



CHAIR – MICHAEL KOBSEFF, SISKIYOU COUNTY
VICE CHAIR – BOB WILLIAMS, TEHAMA COUNTY
EXECUTIVE DIRECTOR – GREG NORTON

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

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

1215 K Street, Suite 1650 Conference Room
Sacramento, CA

Thursday, August 20, 2015 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:

Approval of Minutes from the Meeting of May 21, 2015 – Supervisor Kobseff, ESJPA Chair
(pp 3-8)

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. Presentations

Page 9

A. CalRecycle's Revised Enforcement Policy and Jurisdictional Reviews – Ken Yee, Manager, and Joe Rasmussen, Supervisor, Materials Management and Local Assistance Program, CalRecycle (pp 11-60; 30 minutes)

B. Butte County's Mandatory Commercial Recycling Program (Ordinance) – Steve Rodowick, Recycling Manager, Butte County (pp 61-64 minutes)

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

V. Member County Concerns/Comments

VI. 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, RCRC Senior Legislative Advocate (15 minutes)

A. Complete Text of Selected Bills (*Supplemental Packet pp 1-44*)

B. Summary Listing of All Solid Waste Related Bills (*Supplemental Packet pp 45-62*)

VII. Special Guest Speaker: Message from CalRecycle's New Director, Scott Smithline
(20 minutes)

VIII. Solid Waste/Regulatory Update **Page 65**

Discussion and possible action related to the following:

A. CalRecycle

- Beverage Container Recycling Program Reform – Larry Sweetser (*pp 67-69; 5 minutes*)
- Compostable Materials, Transfer/Processing Regulations – Larry Sweetser (*5 minutes*)

B. Environmental Farming Act Science Advisory Panel

- Governor's Healthy Soils Initiative - Larry Sweetser (*5 minutes*)

C. State Water Resources Control Board (SWRCB)

- Storm Water Industrial General Permit – Larry Sweetser (*pp 71-86; 5 minutes*)
- Compost Waste Discharge Requirements – Larry Sweetser (*pp 87-92; 5 minutes*)
- Water Quality Fees for Fiscal Year 2015-16 – Larry Sweetser (*pp 93-102; 5 minutes*)

D. Extended Producer Responsibility

- CA Product Stewardship Council Update – Heidi Sanborn/Christine Flowers, Product Stewardship Council (*pp 103-114; 10 minutes*)
- Carpet America Recovery Effort (CARE) Update – Lisa Mekis, CA Senior Associate, CARE (*pp 115-116; 5 minutes*)
- PaintCare Update – Daria Kent, Northern California Regional Coordinator (*5 minutes*)
- Mattress Recycling Council Update – Rodney Clara, Mattress Recycling Council (*pp 117-124; 10 minutes*)

E. Grant Program Update – Larry Sweetser (*page 125; 10 minutes*)

F. Highlights of June/July/August Meetings – Larry Sweetser (*pp 127-152; 5 minutes*)

G. Other Regulatory Announcements/Issues of Interest

- CalRecycle Program News (*page 153*)
- SWANA and NW&RA Joint Advisory (*page 154*)
- Cal EPA CUPA Newsletters (*pp 155-166*)
- DTSC E-Waste Updates (*pp 167-172*)

IX. Agenda Suggestions, Member County Presentation Volunteer, Workshop Topics for Next ESJPA Board Meeting Scheduled Thursday, October 15, 2015.

X. Articles of Interest (*pp 175-214*)

Page 173

XI. Adjournment

12:00 PM Lunch

1:00 PM

Technical Advisory Group Breakout Session

This afternoon session will be conducted as an informal workshop. The following topics are intended for robust discussions. You are invited to stay and encouraged to participate in this session.

- **Water Board's General Order for Compost Facilities – Leslie Graves, Senior Engineering Geologist, and Nadine Langley, Engineering Geologist, SWRCB**
- **New Industrial Storm Water Permit - Laurel Warddrip, Industrial & Construction Storm Water Unit Chief, SWRCB**

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.

G:\ESJPA Board of Directors\Meetings\Agenda\2015\082015.final.doc

Agenda Item II

BUSINESS MATTERS



TECHNICAL ADVISORY GROUP (TAG)

CHAIR – MICHAEL KOBSEFF, SISKIYOU COUNTY
VICE CHAIR – MARY RAWSON, ALPINE COUNTY
EXECUTIVE DIRECTOR – GREG NORTON

TAG CHAIR – KRISTINA MILLER, TEHAMA COUNTY
TAG VICE CHAIR – JIM MCHARGUE, AMADOR COUNTY
PROGRAM MANAGER – MARY PITTO

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

Thursday May 21, 2015

MEMBERS REPRESENTED

Mary Rawson, Supervisor
Jim McHargue, Director solid Waste
Bill Mannell, Solid Waste Manager
Steve Rodowick, Recycling Coordinator
Robert Pachinger, Deputy Public Works Director
Yvonne Van Zee, Program Coordinator
Mike Azevedo, Assistant Director
Greg Stanton, Dep. Director Environmental Mgt
William Brunet, Director of Public Works
Tom Valentino, Manager
Paula Wesch, Program Coordinator
Lorenzo Nadora, Engineer
Greg Ollivier, Solid Waste Manager
Bob Perrault, Director of Public Works
Arthur Boyd, Grant Recycling Coordinator
Kristina Miller, Landfill Agency Manager
Karl Fisher, Supervisor
Diane Rader, Deputy Director Solid Waste
Belinda Barlow, Solid Waste Specialist

Alpine County
Amador County
Butte County
Butte County
Calaveras County
Calaveras County
Colusa County
El Dorado County
Imperial County
Lassen County
Lassen County
Madera County
Mariposa County
Plumas County
Siskiyou County
Tehama County
Trinity County
Trinity County
Tuolumne County

STAFF IN ATTENDANCE:

Mary Pitto, ESJPA Program Manager
Paul Smith, Senior Legislative Advocate
Staci Heaton, Regulatory Affairs Advocate
Larry Sweetser, ESJPA Consultant
Maggie Chui, Government Affairs Assistant
Lisa McCargar, Chief Financial Officer
Elizabeth Jensen, Accountant

RCRC Governmental Affairs
RCRC Governmental Affairs
RCRC Governmental Affairs
Sweetser and Associates, Inc.
RCRC Staff
RCRC Staff
RCRC Staff

GUEST SPEAKERS:

David Mehl, ARB
Joe Rassmussen, CalRecycle
Heidi Sanborn, CPSC

Lisa Mekis, CARE
Daria Kent, PaintCare
Connie Cloak, C² Alternative Services

OTHERS IN ATTENDANCE:

Jamie Cameron-Harley, CalRecycle
Will Carpenter, CalRecycle
John Duke, CalRecycle
Spencer Fine, CalRecycle
Jessica Diridoni, Shasta County

Keir Fury, CalRecycle
Daisy Kong, CalRecycle
Susan Mueller, CalRecycle

Mark Urquhart, MJU P.E.

MEMBERS NOT REPRESENTED

Del Norte County, Glenn County, Inyo County, Modoc County, Mono County, Nevada County, and Sierra County

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

Vice Chair Supervisor Mary Rawson, Alpine County called the meeting to order at 9:04 a.m. Self-introductions were made. A quorum was determined at that time.

II. Business Matters

A. Approval of Minutes March 19, 2015. Vice Chair Supervisor Mary Rawson, Alpine County called for the approval of the minutes from the March 19, 2015 Board of Directors Meeting.

The motion to approve the minutes was made by Kristina Miller, Tehama County and was seconded by Bill Mannell, Butte County. The motion passed unanimously.

B. Review and Approval of the 2014 Financial Statements

Lisa McCargar, Chief Financial Officer, presented the ESJPA Board of Directors with the 2014 Annual Audited Financial Statements and the Communications with those charged with Governance for ESJPA. Ms. McCargar noted that ESJPA received an unmodified opinion and had no adjusting journal entries.

Greg Ollivier, Mariposa County called for a motion to approve the 2014 Audited Financial Statements and the Communications for those charged with Governance. Supervisor Karl Fisher, Trinity County, seconded the motion. The motion passed unanimously.

III. Public Comment: Connie Cloak, C2 Alternative Services, presented to the ESJPA Board of Directors on the California's Certified Collection Center Program. Ms. Clog provided informational binders regarding used oil collection centers and other useful resources.

IV. Presentations

A. Short Lived Climate Pollutant Reduction Strategy - Dave Mehl, Air Resources Board (ARB) reported on the agency's early-May release of a concept paper describing ways to achieve the State's goals of emissions reduction. The State is developing a comprehensive strategy through a public process which will, amongst other objectives, include plans for reducing organic waste from landfills. Mr. Mehl stated that ARB will be hosting upcoming workshops to encourage stakeholder participation to help formulate a plan.

B. US EPA's Webinar Pay-As-You-Throw: Growth and Opportunity for Sustainable Materials Management - Dana D'Souza and Dawn BeMent, SERA, Inc. presented to the ESJPA Board of Directors via web conference on the Pay-As-You-Throw (PAYT) program. For communities who

participate in the PAYT program, the community charges their residents a fee for the collection of municipal solid waste based on the amount they throw away versus through property taxes or a fixed fee. The PAYT program is intended to create a direct economic incentive while generating less waste.

C. Portola Landfill Closure - Tom Valentino, Lassen Regional Solid Waste Management Agency, reported on the recent completion of Portola's landfill closure. Prior to the construction project, the Portola landfill was an unlined landfill with erosive soils that caused maintenance issues and water contamination problems. Mr. Valentino reported on the stages the agency has taken to address the soil and contamination problems by utilizing the state-approved final landfill closure system, known as ClosureTurf.

D. Report from CalRecycle - Joe Rasmussen, CalRecycle, reported on the recent release of the 2014 Annual Report, the Department's updated website, and various grant opportunities. Mr. Rasmussen provided a handout for this update, which is available on the ESJPA website.

V. **Member County Concerns/Comments**

Kristina Miller, Tehama County, encouraged the ESJPA Board of Directors to attend the Northern California Household Hazardous Waste Information Exchange meeting to be held in Tehama County on June 17.

Jessica Diridoni, Shasta County, inquired the ESJPA Board of Directors about what is being done in other counties in regards to outreach efforts on mandatory commercial recycling.

VI. **Legislative Update**

Paul A. Smith, Senior Legislative Advocate, provided a brief update on the 2015-16 Legislative Session of bills relating to solid waste.

Assembly Bill 45 (Mullin) continues to be a hot topic amongst the ESJPA Board of Directors. AB 45 would impose new mandates that are extremely costly to administer for curbside collection of household hazardous waste and setting diversion goals for counties. The bill is currently in the Assembly Appropriations Committee and has been placed on the Suspense File. RCRC/ESJPA is in strong opposition of AB 45.

Assembly Bill 864 (Williams) would grant the California Department of Resources Recycling and Recovery (CalRecycle) the ability to issue temporary permits for a variety of solid waste facilities. RCRC/ESJPA has been monitoring the bill, but not offered a formal position. The bill passed the State Assembly with minimal opposition in the Assembly, and now awaits a review in the State Senate.

Assembly Bill 876 (McCarty) would require local jurisdictions to report an estimate of the total organics processing capacity that will be needed over a fifteen-year period. The bill is currently in the Assembly Appropriations Committee and has been placed on the Suspense File. Mr. Smith mentions that AB 876 undermines certain provisions of last year's enactment of Assembly Bill 1826 which RCRC worked to have placed into the bill. RCRC/ESJPA has sent letters in opposition of this bill.

AB 901 (Gordon) strengthens the requirement of solid waste operators to provide data to CalRecycle. The bill is currently in the Assembly Appropriations Committee and has been placed on the Suspense File. RCRC/ESJPA has sent letters in support of this bill.

AB 1045 (Irwin) addresses the diversion of organic waste from disposal. The bill is currently awaiting action on the Assembly Floor. RCRC/ESJPA has not yet engaged on the issue, but may take a position soon.

Much discussion was made on Assembly Bill 1063 (Williams), the “tipping fee” bill, which would require CalRecycle to hold a public hearing and workshop to develop a new solid waste management fee. Mr. Smith speculates that AB 1063 could be amended and serve as a vehicle to revise the solid waste disposal fee which is projected to be an inadequate funding source for future state solid waste management needs. Both Paul Smith and Mary Pitto are actively engaged in discussions on “tipping fees” and have made other stakeholders aware that if there is going to be an increase in the tipping fee, the State Water Board fee should be incorporated into the amount to avoid the current billing system being used by the State Water Board. RCRC/ESJPA has sent a letter in support of the bill.

Mr. Smith also discussed Assembly Bill 1159 (Gordon), which would require CalRecycle to enact regulations to implement a product stewardship pilot program for two specific products – sharps and household primary batteries. The bill is currently in the Assembly Appropriations Committee and has been placed on the Suspense File. RCRC/ESJPA is in support of AB 1159.

Mary Pitto, ESJPA Program Manager, discussed Assembly Bill 1315 (Alejo) relating to stormwater pollution prevention. RCRC/ESJPA along with a broad group of public agencies and organizations has opposed the bill.

In addition, Mr. Smith mentioned that the Legislature’s approved 2015-16 State Budget is due by June 15th. Ms. Pitto provided an update on cap-and-trade funds. In the January Budget, the Governor put in \$40 million dollars to CalRecycle for cap-and-trade monies. In the May Revise, the funds were increased with an additional \$52 million, bringing the total to \$92 million. \$2 million were set aside that will go to rural counties/disadvantaged communities. Though, Ms. Pitto stated the definition of “disadvantaged communities” is not practical as that eliminates 28 counties from qualifying for assistance. RCRC/ESJPA continues to be engaged in the discussions for solutions, such as partnering with other rural counties, and advocating for a change in the “disadvantaged communities” determination.

VIII. Solid Waste/Regulatory Update

A. Air Resources Board

- Governor’s Executive Order B-30-15 and the 2030 Carbon Target - Ms. Pitto reported that during the Governor’s inaugural speech in January, the Governor stated that a new 2030 Carbon Target goal will be established. In late-April, the Governor issued Executive Order B-30-15 that would establish a California greenhouse gas reduction target of 40 percent below 1990 levels by 2030.

B. CalRecycle

- AB 2398 Carpet Product Stewardship – Ms. Pitto introduced Lisa Mekis as the new California Senior Associate for rural county projects for CalRecycle’s stewardship

organization, the Carpet America Recovery Effort (CARE). Ms. Mekis reported that several counties have recently joined the CARE program, including Napa, Marin, Mariposa, and Mendocino Counties. Ms. Mekis informed the ESJPA Board of Directors that there will be a stakeholders meeting to be held on July 15th.

- Beverage Container Recycling Program Reform – Larry Sweetser, ESJPA Consultant, provided information on recent CalRecycle cases where operators were fined for double-dipping on the California Redemption Value (CRV). In addition, Mr. Sweetser reported on CalRecycle entering into partnership with U.S. Labor Department to target labor law violations at California recycling centers.
- Compostable Materials/Transfer/Processing Regulations – Mr. Sweetser reported to the ESJPA Board of Directors on the status of the proposed regulations. Mr. Sweetser reported to the ESJPA Board of Directors on the status of proposed regulations. The proposal will include new requirements on management of compostable green materials, addition of food materials, and land application of organic materials. Currently, it is unclear how the mandatory reporting would work on measuring for physical contamination.

C. Department of Toxic Substance Control

- HHW Regulatory Work Group – Mr. Sweetser reported on the Household Hazardous Waste (HHW) regulatory working group that was formed to address HHW regulatory issues dealing with the Department of Toxic Substance Control (DTSC). The HHW regulatory working group meets once a month.
- Covered Electronic Waste Recycling Program – Mr. Sweetser reported on the Covered Electronic Waste Recycling Program. Mr. Sweetser that as the amount of cathode ray tubes (CRT) at recycling sites continue to decrease, he expects an increase in the consumer fee will be needed. CalRecycle is considering allowing certain CRT glass waste to be landfilled

D. State Water Resources Control Board (SWRCB)

- Storm Water Industrial General Permit – Mr. Sweetser provided a handout regarding the Industrial General Permit for Storm Water Associated with Industrial Activities compliance. The Storm Water Multiple Application and Report Tracking System (SMARTS) program regulates storm water discharges, and also is responsible for maintenance of the program. Mr. Sweetser alerted the Board of Directors that counties have until July 1st to comply.
- Municipal Separate Storm Sewer System (MS4) permits - Ms. Pitto reported that while there were concerns that MS4 permits were too prescriptive, the adopted permit requirements were intended to provide flexibility. Ms. Pitto encouraged the Board of Directors to review the current permit.
- Compost Waste Discharge Requirements – Mr. Sweetser reported on proposed general waste discharge requirements for composting operations. These requirements will impose design standards for different types of composting operations. Some smaller compost operations will be unable to comply with these new standards and will likely cease operations.
- Proposed Trash Amendments – Mr. Sweetser reported that the proposed Final Trash Amendment are set for approval by the SWRCB.

- E. CA Product Stewardship Council Update - Heidi Sanborn, Product Stewardship Council, provided an update on the Council's current projects, including the Refuel Your Fun campaign. The Refuel Your Fun allows users of 1 lb. propane gas cylinders to choose refillable cylinders to save money and the environment. Mariposa County recently joined the program, and Tuolumne and Tehama Counties are expected to join soon.
- F. Paint Care Update - Daria Kent, PaintCare, reported on events they have successfully held in rural communities. Thus far, PaintCare program has paint drop-off sites at over 700 locations throughout California. Ms. Kent mentioned that PaintCare is continuously looking to hold 1-day events at underserved areas and rural communities, and encouraged RCRC/ESJPA-member counties to see if their county qualifies for the event.
- G. Mattress Recycling Council Update – Rodney Clara, Mattress recycling Council, provided an updated on the Proposed Regulations for the Used Mattress Recovery and Recycling Program. Mr. Clara stated that their mattress recycling program in the State of Connecticut launched on May 1st and is receiving a positive response. Mr. Clara provided an update that the Council is seeking request for proposals to recyclers. Lastly, the Council has recently launched a website (<http://www.byebyemattress.com>) for consumer education.
- H. Grant Report Update – Sweetser reported:
- The Beverage Container City/County Payment Program funding Request Due Date is June 23, 2015. There is now a requirement to report expenditures
 - The new Greenhouse Gas Reduction Loan Program Application Due Date is June 30, 2015. CalRecycle has proposed future funding that will include a rural allocation. Member counties should consider application for these funds.
 - The Oil Payment Program, sixth cycle (OPP) applications are due June 30, 2015
- I. Highlights of April/May Meetings. – Sweetser reported that most of the highlights were covered under the Joe Rasmussen's report.
- J. Other Regulatory Announcements/Issues of Interest. Mary Pitto directed Members to the Board packet.

IX. Agenda Suggestions, Member County Presentation Volunteer, Workshop Topics for Next ESJPA Board Meeting Scheduled Thursday, August 20, 2015

X. Articles of Interest

Mary Pitto directed Members to the Board packet.

XI. Adjournment- 12:25 pm

Respectfully submitted,
Maggie Chui, Governmental Affairs Assistant

Technical Advisory Group Breakout Session

Kaoru Cruz, Supervisor, Kyle Pogue, and Christopher Bria, of the Local Assistance and Market Development Branch, CalRecycle provided a review of the new Mandatory Commercial Organics Recycling and AB 1594, green waste as ADC legislation.

Agenda Item IV

PRESENTATIONS



▶ Last revised in 2010 due to SB 1016

▶ adequately implemented
Criteria for analysis

▶ Structure of penalties that may be imposed for failing to implement

▶ This revision incorporates MCR, MORe, 1594



▶ Per-capita disposal target and rate

▶ Per capita disposal rate not determinative of compliance

▶ Focus on program implementation

▶ Annual site visits

▶ 2-year and 4-year cycles



1. Implementing all or most programs and meeting diversion requirements

2. Implementing some/all programs but not meeting diversion requirements

3. Implementing small number of programs and meeting diversion requirements

4. Not implementing programs and not meeting diversion requirements





Requirements

- ▶ MORE is harder than MCR because fewer jurisdictions have programs for commercial foodwaste
- ▶ What constitutes program and what is adequate is key
- ▶ Criteria for review analysis detailed in Enforcement Policy
 - ▶ Not prescriptive, not checklist - guidelines for understanding and analyzing
- ▶ In review cycle -- annual site visits and verifying programs, annual reports, hauler data, website information, etc.
- ▶ Jurisdictions also required to provide info about barriers and plans to address everywhere, will take time to implement



st Draft

- ▶ Describes questions and criteria for each scenario
- ▶ regardless of per capita disposal rate
- ▶ Rural exemptions allowed under MORE
- ▶ Due dates for reporting information in annual reports
- ▶ Steps for issuing Compliance Order for failure to adequately implement MCR and/or MORE requirements
- ▶ Penalties for not meeting MCR, MORE, 1594



- ▶ Clarified requirements on businesses -- applies to those > threshold in place at that time
- ▶ Did not change outreach, education, monitoring -- required annually
- ▶ Reiterated requirement to recycle 100% -- business requirement
- ▶ Also clarified/modified FAQs



Countywide Integrated Waste Management Plan (CIWMP) Enforcement Policy Part II:

Failure to Implement a SRRE and HHWE,
Including Failure to Implement MCR,
MORe, and AB 1594

Updated June 11, 2015

Table of Contents

- BACKGROUND..... 1
- WHAT IS IMPLEMENTATION?..... 1
- SRRE IMPLEMENTATION 2
 - Criteria for SRRE Implementation 2
 - I. Implementing All or Most Programs and Meeting Diversion Requirements..... 3
 - II. Implementing Some/All Programs, But Not Meeting Diversion Requirements.. 3
 - III. Implementing a Small Number of Programs and Meeting the Diversion Requirements..... 9
 - IV. Not Implementing Programs and Not Meeting Diversion Requirements. 11
 - Additional Considerations for SRRE Implementation..... 15
 - Rural Jurisdictions 16
 - Approved Petition for Reduction 16
 - Extensions..... 17
 - Regional Agencies 17
 - Transformation..... 18
- MANDATORY COMMERCIAL RECYCLING IMPLEMENTATION 18
- MANDATORY COMMERCIAL ORGANICS RECYCLING IMPLEMENTATION..... 23
- HHWE IMPLEMENTATION 31
 - Criteria for HHWE Implementation 31
 - Programs Implemented 31
 - Programs Not Implemented..... 32
- DETERMINATION OF SRRE AND HHWE IMPLEMENTATION..... 32
 - Annual Reports 33
 - SRRE Information 33
 - HHWE Information 33
 - CalRecycle Jurisdiction Review Cycles..... 33

Compliance Measurements	34
Criteria for Measuring Diversion Requirements	34
Not Meeting Diversion Requirements	36
ENFORCEMENT	36
Steps Toward Issuance of a Compliance Order	36
Statutory Relief Considerations	38
Compliance Order and Schedule	39
Penalty Structure	39
Removal of Penalties.....	40
CONCLUSION.....	40
APPENDICES	41
Appendix A: Definitions	41
Appendix B: Relevant Waste Reduction Statutes.....	44

BACKGROUND

On November 17, 1993, CalRecycle's predecessor, the California Integrated Waste Management Board (Board) approved Part 1 of the Staff Analysis, CIWMP Enforcement report. Part 1, entitled "Adequacy of CIWMP and Elements," outlines the procedures CalRecycle staff will use to determine the adequacy of Countywide Integrated Waste Management Plans (CIWMPs), Source Reduction and Recycling Elements (SRREs), Household Hazardous Waste Elements (HHWEs), Nondisposal Facility Elements (NDFEs), and Countywide Siting Elements (CSEs).

This report constitutes Part 2 of the CIWMP Enforcement report. CalRecycle must determine, for each jurisdiction, whether the SRREs and HHWEs have been implemented. Annual reports submitted by the jurisdictions will be used, in combination with the Jurisdiction Review process and other information, such as information from site visits, data from haulers, etc., to determine implementation. This report recommends criteria CalRecycle will use during the Jurisdiction Review to determine whether local jurisdiction SRREs, HHWEs, Mandatory Commercial Recycling (MCR), Mandatory Organics Recycling (MORE) and any required AB 1594 Greenwaste/ADC programs have been implemented, mechanisms CalRecycle and local jurisdictions will use to achieve compliance with implementation mandates, and the structure of penalties that may be imposed on jurisdictions failing to implement their SRREs, HHWEs, and/or Mandatory Commercial Recycling, Mandatory Organics Recycling and any required AB 1594 Greenwaste/ADC programs

WHAT IS IMPLEMENTATION?

Full implementation, for the purposes of this report, includes executing the programs as described in the SRRE and HHWE and as required for MCR, Mandatory Organics Recycling and any required AB 1594 Greenwaste/ADC programs, using the jurisdiction's annual per capita disposal rate and, more importantly pursuant to SB 1016, diversion programs implementation as factors in determining compliance with the diversion requirements. The per capita disposal rate is not determinative of compliance. Criteria for determining the level of SRRE, HHWE, MCR, Mandatory Organics Recycling and AB 1594 Greenwaste/ADC, implementation are outlined separately.

CalRecycle staff will refer to the various components of the SRRE and HHWE, information from a jurisdiction's annual report, CalRecycle's Jurisdiction Review, and other sources to determine how fully a jurisdiction has implemented its SRRE, HHWE, MCR, Mandatory Organics Recycling and AB 1594 Greenwaste/ADC. (Also see "Determination of SRRE and HHW Implementation" section.)

SRRE IMPLEMENTATION

Criteria for SRRE Implementation

Each SRRE outlines the source reduction, recycling, composting, and public education and information programs a jurisdiction will implement. Additionally, the SRRE identifies funding mechanisms and monitoring for these programs, and describes their integration into a comprehensive waste diversion program. A fully implemented SRRE means a jurisdiction is both carrying out the selected programs and achieving the diversion requirements.

Staff has identified four scenarios to use in determining SRRE implementation:

- I. Implementing all or most programs, and meeting diversion requirements.
- II. Implementing some/all programs, but not meeting diversion requirements.
- III. Implementing a small number of programs and meeting diversion requirements.
- IV. Not implementing programs and not meeting diversion requirements.

To determine the level of SRRE implementation, staff use annual reports submitted by local jurisdictions, CalRecycle's Jurisdiction Review process, and provide technical assistance, when requested. This applies to all four scenarios.

Staff uses the following criteria to determine the extent to which a jurisdiction has implemented, or shown a good faith effort to implement, their selected diversion programs.

These criteria reflect the four scenarios above, and may not be all-inclusive. These criteria are provided to serve as an example. The criteria are not prescriptive and they are not a "checklist". They indicate the issues that will be examined when CalRecycle performs its Jurisdiction Reviews. There is no intent in this document to mandate that each criterion be adhered to, and that, if not, that a local jurisdiction would be in a "failure" situation.

It is not CalRecycle's intention to micro-manage local jurisdiction's decisions on which diversion programs have been identified and selected for implementation. CalRecycle will attempt, with the identified criteria, to assist local jurisdictions who may need help in identifying why implementation of diversion programs is failing to achieve the results expected, or is failing to meet the diversion requirements.

Note: In scenarios II and IV, criteria for evaluating AB 1594 Greenwaste/ADC are addressed. AB 1594 is included here because implementation of its provisions is directly tied to measurement of per-capita disposal. In contrast, implementation of

MCR and MORE is not linked to per-capital disposal and hence is addressed later in this document.

I. Implementing All or Most Programs and Meeting Diversion Requirements.

Jurisdictions implementing all or most of their diversion programs and achieving or below their 50% equivalent per capita disposal target are not subject to fines by CalRecycle. These jurisdictions will be subject to future CalRecycle review at least once every four years.

Jurisdictions will be required to submit information to CalRecycle stating why diversion programs identified in SRREs have not been implemented. Staff recommends using the following criteria to determine if a jurisdiction fits this scenario.

- What is the measured annual per capita disposal rate?
- What programs have been implemented, or what existing programs have been continued or expanded, to achieve the diversion requirements?
- Will these programs maintain the desired level of diversion?
- Are contingency programs selected and available to implement, if necessary, to maintain diversion levels?

II. Implementing Some/All Programs, But Not Meeting Diversion Requirements.

If a jurisdiction is implementing some or all selected diversion programs and yet not achieving its 50% equivalent per capita disposal target, it may be that the SRRE is in need of revision.

Staff investigates the extent to which a jurisdiction has tried to meet the diversion requirements through its selected diversion programs, and the reasons it has failed to implement some or all of those diversion programs. Staff may recommend that a jurisdiction has either made a good faith effort to implement its SRRE, or should be put on a compliance schedule. In the case of a rural jurisdiction, CalRecycle could instead recommend the jurisdiction apply for a diversion rate reduction as allowed in PRC Section 41787. If a compliance schedule was ordered and the jurisdiction failed to meet the requirements of the order, CalRecycle could then consider levying an administrative fine against the jurisdiction. A fine, if determined to be appropriate, would be decided by CalRecycle on a case-by-case basis, and could be assessed at up to \$10,000 per day.

Staff uses the following criteria to assess the specific conditions that may have prevented a jurisdiction from meeting its 50% equivalent per capita disposal target, and whether a good faith effort was made by the jurisdiction to meet the requirements.

- Have some/all selected diversion programs been implemented? If **yes**, then what may be the cause for not reaching the requirements? For example:

- What is the measured annual per capita disposal rate?
- Does the jurisdiction have a CalRecycle approved reduced diversion requirement?
 - Were waste quantification problems encountered when calculating achievement of the 50% equivalent per capita disposal target?
- Have participation and program effectiveness been low?
 - Has the jurisdiction utilized public education and information programs to promote its diversion programs?
 - Has the jurisdiction targeted the appropriate sector (commercial/residential/industrial) in its public education and information campaign?
 - Is the program accessible to the targeted audience? Have language barriers been addressed?
 - Have incentives for participation been used (e.g., cash for recyclables, free/reduced cost compost bins for workshop attendance, etc.)?
 - What other program alternatives have been used to promote waste prevention and reduction programs (e.g., increased tip fees, local land use restrictions, increased business fees, etc.)?
 - Has the jurisdiction utilized CalRecycle's free public information materials?
- Have markets for diverted materials continually remained low or poor?
 - Has the jurisdiction investigated local and regional marketing options?
 - Has the jurisdiction investigated development opportunities with the private sector?
 - Has the jurisdiction worked with CalRecycle's market development program?
 - Has the jurisdiction applied to CalRecycle's Recycling Market Development Zone (RMDZ) program?
- Were all significant waste materials selected in the SRRE targeted in the implemented programs?
 - Have conditions changed to make these materials less targetable and/or marketable?
 - Have waste generation characteristics changed such that selected programs would no longer be feasible or appropriate?

- Were sufficient funds available to implement programs?
 - Has the jurisdiction investigated grants and loans available from CalRecycle, the U. S. Environmental Protection Agency (US EPA), etc.?
 - Has the jurisdiction investigated regional approaches to programs and expenses?
 - Has the jurisdiction investigated all financial options selected in the SRRE, including contingency funding?
- Have time frames projected in the SRRE been met?
 - What factors have affected these time frames?
 - Will time frames be adjusted to continue program implementation?
- Were local diversion programs implemented but the jurisdiction had disposal increases due to a regional diversion facility generating and disposing significant amounts of residue within the "host" jurisdiction's borders?
- Have other state-mandated programs affected solid waste disposal tonnage (such as a doubling of street sweeping activities due to Clean Water Act requirements for certain cities)?
- What other problems has the jurisdiction encountered in program implementation?
- Have all selected diversion programs been implemented? If no, then what may be the reason for not implementing the programs? For example:
 - What diversion programs were not implemented, and why?
 - What selected diversion facilities (e.g., material recovery, composting) are not yet online?
 - Did financing options for a selected diversion facility (e.g., material recovery, composting) fail?
 - Did a jurisdiction face unavoidable regulatory delays? If so, explain the regulatory delays and how they affected the project time lines.
 - Did a jurisdiction elect to recover a certain type of material (e.g., cardboard), but the hauler/operator will not cooperate and recover the waste type on behalf of the jurisdiction? Is the failure to recover the material(s) due to logistical problems?
- Was insufficient staff available to implement programs?
 - Has the jurisdiction investigated volunteer or internship programs?

- Has the jurisdiction investigated regional approaches to programs, expenses, and staffing?
- Was there a high turnover in staff?
- Did the jurisdiction allot reasonable resources?
- Have time frames projected for program implementation in the SRRE been met?
 - What factors have affected these time frames?
 - Have time frames been adjusted to continue program implementation?
- Have waste generation characteristics changed (e.g., a military base closure, or a manufacturing/industry relocated or closed), such that selected programs would no longer be feasible or appropriate?
- Have contingency diversion programs been implemented to reach the diversion requirements?
 - If contingency programs are significant in scale, has that caused a delay?
- Have existing contractual or legal issues prohibited a jurisdiction from implementing programs?
 - Can the jurisdiction amend franchise agreements? If not, when do the agreements expire?
 - Can the jurisdiction prepare a request for proposal(s) for the implementation of programs and facilities?
- What technical assistance can CalRecycle provide to assist local jurisdictions in implementing diversion programs?

AB 1594

In September 2014, Governor Brown signed AB 1594, Williams (Chapter 719, Statutes of 2014), mandating that as of January 1, 2020, the use of green material as alternative daily cover (ADC) does not constitute diversion through recycling and will be considered disposal in terms of measuring a jurisdiction's annual 50 percent per capita disposal rate.

Beginning with the 2020 Electronic Annual Report (due August 1, 2021), a jurisdiction that, as a result of not being able to claim diversion for the use of green material as ADC, does not meet its 50 percent per capita disposal target, must report additional information to CalRecycle about how it will address diverting greenwaste that was being sent as ADC. Staff will investigate the extent to which a jurisdiction has tried to meet the diversion requirements through its efforts to find other means of diverting greenwaste.

Staff will use the following criteria to assess the specific conditions that may have prevented a jurisdiction from meeting its 50% equivalent per capita disposal target, as a result of not being able to claim diversion for the use of green material as ADC, and whether a good faith effort was made by the jurisdiction to meet the diversion requirements.

- Did the jurisdiction commencing with the 2017 Electronic Annual Report (due August 1, 2018) include information on plans to address the diversion requirements by diverting green material that is being used as ADC?
 - Were the plans reasonable?
 - If the jurisdiction didn't include plans commencing with the 2017 EAR on how to divert green materials, in 2020 or any time thereafter if the jurisdiction is not meeting its target did it address how it is diverting green material that is being used as ADC?

- Did the jurisdiction commencing with the 2020 Electronic Annual Report (due August, 1, 2021) provide the following:
 - Were the barriers to recycling green material identified and addressed?
 - Are there adequate existing facilities to process greenwaste within a reasonable vicinity?
 - Are there existing solid waste and organic waste recycling facilities within the jurisdiction that may be suitable for potential expansion or colocation of organic waste processing or recycling facilities?
 - What time frame could this be accomplished?
 - Are there efforts that are underway to develop new private or public regional organic waste recycling facilities and the anticipated timeline for completion of those facilities?
 - Are there other nondisposal opportunities or markets for greenwaste (e.g., on-site composting, etc.)?
 - Are there appropriate zoning and permit requirements for the location of new or expanded organic waste recycling facilities to help with siting?
 - Are there local incentives available, if any, for developing new organic waste recycling facilities within the jurisdiction?
 - Have markets for recycled organic materials continually remained low or poor?
 - Has the jurisdiction investigated local and regional marketing options?
 - Has the jurisdiction investigated organics recycling opportunities with the private sector, e.g., partnering to site and build organics recycling facilities, collaborating with large commercial generators

to manage waste on-site, such as small scale anaerobic digestion facilities, etc.?

- Are sufficient funds available to implement programs?
 - Has the jurisdiction investigated funding resources, e.g., CalRecycle grants/loans, Treasurer's Office loans and bonds, CA Energy Commission grants, etc.?
 - Has the jurisdiction investigated regional approaches to programs and expenses?
- What selected organics recycling facilities are not yet on-line?
 - Did financing options for a selected diversion facility fail?
 - Did the facilities face unavoidable regulatory delays? If so, did the jurisdiction explain the regulatory delays and how they affected the project time lines?
 - Did a jurisdiction elect to recover a certain type of material (e.g., food waste), but the hauler/operator will not cooperate and recover the waste type on behalf of the jurisdiction? Is the failure to recover the material(s) due to logistical problems?
- Is sufficient staff available to implement programs?
 - Has the jurisdiction investigated volunteer or internship programs?
 - Has the jurisdiction collaborated with the hauler(s)?
 - Has the jurisdiction investigated regional approaches to programs, expenses, and staffing?
- Are there existing contractual or legal issues that need to be addressed that are a barrier to diverting greenwaste that was being used as ADC?
 - Can the jurisdiction amend franchise agreements, contracts, or permits? If not, when do the agreements expire?
 - Can the jurisdiction prepare a request for proposal(s) for the implementation of programs and facilities?
- What other considerations, including but not limited to market development obstacles, population density, waste generation rates, dominant waste generation categories and types, and geographic,

demographic and economic factors, have affected the jurisdiction's ability to implement its organics recycling program?

- If sufficient capacity at facilities that recycle green material is not expected to be operational before the jurisdiction's next review pursuant to Section 41825, was a reasonable plan to address those barriers that are within the control of the local jurisdiction provided?
 - Did the jurisdiction identify all barriers under its control?
 - Did the jurisdiction provide sufficient explanation and supporting information to explain how it would address this, or why it still cannot do so? I.e., is the plan reasonable in light of the barriers?
 - Did it provide a timeline for addressing the barriers?

III. Implementing a Small Number of Programs and Meeting the Diversion Requirements.

This Scenario focuses on the level of SRRE implementation, and reinforces the statutory requirement for SRRE (i.e., program) implementation in addition to meeting the 50% equivalent per capita disposal target. Meeting the per capita disposal target is a factor in evaluating performance but is not determinative of compliance. This scenario will allow CalRecycle to make a case-by-case determination of whether a jurisdiction has made a good faith effort to implement its SRRE, or whether it should be issued a compliance order. Jurisdictions will be required to submit information to CalRecycle stating why diversion programs selected for implementation in the SRRE have not been implemented.

Staff uses the following criteria to determine if a jurisdiction fits this Scenario:

- What is the measured annual per capita disposal rate?
- What programs have been implemented, or what existing programs have been continued or expanded, to achieve the diversion requirements?
- Will these programs maintain the desired level of diversion?
- Are contingency programs selected and available to implement, if necessary, to maintain diversion levels?
- Have any implemented programs been dropped, and if so, why?
- Have programs selected for implementation not been implemented? If not, why not?
 - What selected diversion facilities (e.g., material recovery, composting) are not yet on-line?

- Did financing options for a selected diversion facility (e.g., material recovery, composting) fail?
- Did a jurisdiction face unavoidable regulatory delays? If so, explain the regulatory delays and how they affected the project time lines.
- Did a jurisdiction elect to recover a certain type of material (e.g., cardboard), but the hauler/operator would not cooperate and recover the waste type on behalf of the jurisdiction? Is the failure to recover the material(s) due to logistical problems?
- Were sufficient funds available to implement programs?
 - Has the jurisdiction investigated grants and loans available from CalRecycle, US EPA, etc.?
 - Has the jurisdiction investigated regional approaches to programs and expenses?
 - Has the jurisdiction investigated all financial options selected in the SRRE, including contingency funding?
- Was insufficient staff available to implement programs?
 - Has the jurisdiction investigated volunteer or internship programs?
 - Has the jurisdiction investigated regional approaches to programs, expenses, and staffing?
 - Was there a high turnover in staff?
 - Did the jurisdiction allot reasonable resources?
- Have participation rates and program effectiveness been too low?
 - Has the jurisdiction utilized public education and information programs to promote its diversion programs? Has the jurisdiction targeted the appropriate sector (commercial/residential/industrial) in its public education and information campaign?
 - Is the program accessible to the targeted audience? Have potential language barriers been addressed?
 - Have incentives for participation been used (e.g., cash for recyclables, free/reduced cost compost bins for workshop attendance, etc.)?
 - What other program alternatives have been used to promote waste prevention and reduction programs (e.g., increased tip fees, local land use restrictions, increased business fees, etc.)?

- Has the jurisdiction utilized CalRecycle's free public information materials?
- Have markets for diverted materials continually remained low or poor?
 - Has the jurisdiction investigated local and regional marketing options?
 - Has the jurisdiction investigated development opportunities with the private sector?
 - Has the jurisdiction worked with CalRecycle's market development program?
 - Has the jurisdiction applied to CalRecycle's RMDZ program?
- Were all significant waste materials selected in the SRRE targeted in the implemented programs?
 - Have conditions changed to make these materials less targetable and/or marketable?
 - Have waste generation characteristics changed such that selected programs would no longer be feasible or appropriate?
- What other problems has the jurisdiction encountered in program implementation?
 - Have waste generation characteristics changed (e.g., has a military base closed, or a manufacturer/industry relocated or closed), such that selected programs would no longer be feasible or appropriate?
- Have contingency diversion programs been implemented to reach the diversion requirements?
 - If contingency programs are significant in scale, has that caused a delay in implementation?
- Have existing contractual or legal issues prohibited a jurisdiction from implementing programs?
 - Can the jurisdiction amend franchise agreements? If not, when do the agreements expire?
 - Can the jurisdiction prepare a request for proposal(s) for the implementation of programs and facilities?
- What technical assistance can CalRecycle provide to assist the local jurisdiction in implementing diversion programs?

IV. Not Implementing Programs and Not Meeting Diversion Requirements.

Staff will investigate the reasons a jurisdiction has failed to implement diversion programs and thus failed to meet the 50% equivalent per capita disposal

requirements. Staff will recommend that CalRecycle issue compliance schedules to jurisdictions in this scenario. If the requirements of the compliance schedule are not met, CalRecycle could, at a public hearing, consider assessing the jurisdiction an administrative fine of up to a maximum of \$10,000 per day.

Staff recommends using the following criteria to determine if a jurisdiction fits this scenario.

- What is the measured annual per capita disposal rate?
- Why were programs not implemented?
- Were insufficient funds available to implement programs? If sufficient funds were available, explain why they were not dedicated to implementing programs. For example:
 - Did the jurisdiction investigate grants and loans available from CalRecycle, US EPA, etc.?
 - Did the jurisdiction investigate regional approaches to programs and expenses?
 - Did the jurisdiction investigate all financial options selected in the SRRE?
- Is there a lack of markets for diverted materials, and therefore programs were not implemented? For example:
 - Did the jurisdiction investigate local and regional marketing options?
 - Did the jurisdiction work with CalRecycle's market development program and apply for market development zone designation?
- Was sufficient staff available to implement programs? Was staff allocated?
 - Did the jurisdiction investigate volunteer or internship programs?
 - Did the jurisdiction investigate regional approaches to programs, expenses, and staffing?
- Have existing contractual or legal issues prohibited a jurisdiction from implementing programs?
 - Can the jurisdiction amend franchise agreements?
 - Can the jurisdiction prepare a Request For Proposal (s) for the implementation of programs and facilities?

- What other problems has the jurisdiction encountered that resulted in no diversion program implementation?

AB 1594

In September 2014, Governor Brown signed AB 1594, Williams (Chapter 719, Statutes of 2014), mandating that as of January 1, 2020, the use of green material as alternative daily cover (ADC) does not constitute diversion through recycling and will be considered disposal in terms of measuring a jurisdiction's annual 50 percent per capita disposal rate.

Beginning with the 2020 Electronic Annual Report (due August 1, 2021), a jurisdiction that, as a result of not being able to claim diversion for the use of green material as ADC, does not meet its 50 percent per capita disposal target, must report additional information to CalRecycle about how it will address diverting greenwaste that was being sent as ADC. Staff will investigate the extent to which a jurisdiction has tried to meet the diversion requirements through its efforts to find other means of diverting greenwaste.

Staff will use the following criteria to assess the specific conditions that may have prevented a jurisdiction from meeting its 50% equivalent per capita disposal target, as a result of not being able to claim diversion for the use of green material as ADC, and whether a good faith effort was made by the jurisdiction to meet the diversion requirements.

- Did the jurisdiction commencing with the 2017 Electronic Annual Report (due August 1, 2018) include information on plans to address the diversion requirements by diverting green material that is being used as ADC?
 - Were the plans reasonable?
 - If the jurisdiction didn't include plans commencing with the 2017 EAR on how to divert green materials, in 2020 or any time thereafter if the jurisdiction is not meeting its target did it address how it is diverting green material that is being used as ADC?
- Did the jurisdiction commencing with the 2020 Electronic Annual Report (due August, 1, 2021) provide the following:
 - Were the barriers to recycling green material identified and addressed?
 - Are there adequate existing facilities to process greenwaste within a reasonable vicinity?
 - Are there existing solid waste and organic waste recycling facilities within the jurisdiction that may be suitable for potential expansion or colocation of organic waste processing or recycling facilities?
 - What time frame could this be accomplished?

- Are there efforts that are underway to develop new private or public regional organic waste recycling facilities and the anticipated timeline for completion of those facilities?
- Are there other nondisposal opportunities or markets for greenwaste (e.g., on-site composting, etc.)?
- Are there appropriate zoning and permit requirements for the location of new or expanded organic waste recycling facilities to help with siting?
- Are there local incentives available, if any, for developing new organic waste recycling facilities within the jurisdiction?
- Have markets for recycled organic materials continually remained low or poor?
 - Has the jurisdiction investigated local and regional marketing options?
 - Has the jurisdiction investigated organics recycling opportunities with the private sector, e.g., partnering to site and build organics recycling facilities, collaborating with large commercial generators to manage waste on-site, such as small scale anaerobic digestion facilities, etc.?
- Are sufficient funds available to implement programs?
 - Has the jurisdiction investigated funding resources, e.g., CalRecycle grants/loans, Treasurer's Office loans and bonds, CA Energy Commission grants, etc.?
 - Has the jurisdiction investigated regional approaches to programs and expenses?
- What selected organics recycling facilities are not yet on-line?
 - Did financing options for a selected diversion facility fail?
 - Did the facilities face unavoidable regulatory delays? If so, did the jurisdiction explain the regulatory delays and how they affected the project time lines?
 - Did a jurisdiction elect to recover a certain type of material (e.g., food waste), but the hauler/operator will not cooperate and recover the waste type on behalf of the jurisdiction? Is the failure to recover the material(s) due to logistical problems?
- Is sufficient staff available to implement programs?
 - Has the jurisdiction investigated volunteer or internship programs?

- Has the jurisdiction collaborated with the hauler(s)?
- Has the jurisdiction investigated regional approaches to programs, expenses, and staffing?
- Are there existing contractual or legal issues that need to be addressed that are a barrier to diverting greenwaste that was being used as ADC?
 - Can the jurisdiction amend franchise agreements, contracts, or permits? If not, when do the agreements expire?
 - Can the jurisdiction prepare a request for proposal(s) for the implementation of programs and facilities?
- What other considerations, including but not limited to market development obstacles, population density, waste generation rates, dominant waste generation categories and types, and geographic, demographic and economic factors, have affected the rural jurisdiction's ability to implement its commercial organics recycling program?
- If sufficient capacity at facilities that recycle green material is not expected to be operational before the jurisdiction's next review pursuant to Section 41825, was a reasonable plan to address those barriers that are within the control of the local jurisdiction provided?
 - Did the jurisdiction identify all barriers under its control?
 - Did the jurisdiction provide sufficient explanation and supporting information to explain how it would address this, or why it still cannot do so? I.e., is the plan reasonable in light of the barriers?
 - Did it provide a timeline for addressing the barriers?

Additional Considerations for SRRE Implementation

Statute provides for specific variations to the 25 and 50 percent diversion requirements. These variations include:

1. No more than 10 percent of the average (2003 through 2006) calculated per capita generation tonnage may be counted for a city, county, or regional agency's use of a CalRecycle- permitted transformation project (PRC Sections 41783);
2. Petitions for reduction for rural jurisdictions (PRC Section 41787);
3. Regional and rural regional agency formation (PRC Sections 40970 and 41787.1);
4. A two-year time extension for rural jurisdictions (PRC Section 41787.4);

5. A time extension granted by CalRecycle to a city that incorporated after January 1, 1990, and before January 1, 2001, (PRC Section 41820.5);
6. Pursuant to PRC Section 41784, if CalRecycle determines that a jurisdiction's SRRE will not achieve the 50 percent diversion requirement and a city or county chooses not to use a transformation project to achieve the 50 percent diversion requirement, CalRecycle shall not require the jurisdiction to use a transformation project to achieve the 50 percent requirement;
7. A reduction of the diversion requirements of PRC Section 41780 for any city or county which, on or before January 1, 1990, disposed of 75 percent or more of its solid waste, collected by the jurisdiction or its authorized agents or contractors, by transformation if certain conditions exist (PRC Section 41786).

Staff considers the following criteria, as applicable, in addition to the previous criteria outlined above.

Rural Jurisdictions

[Note that, pursuant to SB 1016 (Wiggins, 2008) as of January 1, 2009, the definition of rural city, rural regional agency and rural county has changed. See PRC Sections 40183 and 40184 before applying this section]

- Has the rural jurisdiction utilized CalRecycle's rural assistance information and programs?
- Has the rural jurisdiction investigated regional approaches to program implementation?
- Is the rural jurisdiction qualified to petition for a reduction in diversion requirements?
- What other considerations, including but not limited to market development obstacles, population density, waste generation rates, dominant waste generation categories and types, and geographic, demographic and economic factors, have affected the rural jurisdiction's ability to meet the diversion requirements?

Approved Petition for Reduction

- Are rural cities and rural counties that are members of a rural regional agency eligible for a reduction in diversion requirements? If so, then the rural regional agency may be eligible for a reduction of the diversion requirements of PRC Section 41780. Has the rural regional agency petitioned CalRecycle for a reduction in the diversion requirements?

- Has a jurisdiction that qualifies for a reduction petitioned for a reduction in the diversion requirements?
- Did a jurisdiction petition for a reduction in diversion requirements and receive a reduced diversion requirement? If so, were the conditions of the petition reduction request met by the jurisdiction?
- If the jurisdiction has a CalRecycle-approved reduced diversion requirement, was the reported total reporting year disposal tonnage equal to or less than the maximum allowable disposal for that reduced disposal percentage?
- Has the jurisdiction implemented the programs specified in the approved petition?
- Are there any other considerations that affect the jurisdiction's ability to meet its reduced diversion requirements?

Extensions

- Did a newly incorporated city (incorporated after January 1, 1990) receive a time extension from the diversion requirements (PRC Section 41820.5)?
- Has the rural city, rural county, or rural regional agency been granted a two-year time extension (PRC Section 41787.4)?
- Is the jurisdiction achieving the maximum feasible amount of source reduction, recycling, and composting within its jurisdiction?

Regional Agencies

Jurisdictions that form a regional agency to share planning and diversion requirements of the Integrated Waste Management Act are required by PRC Section 40975(b)(2) to describe the method by which any civil penalties imposed will be allocated among the agency members. Each member of a regional agency, which is formed to allow its members to share diversion, is liable for the sum of the penalties that may be imposed against each member of the regional agency. Thus, a regional agency that has five members would be subject to a maximum penalty of \$50,000 per day. However, CalRecycle may consider the relevant circumstances that resulted in a regional agency (as described in PRC Sections 40970-40976) not achieving the diversion requirements and the individual members who may have contributed to the circumstances that resulted in a failure to achieve the diversion requirements.

PRC Section 40974 establishes the maximum liability for civil administrative penalties imposed pursuant to PRC Section 41813 or PRC Section 41850 at \$10,000 per day for each member of a regional agency. The remainder of PRC Section 40974 may be interpreted to provide an option for members of a regional agency to agree among themselves to a different maximum liability through an apportionment of the sum of the penalties that may be imposed against each member of the regional agency. CalRecycle may consider a regional agency's joint powers agreement that specifies

that all liability for fines rests with the non-complying agency member with no liability assigned to the regional agency or the authority.

An apportionment of penalties on agency members and not the regional agency may provide for flexibility for the regional agency to continue to resolve the issue that is causing the agency members to not meet the diversion requirements. CalRecycle may consider limiting penalties to a maximum of \$10,000 per day if a member's failure does not cause other members or the regional agency to fail to implement the programs in the regional SRRE. Consideration of no fines or penalties on a member or the regional agency may be given by CalRecycle if the agency member has demonstrated to the satisfaction of CalRecycle to have made good faith efforts to implement the programs assigned to it in the regional SRRE. Questions to consider include:

- Is the jurisdiction part of a regional agency or rural regional agency?
- Is the regional agency implementing its programs and meeting its diversion requirements?
- If a regional agency was dissolved, will each of the agency members meet the 50% equivalent per capita disposal requirements?

Transformation

- Did the jurisdiction claim no more than 10 percent of the average (2003 through 2006) calculated per capita generation tonnage (PRC Section 41783)?
- Did the jurisdiction dispose of 75 percent or more of its solid waste by transformation, and if so, were the statutory conditions in PRC Section 41786 met?

MANDATORY COMMERCIAL RECYCLING IMPLEMENTATION

Commencing July 1, 2012, each jurisdiction shall implement a commercial solid waste recycling program that consists of education, outreach and monitoring of businesses, that is appropriate for that jurisdiction and is designed to divert commercial solid waste from businesses, whether or not the jurisdiction has met the requirements of PRC Section 41780. Each jurisdiction shall report the progress achieved in implementing its commercial recycling program, including education, outreach and monitoring, and if applicable, enforcement efforts and exemptions, by providing updates in its electronic annual report.

To determine the level of Mandatory Commercial Recycling (MCR) implementation, staff review programs and data as part of the annual site visits, and use annual report information submitted by local jurisdictions, and other information, such as recovery rate

data, educational materials both print and electronic, etc. Jurisdictions' compliance with the MCR requirements will be determined during the formal Jurisdiction Review (either during a two or four-year review cycle depending on which cycle the jurisdiction is on).

Staff uses the following criteria to determine the extent to which a jurisdiction has shown a good faith effort to implement its mandatory commercial recycling program. These criteria are provided to serve as an example. The criteria are not prescriptive and they are not a "checklist". They indicate the issues that will be examined when CalRecycle performs its Jurisdiction Reviews. There is no intent to mandate that each criterion be adhered to, and that, if not, that a local jurisdiction would be in a "failure" situation. The criteria are broken down into four sections: 1) Identifying Commercial Generators, 2) Conducting Education/Outreach, 3) Monitoring, and 4) Ensuring Commercial Recycling Services.

1. Identifying Commercial Generators

- Did the jurisdiction make a reasonable effort to annually identify the commercial generators that are required to recycle?
- Did the jurisdiction provide data on the following in the Annual Report beginning August 1, 2013?
 - Number of regulated businesses.
 - Number of regulated multifamily complexes.
 - Number of regulated businesses that are recycling.
 - Number of regulated multifamily complexes that are recycling.
 - If any of this data is not available, did the jurisdiction explain why and how they are addressing gathering the data?
 - If applicable, did the jurisdiction provide the amount of recyclable material that is being diverted by businesses/multifamily complexes?
- If any of the data was not provided, did the jurisdiction have a reasonable explanation and is the jurisdiction demonstrating that it is trying to address the gap?
- If the jurisdiction is phasing in identification, did the jurisdiction provide adequate rationale?
- Based upon this information CalRecycle will assess the extent to which businesses have complied with Section 42649.2, including information on the amount of disposal that is being diverted from the businesses, if available, and on the number of businesses that are subscribing to service.
 - If the number of businesses that have recycling service decreases during the review cycle, CalRecycle would assess the reasons further with the jurisdiction, including did the jurisdiction cease any active education or outreach efforts, did the rate structure change, etc.?
 - CalRecycle would also assess the availability of markets for collected recyclables.

2. Conducting Education/Outreach

- Did the jurisdiction provide information about its annual education and outreach efforts?
- Did the jurisdiction use a variety of education and outreach approaches to inform covered businesses and multifamily complexes about the law and how to recycle, including electronic, print, and direct contact approaches?
 - Is this occurring annually?
 - Are there activities that were intended to be only one-time and did the jurisdiction provide an explanation that is reasonable?
- Is education and outreach accessible to the targeted sector, e.g., can affected commercial customers readily find information on the jurisdiction or hauler's websites, is information provided at least annually, etc.?
- Have language barriers been addressed, e.g., if needed, have materials been translated into other languages, is the website information available in other languages, etc.?
- Have any incentives been provided to covered businesses and multifamily complexes, e.g., free or reduced cost collection services, technical assistance, awards and recognition, etc.?
- Has the jurisdiction utilized CalRecycle's free public information related to mandatory commercial recycling?
- Was sufficient staff available to implement the education and outreach? If not, were there budgetary constraints? How did the jurisdiction try to address this?
 - Has the jurisdiction investigated volunteer or internship programs?
 - Has the jurisdiction investigated regional approaches to programs, expenses, and staffing?
 - Was there a high turnover in staff?
 - Did the jurisdiction allot reasonable resources?
- If the jurisdiction is phasing in education and outreach, did the jurisdiction provide adequate rationale?
- In the case of a rural jurisdiction, what were the effects of small geographic size, low population density, or distance to markets?

3. Monitoring

- For those covered businesses and multifamily complexes that were not in compliance with the MCR law were covered businesses and multifamily complexes annually identified?
- Were covered businesses and multifamily complexes that were not in compliance annually notified about the law and how to comply with the law, e.g., non-compliant

businesses were sent a letter by the jurisdiction, contacted via phone call, received an on-site meeting, etc.?

- If the jurisdiction is phasing in monitoring, did the jurisdiction provide adequate rationale?
- If any of the data was not provided, did the jurisdiction have a reasonable explanation and is the jurisdiction demonstrating that it is trying to address the gap?
- Were there staffing or budgetary constraints?
- In the case of a rural jurisdiction, were there issues regarding monitoring related to the geographic size of the jurisdiction, or low population density?

4. Ensuring Commercial Recycling Services

Pursuant to statute, jurisdictions may include, but are not limited to, the following elements in their commercial waste recycling services:

1. Requiring a hauler under a franchise contract or agreement to provide commercial recycling services for on-site collection of recyclables from businesses.
2. Requiring permitted or contract haulers to provide commercial recycling services for on-site collection of recyclables from businesses in a non-franchised jurisdiction.
3. Implementing a mandatory commercial waste recycling policy or ordinance that requires businesses to either hire a service provider to haul its recyclables to a source separated or mixed processing system that diverts recyclables from disposal, or to self-haul.

Additional program elements that might support a program include:

1. Establishing certification requirements for self-haulers.
2. Enforcement provisions, including a structure for fines and penalties.
3. Charging businesses a fee to cover the jurisdiction's costs of implementing the commercial waste recycling program.

Note: A jurisdiction may implement or enforce commercial recycling requirements that are more stringent or comprehensive than the law.

Determining Progress Achieved in Implementing a Commercial Recycling Program:

In addition to the questions above, what constitutes "commercial waste recycling services" will vary depending on many factors, such as the types of commercial generators and the types of recyclables that are generated, the types of existing or potential infrastructure for processing recyclable materials, on-site collection options, etc. The commercial waste recycling services must be appropriate for the jurisdiction and

meet the needs of its businesses; it must provide opportunities for the regulated businesses to avail themselves of organics recycling services.

- Did the jurisdiction sufficiently demonstrate that the commercial recycling programs available to regulated businesses and multifamily complexes are adequate?
- What is the recovery rate of the commercial waste from the material recovery facilities that are utilized by the businesses? Note: Pursuant to statute, CalRecycle may review the recovery rate of the commercial waste from the material recovery facilities that are utilized by the businesses, as well as all information, methods, and calculations, and any additional performance data.
- If the jurisdiction has not been able to implement a commercial recycling program that is appropriate for the jurisdiction and meets the needs of its businesses, has it done the following:
 - Have markets for recycled materials continually remained low or poor?
 - Has the jurisdiction investigated local and regional marketing options?
 - Has the jurisdiction investigated recycling opportunities with the private sector, e.g., partnering to site and build recycling manufacturing facilities, etc.?
 - Are sufficient funds available to implement programs?
 - Has the jurisdiction investigated funding resources, e.g., CalRecycle grants/loans, Treasurer's Office loans and bonds, CA Energy Commission grants, etc.?
 - Has the jurisdiction investigated regional approaches to programs and expenses?
 - What selected recycling facilities are not yet on-line?
 - Did financing options for a selected diversion facility fail?
 - Did a jurisdiction face unavoidable regulatory delays? If so, did the jurisdiction explain the regulatory delays and how they affected the project time lines?
 - Did a jurisdiction elect to recover a certain type of material, but the hauler/operator will not cooperate and recover the waste type on behalf of the jurisdiction? Is the failure to recover the material(s) due to logistical problems?
 - Was insufficient staff available to implement programs?
 - Has the jurisdiction investigated volunteer or internship programs?

- Has the jurisdiction collaborated with the hauler(s)?
- Has the jurisdiction investigated regional approaches to programs, expenses, and staffing?
- Was there a high turnover in staff?
- Did the jurisdiction allot reasonable resources?
- Have existing contractual or legal issues prohibited a jurisdiction from implementing programs?
 - Can the jurisdiction amend franchise agreements, contracts, or permits? If not, when do the agreements expire?
 - Can the jurisdiction prepare a request for proposal(s) for the implementation of programs and facilities?
- What other considerations, including but not limited to market development obstacles, population density, waste generation rates, dominant waste generation categories and types, and geographic, demographic and economic factors, have affected the rural jurisdiction's ability to implement its commercial recycling program?

MANDATORY COMMERCIAL ORGANICS RECYCLING IMPLEMENTATION

On and after January 1, 2016, each jurisdiction is required to implement an organic waste recycling program that is appropriate for that jurisdiction and designed specifically to divert the organic waste generated by businesses subject to Section 42649.81, whether or not the jurisdiction has met the requirements of Section 41780.

The intent of AB 1826, the Mandatory Commercial Organics Recycling law is to divert organic materials from landfills, primarily by requiring: 1) a business that generates a specified amount of organic waste per week to arrange for recycling services for that organic waste; and 2) jurisdictions to implement mandatory organic waste recycling programs.

Every jurisdiction's organic waste recycling program at a minimum **must** consist of the following for the businesses that meet the required thresholds (described in more detail on the following pages):

1. Identifying the businesses that are required to recycle their organic waste.
2. Education and outreach to inform businesses about the law and how to recycle organics in the jurisdiction.

3. Implementing annual monitoring activities to identify those not recycling and to inform them of the law and how to recycle organics in the jurisdiction.
4. Ensuring that organic waste recycling services are available to businesses in the jurisdiction that meet the required threshold.

To determine the level of Mandatory Commercial Organics Recycling (MORe) implementation, staff would review programs and data as part of the annual site visits, and use information such as annual report information submitted by local jurisdictions, tonnage data, education information, etc. Jurisdictions' compliance with the MORe requirements will be determined during the formal Jurisdiction Review (either during a two or four-year review cycle depending on which cycle the jurisdiction is on).

As part of this, CalRecycle recognizes that the AB 1826 requirement for jurisdictions to implement mandatory organic waste recycling programs may require more than what AB 341 required for mandatory commercial recycling. For example, if the jurisdiction has to implement new or expanded commercial organic recycling programs and if determining the businesses that meet the compliance threshold is more complex, e.g., due to complexity of identifying businesses that generate certain thresholds of organic material. To assist jurisdictions in developing appropriate programs and understanding how CalRecycle will assess program implementation and compliance, CalRecycle developed a separate analytical tool to demonstrate the nature of the questions and information that staff will use in reviewing jurisdiction programs – e.g., has the jurisdiction done the following:

- Identified covered businesses and the amount of organic material they generate,
- Assessed if the covered businesses are already diverting their organic material,
- Determined the availability of existing organics recycling services to those covered businesses and the need for additional services,
- Determined what else it will need to implement to meet the needs of its covered businesses, and,
- Reported to CalRecycle if there are barriers and developed and provided a plan to address the barriers?

While jurisdictions do not need to use this analytical tool, they should be aware that it reflects the types of information that CalRecycle will be looking to assess as part of the formal Jurisdiction Review.

CalRecycle has incorporated the substance of this approach into the following criteria that staff would use to determine the extent to which a jurisdiction has shown a good faith effort to implement its mandatory organics recycling program. These criteria are provided

to serve as an example. The criteria are not prescriptive and they are not a "checklist". They indicate the issues that will be examined when CalRecycle performs its Jurisdiction Reviews. There is no intent to mandate that each criterion be adhered to, and that, if not, that a local jurisdiction would be in a "failure" situation. The criteria are broken down into four sections: 1) Identifying Commercial Generators of Organic Materials, 2) Conducting Education/Outreach, 3) Monitoring, and 4) Ensuring Commercial Recycling Services. Note: If jurisdictions meet the criteria for a rural exemption as provided for in AB 1826 and submitted the exemption resolution to CalRecycle, they will be exempt from implementing the requirements of AB 1826 and not subject to enforcement.

1. Identifying Covered Commercial Businesses of Organic Materials

- Did the jurisdiction make a reasonable effort to annually identify the commercial businesses that are required to recycle their organic waste?
 - How did the jurisdiction identify the covered commercial organics businesses?
 - Did the jurisdiction identify the types of existing organics diversion programs that the covered commercial businesses have in place?
 - Did the jurisdiction identify the types of programs that it has for covered commercial organics businesses?
 - Did the jurisdiction identify expanded or new programs that are needed to meet the needs of businesses?

- Did the jurisdiction provide data on the following regarding covered businesses in the Annual Report beginning August 1, 2017?
 - Number of covered businesses.
 - Number of covered multifamily complexes.
 - Number of covered businesses that are recycling organic waste.
 - Number of covered multifamily complexes that are recycling green waste, landscape and pruning waste, and nonhazardous wood waste.
 - The methodology used to identify covered businesses and multifamily complexes.
 - If any of this data is not available, an explanation of why and how the jurisdiction is addressing gathering the data
 - If applicable, the amount of organic material that is being diverted by covered businesses/multifamily complexes

- If any of the data was not provided, did the jurisdiction have a reasonable explanation and is the jurisdiction demonstrating that it is trying to address the gap?

- If the jurisdiction is phasing in identification, did the jurisdiction provide adequate rationale?

- Based upon this information CalRecycle will assess the extent to which jurisdictions have monitored which covered businesses are in compliance with Section 42649.81, including information on the amount of organic waste that is being diverted from covered businesses, if available, and on the number of covered businesses that are subscribing to service. If the number that have recycling service decreases during the review cycle, then CalRecycle would explore further with the jurisdiction to assess the reasons, including did the jurisdiction cease any active education or outreach efforts, did the rate structure change, etc.?

2. Conducting Education/Outreach

- Did the jurisdiction provide information about its annual education and outreach efforts?
- Did the jurisdiction use a variety of education and outreach approaches to inform covered businesses and multifamily complexes about the law and how to recycle organics, including electronic, print, and direct contact approaches?
 - Is this occurring annually?
 - Are there activities that were intended to be only one-time and did the jurisdiction provide an explanation that is reasonable?
- Is education and outreach accessible to the targeted sector, e.g., can affected commercial businesses readily find information on the jurisdiction or hauler's websites, is information provided at least annually, etc.?
- Have language barriers been addressed, e.g., if needed, have materials been translated into other languages, is the website information available in other languages, etc.?
- Have any incentives been provided to covered businesses and multifamily complexes, e.g., free or reduced cost collection services, technical assistance, awards and recognition, etc.?
- Has the jurisdiction utilized CalRecycle's free public information related to mandatory organics recycling?
- Was insufficient staff available to implement the education and outreach? Were there budgetary constraints? How did the jurisdiction try to address this?
 - Has the jurisdiction investigated volunteer or internship programs?
 - Has the jurisdiction investigated regional approaches to programs, expenses, and staffing?
 - Was there a high turnover in staff?
 - Did the jurisdiction allot reasonable resources?
- If the jurisdiction is phasing in education and outreach, did the jurisdiction provide adequate rationale?

- In the case of a rural jurisdiction, what were the effects of small geographic size, low population density, or distance to markets?

3. Monitoring

- Were covered businesses and multifamily complexes annually identified that were not in compliance with the Mandatory Organics Recycling law?
- Were covered businesses and multifamily complexes that were not in compliance annually notified about the law and how to comply with the law, e.g., non-compliant businesses were sent a letter by the jurisdiction, contacted via phone call, received an on-site meeting, etc.?
- If the jurisdiction is phasing in education and outreach, did the jurisdiction provide adequate rationale?
- If any of the data was not provided, did the jurisdiction have a reasonable explanation and is the jurisdiction demonstrating that it is trying to address the gap?
- Were there staffing or budgetary constraints?
- In the case of a rural jurisdiction, were there issues regarding monitoring related to the geographic size of the jurisdiction, or low population density?

4. Ensuring Organic Waste Recycling Services

Pursuant to statute, jurisdictions may include, but are not limited to, the following three elements in their organic waste recycling services:

1. Requiring a hauler under a franchise contract or agreement to provide commercial organic recycling services for on-site collection of organics from businesses.
2. Requiring permitted or contract haulers to provide commercial organic recycling services for on-site collection of organics from businesses in a non-franchised jurisdiction.
3. Implementing a mandatory commercial organic waste recycling policy or ordinance that requires businesses to either hire a service provider to haul its organic waste to a source separated or mixed processing system that diverts organic waste from disposal, or to self-haul

These three elements also might be implemented in conjunction with food rescue programs, on-site composting/AD, self-hauling by businesses, and landscaping services that collect the greenwaste and recycle it. Additional program elements that might support a program include:

1. Establishing certification requirements for self-haulers or businesses that manage organics on site.
2. Enforcement provisions, including a structure for fines and penalties.

3. Charging businesses a fee to cover the jurisdiction's costs of implementing the organic waste recycling program.

Note: A jurisdiction may implement or enforce organic waste recycling requirements that are more stringent or comprehensive than the law.

Determining Progress Achieved in Implementing a Commercial Organics Waste Recycling Program:

What constitutes "organics waste recycling services" will vary depending on many factors, such as the types of commercial generators and the types of organics that are generated, the types of existing or potential infrastructure for processing organic materials, on-site collection options, etc. The organics waste recycling services must be appropriate for the jurisdiction and meet the needs of its businesses; it must provide opportunities for the regulated businesses to avail themselves of organics recycling services.

1. Looking at the data regarding generators (see *Identifying Generators* above), did the jurisdiction sufficiently demonstrate that the commercial organics recycling programs available to regulated businesses and multifamily complexes are adequate?
 - a. How is the program sufficient, e.g., if the jurisdiction only has food rescue and allows businesses to manage it onsite via composting or anaerobic digestion, and there is no on-site collection services, did the jurisdiction demonstrate that this is sufficient to meet the needs of the businesses and multifamily complexes?
2. Did the jurisdiction demonstrate that its commercial organics recycling programs are effective?
 - a. What is the recovery rate of the commercial waste from the material recovery facilities that are utilized by the covered businesses? Note: Pursuant to statute, CalRecycle may review the recovery rate of the commercial waste from the material recovery facilities that are utilized by the businesses, as well as all information, methods, and calculations, and any additional performance data.
 - b. Are the programs, in combination with other available services, sufficient to provide for the collection where needed of all organic materials from regulated businesses?
3. If the jurisdiction has not been able to implement a commercial organics recycling program that is appropriate for the jurisdiction and meets the needs of its covered businesses, has it done the following:
 - a. Have markets for recycled organic materials continually remained low or poor? (See *Additional Reporting and Analysis Requirements* below.)

- i. Has the jurisdiction investigated local and regional marketing options?
 - ii. Has the jurisdiction investigated organics recycling opportunities with the private sector, e.g., partnering to site and build organics recycling facilities, collaborating with large commercial generators to manage waste on site, such as small scale anaerobic digestion facilities, etc.?
- b. Were sufficient funds available to implement programs?
 - i. Has the jurisdiction investigated funding resources, e.g., CalRecycle grants/loans, Treasurer's Office loans and bonds, CA Energy Commission grants, etc.?
 - ii. Has the jurisdiction investigated regional approaches to programs and expenses?
- c. What selected organics recycling facilities are not yet on-line? (See *Additional Reporting and Analysis Requirements* below.)
 - i. Did financing options for a selected diversion facility fail?
 - ii. Did a jurisdiction face unavoidable regulatory delays? If so, did the jurisdiction explain the regulatory delays and how they affected the project time lines?
 - iii. Did a jurisdiction elect to recover a certain type of material (e.g., food waste), but the hauler/operator will not cooperate and recover the waste type on behalf of the jurisdiction? Is the failure to recover the material(s) due to logistical problems?
- d. Was insufficient staff available to implement programs?
 - i. Has the jurisdiction investigated volunteer or internship programs?
 - ii. Has the jurisdiction collaborated with the hauler(s)?
 - iii. Has the jurisdiction investigated regional approaches to programs, expenses, and staffing?
 - iv. Was there a high turnover in staff?
 - v. Did the jurisdiction allot reasonable resources?
- e. Have existing contractual or legal issues prohibited a jurisdiction from implementing programs?

- i. Can the jurisdiction amend franchise agreements, contracts, or permits? If not, when do the agreements expire?
 - ii. Can the jurisdiction prepare a request for proposal(s) for the implementation of programs and facilities?
 - f. What other considerations, including but not limited to market development obstacles, population density, waste generation rates, dominant waste generation categories and types, and geographic, demographic and economic factors, have affected the rural jurisdiction's ability to implement its commercial organics recycling program?
4. **Note:** Due to the amount of organics generated by the commercial sector, the jurisdiction may be able to phase in organics recycling services. For example, some jurisdictions may not have any businesses that generate 8 cy/week of organics, but do have businesses that generate 4 cy/week of organics. For these jurisdictions they may not need to implement organics recycling services until 2017. For jurisdictions that don't have businesses that generate 4 cy/week of organics and have businesses that generate 4 cy/week of trash, they may not need to implement organics recycling services until 2019.

5. Did the jurisdiction meet additional reporting and analysis requirements?

The following shall be reported in the Electronic Annual Report beginning August 1, 2017, for compost, anaerobic digestion and chip and grind facilities, and may include other facilities that recycle organic waste. This information will be analyzed by CalRecycle to determine if the jurisdiction's efforts to implement an organics recycling program are adequate.

- a. The names of compost, anaerobic digestion and chip and grind facilities, within a reasonable vicinity and the capacities available for materials to be accepted at each facility?
- b. Existing solid waste and organic waste recycling facilities within the jurisdiction that may be suitable for potential expansion or colocation of organic waste processing or recycling facilities?
- c. Efforts of which the jurisdiction is aware that are underway to develop new private or public regional organic waste recycling facilities and the anticipated timeline for completion of those facilities?
- d. A summary of closed or abandoned sites that may be available for new organic waste recycling facilities?

- e. Other nondisposal opportunities or markets (e.g., food donation, on-site composting, etc.)
- f. Are there appropriate zoning and permit requirements for the location of new organic waste recycling facilities to help with siting?
- g. Are there local incentives available, if any, for developing new organic waste recycling facilities within the jurisdiction?
- h. If there are known barriers to siting or expanding organic waste recycling facilities in the area that are in the jurisdiction's control, did the jurisdiction provide a summary of the jurisdiction's plan to remedy the barriers?

HHWE IMPLEMENTATION

Each HHWE describes programs for the safe collection, recycling, treatment and disposal of hazardous wastes generated by households, a monitoring program, funding sources, and a specific implementation time frame. CalRecycle staff recommends using the following criteria to determine whether selected programs were implemented, and to assess the reasons a jurisdiction has failed to implement its HHW programs. CalRecycle staff will also determine if the jurisdiction is following the HHWE implementation schedule. Jurisdictions failing to fully implement their HHWE may be fined up to \$10,000 per day.

Criteria for HHWE Implementation

Programs Implemented

Jurisdictions implementing their HHW programs are not subject to fines by CalRecycle. Staff recommends the following criteria be used to determine if programs were implemented. For example:

- Was a HHW event or a permanent collection facility made available to all households in the jurisdiction, regardless of actual participation?
- What expenditures have been devoted to HHW collection, treatment, recycling, and disposal?
- What efforts have been made to inform the public about HHW and HHW collection events and/or facilities?
- Have the time frames specified in the HHWE for implementing programs been followed (considering reasonable barriers to implementation)?

Programs Not Implemented

Staff recommends investigating the extent to which a jurisdiction has implemented programs, and the reasons they have failed to implement programs. Based upon the evaluation, staff may recommend to CalRecycle that a jurisdiction be issued a compliance order. CalRecycle may consider assessing fines of up to \$10,000 per day to jurisdictions that fail to meet the requirements of their compliance orders, on a case-by-case basis. Example criteria include:

- What programs were not implemented?
- Has the jurisdiction investigated local and regional waste exchange, recycling and reuse options?
- Were insufficient funds available to implement programs?
 - Has the jurisdiction investigated grants available from CalRecycle, the US EPA, etc.?
 - Has the jurisdiction investigated regional approaches to programs and expenses?
 - Has the jurisdiction investigated all financial options selected in the HHWE?
- Have time frames projected in the HHWE been met?
 - What factors have affected these time frames?
 - Will time frames be adjusted to continue program implementation?
- What other problems has the jurisdiction encountered in program implementation?
- Was insufficient staff available to implement programs?
 - Has the jurisdiction investigated volunteer or internship programs?
 - Has the jurisdiction investigated regional approaches to programs, expenses, and staffing?
- Have existing contractual or legal issues prohibited a jurisdiction from implementing programs?

DETERMINATION OF SRRE AND HHWE IMPLEMENTATION

CalRecycle staff will refer to the various components of the SRRE and HHWE, information from a jurisdiction's annual report, CalRecycle's Review, and other information sources to determine how fully a jurisdiction has implemented its SRRE and HHWE.

Annual Reports

SRRE Information

Each jurisdiction is required to annually submit a report to CalRecycle summarizing its progress in implementing waste diversion programs and achieving the diversion requirements. A jurisdiction's annual per capita disposal rate and up-to-date information on its diversion programs should be included in each annual report. Annual reports must be submitted to CalRecycle by August 1 of each year following the year of Board approval of a jurisdiction's SRRE, with the first annual report (for 1995) due by August 1, 1996, and each year thereafter.

CalRecycle will provide jurisdictions with a model annual report.

Commencing with the 2012 Annual Report (due August 1, 2013) each jurisdiction must report annually on its implementation of MCR. Commencing with the 2016 Annual Report (submitted on August 1, 2017) each jurisdiction must report annually on its implementation of MORE. Commencing with the 2017 Electronic Annual Report (due August 1, 2018) each jurisdiction must report annually on its implementation of AB 1594. CalRecycle will provide jurisdictions with guidance in the Electronic Annual Report on the information that needs to be reported.

HHWE Information

Each jurisdiction is also required to include in its annual report information summarizing its progress in implementing the household hazardous waste programs selected in its HHWE.

CalRecycle Jurisdiction Review Cycles

Based on the information provided in a jurisdiction's annual reports submitted pursuant to PRC Section 41821 and any other relevant information, CalRecycle shall make a finding as to whether each jurisdiction was in compliance with PRC Section 41780 for the calendar year 2006 and shall review a jurisdiction's compliance with the diversion requirements of PRC Section 41780 as follows (PRC Section 41825), as well as PRC Section 42649 (MCR and MORE), and PRC Section 41781.3:

- If the jurisdiction was in compliance for the calendar year 2006, commencing January 1, 2012, and at least once every four years thereafter, CalRecycle shall review whether the jurisdiction has implemented its SRRE, HHWE, MCR and MORE.
- If the jurisdiction made a good faith effort to implement its SRRE and HHWE, commencing January 1, 2010, and at least once every two years thereafter, CalRecycle shall review, whether the jurisdiction has implemented its SRRE, HHWE, MCR and MORE.

- If the jurisdiction was not in compliance for the calendar year 2006, commencing January 1, 2010, and at least once every two years thereafter, CalRecycle shall review, whether the jurisdiction has implemented its SRRE, HHWE, MCR and MORE.
- If a jurisdiction subject to a two-year schedule subsequently comes into compliance with PRC Section 41780, CalRecycle has discretion to switch the jurisdiction to a four-year review schedule.
- If a jurisdiction subject to a four-year schedule subsequently falls out of compliance with PRC Section 41780, CalRecycle has discretion to switch the jurisdiction to a two-year review schedule.
- In addition to the above requirements, CalRecycle may review whether a jurisdiction is in compliance with PRC Section 41780 at any time that CalRecycle receives information that the jurisdiction may not be making a good faith effort to implement its SRRE, HHWE, MCR or MORE.

Compliance Measurements

Pursuant to SB 1016, as of January 1, 2009 the 50% equivalent per capita disposal target is the amount of disposal a jurisdiction would have had during the base period if it had been exactly at a 50% diversion rate. It is calculated using the average of 2003-2006 per capita generation for each jurisdiction (in pounds). It then divides this generation average in half to determine the 50% equivalent per capita disposal target. This is the only time that generation will be used. This target will be specific to each jurisdiction and is not comparable to those of other jurisdictions.

The target is an indicator for comparison with that jurisdiction's annual per capita per day disposal rate beginning with the 2007 program year.

Disposal reporting requirements are described in 14 CCR, Article 9.2, Sections 18800-18813. A jurisdiction will determine its yearly disposal amount based on disposal information provided by one or more counties as part of CalRecycle's Disposal Reporting System. Jurisdictions will measure and report on their achievement of the 25 percent diversion requirement for the years 1995 through 1999, and achievement of the 50 percent diversion requirement for 2000 and beyond.

A jurisdiction will measure its progress toward achieving the applicable waste diversion requirement as required in PRC Section 41780 by following the requirements outlined in PRC Sections 41780.05, 41780.1 and 41780.2, and Sections 41781 through 41786, as applicable.

Criteria for Measuring Diversion Requirements

Staff recommends using the following criteria to determine whether the applicable diversion requirement has been achieved. Information will be obtained from the

electronic annual report, information provided by the jurisdiction, and other sources as necessary.

- Has the jurisdiction updated its SRRE and/or, HHWE through the electronic annual report to include any new or expanded programs it has implemented or plans to implement?
- Has the jurisdiction updated its NDFE through the electronic annual report to reflect any new or expanded non-disposal facilities it is using or planning to use?
- Is the total actual per capita disposal amount reported in the jurisdiction's applicable annual report equal to or less than the 50% equivalent per capita disposal allowable to meet the applicable diversion requirement of PRC Section 41780, or CalRecycle-approved reduced diversion requirement?
- Has the jurisdiction summarized its progress in diverting construction and demolition material, including information on programs and ordinances implemented by the local government and quantitative data, where applicable?
- Has the jurisdiction included other information relevant to compliance with PRC Section 41780 including, but not limited to:
 - Information on disposal reported pursuant to PRC Section 41821.5 that the jurisdiction believes may be relevant to CalRecycle's determination of the jurisdiction's per capita disposal rate.
 - Disposal characterization studies or other completed studies that show the effectiveness of the programs being implemented.
 - Factors that the jurisdiction believes would affect the accuracy of or mitigate the amount of solid waste disposed by the jurisdiction including but not limited to either of the following:
 - Whether the jurisdiction hosts a solid waste facility or any regional diversion facility.
 - The effects of self-hauled waste and construction and demolition waste.
 - The extent to which the jurisdiction previously relied on biomass diversion credit and the extent to which it may be impacted by the lack of the credit.
 - Information regarding the programs the jurisdiction is undertaking to address specific disposal challenges and why it is not feasible to implement programs to respond to other factors that affect the amount of waste that is disposed.
- Is the actual per capita disposal rate reflective of actual programmatic performance?

Not Meeting Diversion Requirements

- If the total annual per capita disposal rate is greater than the jurisdiction's 50% equivalent per capita disposal target, how much greater is it?
- Is the increase in per capita disposal rate the result of the jurisdiction's disposal increasing faster than the jurisdiction's growth?
- Is the actual per capita disposal rate reflective of actual programmatic performance?
- Has the jurisdiction provided relevant and substantive documentation indicating that the factors used in calculating its annual per capita disposal rate may have resulted in rate 50% equivalent per capita disposal target that is inaccurate and may require correction?

ENFORCEMENT

The preceding sections entitled "SRRE Implementation," "HHWE Implementation," MCR Implementation, and MORE Implementation outline the criteria staff uses to determine level of implementation. The following section outlines the enforcement processes recommended to be used by CalRecycle.

Steps Toward Issuance of a Compliance Order

CalRecycle's Jurisdiction Review process will be used to assess the level of implementation of jurisdictions' SRREs and HHWEs. Also, CalRecycle's Jurisdiction Review process will be used to assess the level that each jurisdiction has made in implementing MCR, MORE, and AB 1594. For example, for the 1999/2000 Biennial Review, staff evaluated the program implementation and diversion rate information in jurisdictions' 1999 and 2000 Annual Reports to determine their progress in implementing diversion programs selected in their SRREs (and HHWEs) and in meeting the 50 percent diversion requirement in 2000. Staff then presented the results of that review and their recommendations to the Board at a regularly scheduled meeting. To the extent possible, this hearing will be held in the local or regional agency's jurisdiction (PRC Section 41825).

If CalRecycle finds, after the public hearing, that a jurisdiction has failed to adequately implement its SRRE and/or HHWE and fits into Scenarios II or III, CalRecycle may issue an Order of Compliance, including a compliance schedule (PRC Section 41825). CalRecycle will follow the procedures for issuing compliance orders it adopted at the January 23-24, 2001, Board meeting. Jurisdictions determined to be in Scenario IV will be issued an Order of Compliance, including a compliance schedule. The compliance order will identify the programs of the SRRE and/or HHWE that are not being implemented or attained by the jurisdiction, or identify areas of the SRRE and/or

HHWE that require revision. Staff recommends that CalRecycle set a specific schedule for the jurisdiction to act on these findings, to be determined on a case-by-case basis.

CalRecycle will follow the requirements of PRC Section 41825 regarding issuing a jurisdiction a compliance order for failure to adequately implement its SRRE and/or HHWE.

If CalRecycle finds, after the public hearing, that a jurisdiction has failed to adequately implement its MCR and/or MORE requirements regardless if it met the diversion requirements of PRC Section 41780 and has not demonstrated a good faith effort to implement one or both of these programs, CalRecycle may issue an Order of Compliance, including a compliance schedule (PRC Section 41825). CalRecycle will follow the procedures for issuing compliance orders it adopted at the January 23-24, 2001, Board meeting. The compliance order will identify the programs for mandatory commercial recycling and mandatory commercial organics recycling that are not being implemented by the jurisdiction. CalRecycle will set a specific schedule for the jurisdiction to act on these findings, to be determined on a case-by-case basis. CalRecycle will follow the requirements of PRC Section 41825 regarding issuing a jurisdiction a compliance order for failure to adequately implement its MCR and/or MORE programs.

If CalRecycle finds, after the public hearing, that a jurisdiction has failed to adequately implement its requirements under AB 1594 and fits into Scenarios II or IV and has not made a good faith effort to address the barriers to divert greenwaste that was being used as ADC, CalRecycle may issue an Order of Compliance, including a compliance schedule (PRC Section 41825). CalRecycle will follow the procedures for issuing compliance orders it adopted at the January 23-24, 2001, Board meeting. The compliance order will identify the greenwaste programs that are not being implemented. CalRecycle will set a specific schedule for the jurisdiction to act on these findings, to be determined on a case-by-case basis.

CalRecycle will follow the requirements of PRC Section 41825 regarding issuing a jurisdiction a compliance order for failure to adequately implement AB 1594's requirements.

If a jurisdiction fails to meet the requirements of its compliance order and CalRecycle is determining whether or not to impose a fine, or determining the amount of a fine, including cases where a jurisdiction failed to meet the diversion requirements due to the inability to count the excluded wastes (agricultural waste, inert solids, scrap metals and white goods), CalRecycle will follow the requirements of PRC Section 41850(b). That Section states that in determining the amount of any penalties imposed, including penalties imposed due to the exclusion of solid waste pursuant to PRC Section 41781.2 which results in a reduction in the quantity of solid waste diverted by a city or

county, CalRecycle shall consider only those relevant circumstances which have prevented a city or county or regional agency from meeting the diversion requirements. PRC Section 41850 provides a non-exclusive list of potential circumstances CalRecycle shall consider before assessing a fine, as noted in the "Statutory Relief Considerations" section below.

Statutory Relief Considerations

The preceding criteria will be used to recommend to CalRecycle whether a jurisdiction has implemented its SRRE, HHWE, and met the MCR, MORE, and AB 1594 requirements. Administrative civil penalties of up to \$10,000 per day per may be levied on jurisdictions failing to implement their SRRE and HHWEs, or for failing to meet these other requirements; however, statute allows CalRecycle to consider the following circumstances when determining the amount of the civil penalty.

- Disasters or acts of nature, such as the Northridge, Ferndale, and Loma Prieta earthquakes, the Oakland Hills and Malibu fires, or the mudslides that are common to California, which result in short-term increases in the amount of wastes sent to landfills and short or long-term re-direction of city and county personnel who must respond to the health and safety issues resulting from the acts of nature.
- Budgetary conditions within a jurisdiction that could not be remedied by the imposition or adjustment of solid waste fees. Examples include high unemployment, a limited tax base, or existing solid waste contracts that cannot be altered.
- Work stoppages that directly prevent a jurisdiction from implementing its source reduction and recycling element. This may include unanticipated industry closures, closure of privately-owned composting or materials recovery facilities, strikes by city or county labor unions, or work stoppages in private industries that provide support and/or materials to a jurisdiction through a public-private partnership.
- The extent to which a jurisdiction has implemented additional source reduction, recycling, and composting activities to comply with the diversion requirements. This would include the implementation of programs not initially selected in the SRRE, but chosen to make up for an unanticipated diversion shortfall in a selected program or to adjust to meet changes in the composition of the jurisdiction's waste stream.
- The extent to which a jurisdiction is meeting the diversion requirements.
- The extent to which a jurisdiction has made good faith efforts to implement its SRRE or HHWE. "Good faith effort" is shown when a city, county, or regional agency has made all reasonable and feasible efforts to implement those programs or activities identified in its SRRE or HHWE, or alternative programs or activities

that achieve the same or similar results. A jurisdiction will be required to demonstrate to CalRecycle its good faith efforts. CalRecycle will determine the adequacy of the effort, as described by the city, county or regional agency.

- MCR has some specific provisions for determining Good Faith Effort at PRC 42649.3 (i)(1-7).
- MORE has some specific provisions for determining Good Faith Effort at PRC 42649.82 (h)(1-10).

Compliance Order and Schedule

Jurisdictions that are issued Compliance Orders by CalRecycle will work with staff to develop compliance schedules for implementing the Order. CalRecycle staff will monitor the progress of the jurisdiction throughout the compliance period. In determining the appropriate compliance schedule, staff recommends CalRecycle consider the following:

- a) Existing budgetary and/or personnel constraints or other compelling issues within the jurisdiction (for example, time required to solicit proposals, conduct bid processes, establish pilot programs, generate funding);
- b) Alternative programs the jurisdiction may undertake to meet the diversion requirements (including MCR, MORE, and AB 1594) and/or SRRE implementation requirements;
- c) Local regulatory or zoning conditions that would prohibit or postpone compliance; and
- d) Impacts of the compliance schedule to public health and the environment.

Staff recommends CalRecycle include specific requirements in the compliance schedule to ensure compliance is attained, including, but not limited to, the following:

- a) A date by which the jurisdiction will achieve compliance with the requirements set forth by CalRecycle; and
- b) A specific monitoring schedule for CalRecycle to assess progress toward compliance.

Time frames for monitoring a jurisdiction's performance may include periodic (e.g., quarterly) progress reports of the jurisdiction's efforts to attain compliance.

Penalty Structure

CalRecycle may impose fines only after a jurisdiction fails to adhere to the Compliance Order and schedule requirements. Fines would be levied according to the cause of

failure to adequately implement a SRRE, HHWE, or meet the MCR, MORE and/or AB 1594 requirements, as listed below. Staff will recommend to CalRecycle an appropriate level of penalty, based on an analysis of the above-mentioned criteria.

1. "Serious" failure includes jurisdictions that fail to implement their SRRE, HHWE, MCR or MORE requirements without reason or justification. The fine recommended for this type of violation would be no less than \$5,000 and up to the maximum \$10,000 per day.
2. "Moderate" failure includes jurisdictions that fail to implement their SRRE, HHWE, MCR or MORE requirements due to mitigating circumstances that have no bearing on natural disasters, budgetary constraints and work stoppages. Mitigating circumstances would be determined on a case-by-case basis by CalRecycle. The fine recommended for this type of violation would be \$1,000 to \$5,000 per day.
3. "Minor" failure includes jurisdictions that have implemented some or all programs, but have failed to meet the diversion requirements to some extent. Fines will be based on information provided by jurisdictions as outlined in the above criteria for implementation, and on statutory relief considerations. Fines, if determined to be appropriate, will be decided by CalRecycle on a case-by-case basis, and would range from \$1 to up to \$1,000 per day.

Notwithstanding the above penalty structure, if a jurisdiction demonstrates that it has made a good faith effort to implement its SRRE and to meet the MCR, MORE, and AB 1594 requirements, including achieving the diversion requirements, CalRecycle, on a case-by-case basis, shall not impose any penalties.

Removal of Penalties

Jurisdictions may only be fined after failing to adhere to the compliance order and schedule. Fines will continue until a jurisdiction has implemented the programs as outlined in the compliance order.

CONCLUSION

CalRecycle staff has prepared this report that explains the method and criteria staff recommends using to determine whether local jurisdiction SRREs, HHWEs, and the requirements of MCR, MORE, and AB 1594 have been adequately implemented. It also proposes a process that CalRecycle and local jurisdictions would use to achieve compliance with implementation requirements, and the structure of penalties that may be imposed on jurisdictions that fail to adequately implement their SRREs and HHWEs and the requirements of MCR, MORE, and AB 1594.

APPENDICES

Appendix A: Definitions

"Disasters/Acts of Nature" includes the proclamation by the Governor or a local governing body of the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state or local area caused by such conditions as air pollution, fire, flood, storm, epidemic, riot, drought, sudden and severe energy shortage, plant or animal infestation or disease, the Governor's warning of an earthquake or volcanic prediction, or an earthquake or other conditions which, by reason of their magnitude, are likely to be beyond the control of the services, personnel, equipment, and facilities of any single county, city and county, or city.

"Disposal" means all waste created by all sources within each jurisdiction (including businesses, government agencies and residents) which is disposed at CalRecycle-permitted landfills or CalRecycle-permitted transformation facilities, or is exported from the state. CalRecycle tracks tons of waste disposed by each jurisdiction using its Disposal Reporting System. Also, see Public Resources Code Section 41821.5.

"Diversion program" means a program in the source reduction and recycling element of a jurisdiction's integrated waste management plan, specified in Chapter 2 (Commencing with Section 41000) of, or Chapter 3 (commencing with Section 41300) of, Part 2 and that has the purpose of diverting solid waste from landfill disposal or transformation through source reduction, recycling, and composting activities. "Diversion program additionally includes any amendments, revisions, or updates to the element, and any programs set forth in a time extension, alternative requirement, or compliance order approved by CalRecycle pursuant to Part 2 (commencing with Section 40900).

"Employment" means the estimate of the annual average number of employees by jurisdiction as prepared by the California Employment Development Department (EDD). It is the number of people aged 16 years or older employed at places within each jurisdiction's boundaries (industry employment)--not the number of jurisdiction residents with jobs (labor force employment). Employment includes full-time and part-time employees even if the employee is on paid vacation or paid sick leave, but not if the employee is involved in a labor-management dispute. Self-employed, unpaid family workers, and private household employees are not included. It is a benchmark estimate to compare year-to-year employment change.

"Estimated generation amounts" The estimated reporting year generation amount is calculated by adjusting the base-year generation for changes in population and economics. The uniform method for adjusting waste disposal to account for changes

In population and economics adjusts the maximum allowable reporting year disposal amount using a combination of the ratios of base-year to report-year population, employment, taxable retail sales and Consumer Price Index factors. Waste tonnage from the residential sector are calculated separately from waste from the non-residential sector (i.e., commercial/industrial wastes); then the waste tonnage from both sectors are added together, as the adjustment factors influence residential and non-residential wastes in a slightly different way. Pursuant to SB 1016 (Wiggins, 2008) as of January 1, 2009, measurement of the PRC Section 41780 diversion requirement has changed to a disposal based measurement system. Accordingly jurisdictions are no longer required to calculate their estimated generation amount for each reporting year.

"Excluded waste types" PRC Section 41781.2 specifies that agricultural wastes, inert solids, scrap metals, and white goods that were diverted in the base year as a result of diversion programs that began prior to January 1, 1990, are not allowed to count toward base-year diversion claims unless CalRecycle receives documentation showing that three specific criteria are met. These waste types are referred to by CalRecycle as "restricted wastes."

"Full implementation" means the accomplishment of the program tasks, including the achievement of waste diversion requirements, as identified in each component of the Source Reduction and Recycling Element or Household Hazardous Waste Element.

"Good Faith Effort" means all reasonable and feasible efforts by a city, county, or regional agency to implement those programs or activities identified in its Source Reduction and Recycling Element and Household Hazardous Waste Element, or alternative programs or activities that achieve the same or similar results [PRC Section 41850 (d) (1)]. Good faith effort is further defined in PRC Section 41850(d) (2) and (3). Subsection (3) refers to the criteria in this policy document. Good Faith Effort is defined for MCR in PRC section 42649.3(i) and for MORE in PRC Section 42649.82(h).

"Jurisdiction" means the city, county, or regional agency that is approved by CalRecycle pursuant to Section 40975.

"Multicounty regional agency" means a regional agency, as defined in PRC Section 40181, that includes all of the jurisdictions that are located in at least two or more rural counties.

"Per capita disposal" is a numeric indicator of reported disposal divided by jurisdiction population (residents) or in some cases jurisdiction industry employment (employees) to obtain disposal by individual.

"50 percent per capita disposal target" is the amount of disposal that is approximately equivalent to the current 50 percent diversion requirement. To meet the 50 percent goal, jurisdictions must dispose of not more than their 50 percent per capita disposal target. For most jurisdictions, the 50 percent per capita disposal target will be based on the average of 50 percent of generation in 2003 through 2006 expressed in terms of per capita disposal.

"Population" means the January 1 estimate of the number of inhabitants occupying a jurisdiction as prepared by the California Department of Finance (DOF) for each non-Census year (calendar year ending with a digit other than zero). "Population" also means the April 1 U.S. Census count for each Census year (calendar year ending with the digit zero). Population includes each person at the place where the person lives and sleeps most of the time. This place is not necessarily the same as the person's voting residence or legal residence. Noncitizens who are living in the United States are included, regardless of their immigration status. Persons are included regardless of characteristics such as: college student, commuter worker, domestic worker or live-in nanny, foreign national, homeless, hospital or nursing home patient, prisoner, intermittent resident or "snow-bird," military member, tourist or undocumented worker. The fundamental goal is to count each person once, only once, and in the correct "usual residence" location according to U.S. Census residence rules.

"Rural city" or "rural regional agency" means a city or regional agency that is located within a rural county as defined in PRC Section 40183(a).

"Rural county" means a county or multicounty regional agency that annually disposes of no more than 200,000 tons of solid waste as defined in PRC Section 40184(a).

Appendix B: Relevant Waste Reduction Statutes

- PRC Section 40973 states that the regional agency, and not the cities or counties which are member agencies of the regional agency, may be responsible for compliance with Section 41780 if specified in the agreement pursuant to which the regional agency is formed. PRC Section 40973(c) states that if all member jurisdictions of a regional agency are rural cities or rural counties, as defined in PRC Sections 40183-40184, respectively, the regional agency may be eligible for a reduction of the diversion requirements of PRC Section 41780.
- PRC Section 40974 states that notwithstanding PRC Section 40972, each city or county which is a member agency of a regional agency is liable for any civil penalties which may be imposed by CalRecycle pursuant to PRC Sections 41813 or 41850. However, an agreement which establishes a regional agency may apportion any civil penalties between or among the cities or counties which are member agencies of the regional agency if the total amount of civil penalties which may be imposed against the regional agency is equivalent to that amount which is the sum of the penalties which may be imposed against each city or county which is a member agency of the regional agency.
- PRC Section 41780 requires jurisdictions to reduce the amount of waste sent to landfills by 25 percent by 1995 and 50 percent by the year 2000.
- PRC Section 41781.3 as amended by AB 1594 provides the new ADC/Green Waste requirements.
- PRC Section 41782 allows CalRecycle to make adjustments to the amounts reported pursuant to subdivisions (a) and (c) of PRC Section 41821.5, if the city, county, or regional agency demonstrates, and CalRecycle concurs, based on substantial evidence in the record, that achievement of the diversion requirements of PRC Section 41780 is not feasible due to the fact that a medical waste treatment facility, as defined in Health and Safety Code Section 25025(a), accepts untreated medical waste, which was generated outside of the jurisdiction, for purposes of treatment, and the medical waste, when treated, becomes solid waste.
- PRC Section 41783 allows a jurisdiction submitting a SRRE after January 1, 1995, and on or before January 1, 2009, to include diversion of not more than 10 of the 50 percent diversion requirement through transformation if statutory requirements are met and allows for SRREs submitted thereafter to reduce the per capita disposal rate by an amount to achieve the same effect (up to 10 of the 50% diversion rate equivalent).

- PRC Section 41820.5 allows CalRecycle to grant a time extension from the diversion requirement of Section 41780 to a city if it incorporated after January 1, 1990 and if the county within which the city is located did not include provisions in its franchises which ensured that the now incorporated area would comply with the diversion requirements of Section 41780.
- PRC Section 41825 states that according to either a two or a four year schedule based upon whether the jurisdiction was in compliance with PRC Section 41780 for the calendar year 2006, CalRecycle shall review each city, county, or regional agency SRRE and HHWE. If, after a public hearing, which, to the extent possible, is held in the local or regional agency's jurisdiction, CalRecycle finds that the city, county, or regional agency has failed to implement its SRRE or its HHWE, CalRecycle shall issue an order of compliance with a specific schedule for achieving compliance. The compliance order shall include those conditions which CalRecycle determines to be necessary for the local agency or regional agency to complete in order to implement its SRRE or HHWE
- PRC Section 41850 allows CalRecycle, after holding a public hearing and issuing an order of compliance pursuant to Section 41825, to impose administrative civil penalties of up to ten thousand dollars per day (until the jurisdiction implements the element) on jurisdictions that have failed to make a good faith effort to implement their SRRE or HHWE. This section directs CalRecycle to consider only those relevant circumstances that have prevented a jurisdiction from meeting the diversion requirements, and provides examples of legitimate relevant circumstances. This section also describes what is meant by "good faith effort".
- PRC Section 41850.5 states that any administrative civil penalty imposed by CalRecycle pursuant to Sections 41813 or 41850 shall be deposited in the Local Government Assistance Account. Funds deposited in that account shall be used solely for the purposes of assisting local governments in complying with the diversion requirements.
- PRC Section 42649 et seq. describes the MCR requirements.
- PRC Section 42649.8 et seq. describes the MORE Requirements.



Mandatory Commercial Organics Recycling Background and Overview

In October of 2014 Governor Brown signed [AB 1826 Chesbro \(Chapter 727, Statutes of 2014\)](#), requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units (please note, however, that, multifamily dwellings are not required to have a food waste diversion program). Organic waste (also referred to as organics throughout this resource) means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law phases in the mandatory recycling of commercial organics over time, while also offering an exemption process for rural counties. In particular, the minimum threshold of organic waste generation by businesses decreases over time, which means that an increasingly greater proportion of the commercial sector will be required to comply.

Program News...

- Updated FAQs now available.
- Mandatory Commercial Organics Recycling (AB 1826) Stakeholder Workshop Materials (April 2015)
- Subscribe to Listserv

Why Organics? Mandatory recycling of organic waste is the next step toward achieving California's aggressive recycling and greenhouse gas (GHG) emission goals. California disposes approximately 30 million tons of waste in landfills each year, of which more than 30 percent could be used for compost or mulch (see the [2008 Waste Characterization Study](#)). Organic waste such as green materials and food materials are recyclable through composting and mulching, and through anaerobic digestion, which can produce renewable energy and fuel. Greenhouse gas (GHG) emissions resulting from the decomposition of organic wastes in landfills have been identified as a significant source of emissions contributing to global climate change. Reducing the amount of organic materials sent to landfills and increasing the production of compost and mulch are part of the [AB 32 \(California Global Warming Solutions Act of 2006\) Scoping Plan](#). For more information on the connection between the waste sector and California's GHG emission reduction goals, please see [CalRecycle's Climate Change page](#).

Key Elements of the Law

The pages below address the specific requirements of businesses, jurisdictions, and CalRecycle.

- [Business Requirements and Resources](#)
- [Local Government Requirements and Resources](#)
- [CalRecycle Requirements](#)

Implementation Dates and Thresholds

The law phases in the requirements on businesses, including multifamily residential dwellings that consist of five or more units,* over time based on the amount and type of waste the business produces on a weekly basis, with full implementation realized in 2019. Additionally, the law contains a 2020 trigger that will increase the scope of affected businesses, if waste reduction targets are not met. The implementation schedule is as follows:

- **January 1, 2016:** Local jurisdictions must have an organic waste recycling program in place. Jurisdictions must conduct outreach, education to inform businesses how to recycle organic waste in the jurisdiction, and monitoring to identify those not recycling and inform them of the law and how to recycle organic waste.
- **April 1, 2016:** Businesses that generate eight cubic yards of organic waste per week must arrange for organic waste recycling services.
- **January 1, 2017:** Businesses that generate four cubic yards of organic waste per week must arrange for organic waste recycling services.
- **August 1, 2017 and Ongoing:** Jurisdictions must provide information about their organic waste recycling program implementation in the annual report submitted to CalRecycle. (See above for description of information to be provided.)
- **Fall 2018:** After receipt of the 2016 annual reports submitted on August 1, 2017, CalRecycle shall conduct its [formal review of those jurisdictions that are on a two-year review cycle](#).
- **January 1, 2019:** Businesses that generate four cubic yards or more of commercial solid waste per week must arrange for organic waste recycling services.
- **Fall 2020:** After receipt of the 2019 annual reports submitted on August 1, 2020, CalRecycle shall conduct its formal review of all jurisdictions.

- ➔ **Summer/Fall 2021:** If CalRecycle determines that the statewide disposal of organic waste in 2020 has not been reduced by 50 percent of the level of disposal during 2014, the organic recycling requirements on businesses will expand to cover businesses that generate two cubic yards or more of commercial solid waste per week. Additionally certain exemptions, previously discussed, may no longer be available if this target is not met.

*Note: Multifamily dwellings are not required to have a food waste diversion program.

Related Resources

- ➔ [Frequently Asked Questions](#) (FAQ). This FAQ provides CalRecycle's responses to frequently asked questions from stakeholders about the requirements of commercial organic recycling under AB 1826.
- ➔ [Mandatory Commercial Organics Recycling \(AB 1826\) Stakeholder Workshop Materials](#) (April 2015). Presentation, proposed FAQs, generator identification tool, info on annual reporting, example programs, program needs assessment tool, and Countywide Integrated Waste Management Plan (CIWMP) enforcement revisions.
- ➔ [Contact Search](#). Use the Contact Search form to locate jurisdiction (city, county, or regional agency) contacts and/or identify the CalRecycle liaison assigned to a jurisdiction.
- ➔ CalRecycle's [Food scraps management](#) provides information by generator (e.g., [Hotels/Restaurants](#), [Health Care Industry](#), [Stadiums/Special Events](#), [Colleges/Universities](#)).
- ➔ [Find a Composter Near You](#). Locate compost and/or mulch facilities by county and feedstock accepted. Additional facility information is available using CalRecycle's [Facility Information Toolbox](#) (FacIT).
- ➔ [USEPA Food Recovery Challenge](#). Participants reduce wasted food through prevention, donation, composting, and anaerobic digestion.
- ➔ [USEPA's Reducing Wasted Food & Packaging Toolkit](#). The free toolkit includes a PDF guide and a tracking tool (Excel spreadsheet) to help food service facilities identify and implement opportunities to reduce food and packaging waste, which saves money and reduces environmental impacts.
- ➔ CalRecycle's site for [organics materials management technologies](#) has multiple resources including list of anaerobic digestion projects, guidance, a listserv, and program news. These and other resources are all accessible from CalRecycle's [organics home page](#), which is regularly updated.
- ➔ Stay up to date on CalRecycle's [proposed regulations on Compostable Materials, Transfer/Processing](#) by signing up for the [related listserv](#).

Last updated: June 18 2015
 Business Assistance, <http://www.calrecycle.ca.gov/Business/>
 Local Assistance & Market Development, LAMD@calrecycle.ca.gov (916) 341-6199

[Conditions of Use](#) | [Privacy Policy](#) | [Language Complaint Form](#)
 ©1995, 2015 California Department of Resources Recycling and Recovery (CalRecycle). All rights reserved.

Exemptions for businesses and multifamily complexes

Case-by-case exemptions: The law allows jurisdictions to, on a case-by-case basis, grant exemptions to businesses and multifamily complexes that meet any of the following criteria:

- The multifamily complexes or businesses lack sufficient space to provide additional organic material recycling bins.
- The business currently implements actions that result in the recycling of a significant portion of organic waste.
- The business or group of businesses does not generate at least one-half of a cubic yard of organic waste per week.
- The business or group of businesses does not generate at least one cubic yard of organic waste per week (if the local jurisdiction provides CalRecycle with information that explains the need for this higher exemption).⁴
- Limited-term exemptions may be granted for extraordinary and unforeseen events.

Resources Local Resources

State Resources
1. CalRecycle Local Assistance and Market Development (LAMD) Staff Contacts (www.calrecycle.ca.gov/lcentral/reports/contacts.aspx). LAMD staff is available to assist local governments with planning and implementing Mandatory Organics Recycling programs.

2. Mandatory Organic Recycling (MORe) Home Page <http://www.calrecycle.ca.gov/Recycle/Commercial/Organics/>

3. Mandatory Organic Recycling (MORe) Frequently Asked Questions (FAQs). <http://www.calrecycle.ca.gov/Recycle/Commercial/FAQ.htm>

4. CalRecycle Food Scrap Management Home Page at <http://www.calrecycle.ca.gov/organics/Food/default.htm>

5. CalRecycle tool for jurisdictions to determine how many businesses (when available).

6. California Air Resources Board (ARB) Small Business Toolkit (www.CoolCalifornia.org).

Contact Information

⁴ This exemption is subject to expiration if the state fails to meet disposal reduction targets in 2020.

California Businesses and Multifamily Complexes Will Soon Be Required to Recycle Their Organic Waste



With the passage of AB 1826, new organic recycling requirements will be phased in over several years and will help the state meet its goal to recycle 75 percent of its waste by 2020.

Businesses, including public entities, and multifamily complexes of 5 units or more are required to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week.

City of _____ and _____ hauling company are here to help you comply with the new state requirements. Read this brochure to learn more about organic waste collection and recycling options available to you.

DID YOU KNOW? Recyclable organic waste accounts for about 40 percent of the material Californians dispose in landfills annually.¹ Recycling organic waste can save _____ businesses money by reducing disposal costs while supporting green jobs in our community.



¹ California Department of Resources Recycling and Recovery (CalRecycle)

Regulatory Requirements

The law requires that businesses arrange for recycling services for the following types of organic waste: food waste, green waste, landscape and pruning waste, non-hazardous wood waste, and food-soiled paper.² Multifamily complexes must arrange for recycling services for the same material with the exception of food waste and food-soiled paper. Most organic waste is recyclable through methods such as composting, mulching, and anaerobic digestion. Organic recycling services often accept a wide variety of different types of organic waste. Check with _____ to learn how to arrange for recycling.

Businesses and multifamily complexes must start recycling organic waste by the following dates:

- April 1, 2016 – generators of 8 or more cubic yards of organic waste per week;
- January 1, 2017 – generators of 4 or more cubic yards of organic waste per week;
- January 1, 2019 – generators of 4 or more cubic yards of solid waste per week;
- January 1, 2020 – generators of 2 or more cubic yards of solid waste per week, if statewide disposal of organic waste is not decreased by half.

Organic Recycling Services

The requirement to recycle organic waste can be met by taking one or any combination of the following actions, provided that the action is in compliance with local ordinances and requirements.³

1. Source-separate organic waste from other waste and subscribe to an organic waste recycling service that specifically includes collection and recycling of organic waste.
2. Recycle organic waste onsite, or self-haul organic waste for organic recycling.
3. Subscribe to an organic waste recycling service that includes mixed waste processing that specifically recycles organic waste.
4. Sell or donate the generated organic waste.

² Food-soiled paper includes items such as wax coated food containers and spilled napkins mixed with food waste. Food-soiled paper does not include paper products with a plastic coating, e.g., paper cups with a polylithium coating.

_____ will help local businesses comply with the new law.

Prior to the deadline to start recycling their organic waste, every local jurisdiction is required to implement an organic waste recycling program to provide organic recycling options, educate businesses and multifamily complexes about their local organic recycling options, and monitor implementation.



Success Stories

Albertson's grocery stores in San Diego have participated in the collection of food scraps for compost and food rescue for disadvantaged communities since 2011. Edible food is donated to the Feeding America food bank, and inedible food is sent for composting at the Miramar Greenery, operated by the City of San Diego. Fifteen stores participate in this program, resulting in 58 tons of edible food donations and 37 tons of food scraps composted annually.

The Hyatt Regency hotel in Sacramento began a food and green waste collection program in 2011. This high-rise hotel has 503 guest rooms, 4 restaurants, and a main kitchen serving about 1,975 meals daily. In the first year, the hotel diverted more than 243 tons of food waste to Clean World Partners, an anaerobic digestion facility, where it is converted into renewable natural gas for fuel.

³ Prior to taking action to recycle organic waste, a business should check with the recycling coordinator for more information about local requirements. See the next page for specifics on local recycling options.

Agenda Item VIII

SOLID WASTE REGULATORY UPDATES



For Immediate Release

June 1, 2015

Release #2015-12

For more information contact:

Media Contact: [Lance Klug \(CalRecycle\)](#)

Recycling Fraud Arrest: Second Trucker Busted at Border: \$15,356 out-of-state haul stopped at agricultural checkpoint

SACRAMENTO--For the second time in as many months, the Department of Resources Recycling and Recovery (CalRecycle) is announcing the arrest of a semi-truck driver on recycling fraud charges. Similar to the [prior incident](#), this case involves importing out-of-state empty beverage containers for the purpose of defrauding the California Redemption Value (CRV) fund.

"When criminals try to cash in on out-of-state empty beverage containers, they essentially try to steal from every Californian who pays the CRV fee at the cash register," CalRecycle Director Carol Mortensen said. "We'll continue to do everything it takes to stop fraud and prevent criminals from making illicit gains from our beverage container recycling program."

CalRecycle works closely with its enforcement partners at the California Department of Justice and the Department of Food and Agriculture to enforce CRV fraud-prevention efforts.

On May 12, members of DOJ's Recycling Fraud Team were conducting surveillance at a recycling center in Phoenix, Ariz., when they observed a "B&S Transport" semi-truck out of Baldwin Park, Calif., being loaded with bags of empty beverage containers. The semi left the Phoenix recycling center in the afternoon and arrived at the Blythe border agricultural checkpoint in Riverside County that evening. There, according to the arrest report, the driver told the checkpoint inspector that his truck was empty. However, upon inspection, the trailer was found to contain the used beverage containers that were observed being loaded in Phoenix – a total of 8,548 pounds of aluminum and 1,522 pounds of plastic with a potential value of more than \$15,000 in illegal CRV refunds.

After being interviewed by RFT agents, driver Ricardo Rodriguez of Colton, in San Bernardino County, was arrested on recycling fraud and attempted grand theft charges. His arraignment is set for July 14 at the Riverside County Courthouse in Indio.

California's Beverage Container Recycling and Litter Reduction Act incentivizes recycling through a CRV fee paid by California consumers at the time of purchase and refunded upon return of the empty containers. Since the fee is not paid by out-of-state consumers, out-of-state containers are not eligible for CRV redemption. CalRecycle aggressively combats fraud through enhanced training of recycling center owners, increased scrutiny of payment claims, daily load limits, and increased enforcement and inspection efforts with cooperation from California's DOJ and CDFA's agricultural checkpoints.

Connect With Us: 

###

CalRecycle is the state's leading authority on recycling, waste reduction, and product reuse. CalRecycle plays an important role in the stewardship of California's vast resources and promotes innovation in technology to encourage economic and environmental sustainability. For more information, visit www.calrecycle.ca.gov.

News Room <http://www.calrecycle.ca.gov/NewsRoom/>

Public Affairs Office: opa@calrecycle.ca.gov (916) 341-6300

[Conditions of Use](#) | [Privacy Policy](#)

©1995, 2015 California Department of Resources Recycling and Recovery (CalRecycle). All rights reserved.



For Immediate Release

July 7, 2015

Release #2015-13

For more information contact:

Media Contact: [Lance Klug \(CalRecycle\)](#)

Recycling Fraud Border Bust-Third Arrest of 2015: CRV scammer thwarted with \$7,000 haul

SACRAMENTO--For the third time in 2015, a truck driver faces charges for smuggling out-of-state used beverage containers across our border in an attempt to defraud the California Redemption Value (CRV) fund. With this latest arrest, the Department of Resources Recycling and Recovery (CalRecycle) reaffirms its commitment to protect California funds with vigorous prevention and enforcement efforts.

"Our enforcement partners with the California Department of Justice's Recycling Fraud Team are relentless when it comes to locating, surveilling and ultimately disrupting these CRV fraud schemes," CalRecycle Acting Director Ken DaRosa said. "From the monitoring of recycling centers, in-state and out-of-state, to the continued vigilance at California's border agricultural checkpoints, illegal haulers should know that we are going all-out to shut them down."

CalRecycle works closely with the California Department of Justice and Department of Food and Agriculture to enforce CRV fraud-prevention efforts.

Cesar Vargas of Compton, 42, was arrested by DOJ Recycling Fraud Team agents on June 23, 2015. While conducting surveillance on recycling centers in Phoenix, Ariz., agents spotted a red semi with a white trailer labeled "Franklin Express" of Compton being loaded with used beverage containers at an undocumented business at 4235 W. Clarendon Ave. More than three hours after its departure, the semi arrived at the Blythe Agricultural Checkpoint in Riverside County, where a driver, later identified as Vargas, told inspectors his trailer was empty. A subsequent inspection revealed nearly 7,000 pounds of plastic and aluminum used beverage containers worth an estimated \$7,136. The driver could not produce an Imported Materials Report, which is required under [2014 reform regulations](#) to fight CRV fraud in the state.

Vargas was arrested on recycling fraud and attempted grand theft charges, and his truck was impounded. His arraignment is set for Aug. 18 in Indio. Recycling Fraud Team agents made two similar arrests at agricultural checkpoints earlier this year: one in [Yermo](#), Calif., and another at the [Blythe](#) station where Vargas was detained.

California's Beverage Container Recycling and Litter Reduction Act incentivizes recycling through a CRV fee paid by California consumers at the time of purchase and refunded upon return of the empty beverage containers. Since the fee is not paid by out-of-state consumers, out-of-state beverage containers are not eligible for CRV redemption. CalRecycle aggressively combats fraud through enhanced training of recycling center owners, increased scrutiny of payment claims, daily load limits, and increased enforcement and inspection efforts with cooperation from California's DOJ and CDFA's agricultural checkpoints.



Connect With Us:

###

CalRecycle is the state's leading authority on recycling, waste reduction, and product reuse. CalRecycle plays an important role in the stewardship of California's vast resources and promotes innovation in technology to encourage economic and environmental sustainability. For more information, visit www.calrecycle.ca.gov.

News Room <http://www.calrecycle.ca.gov/NewsRoom/>
Public Affairs Office: opa@calrecycle.ca.gov (916) 341-6300

[Conditions of Use](#) | [Privacy Policy](#)

©1995, 2015 California Department of Resources Recycling and Recovery (CalRecycle). All rights reserved.



For Immediate Release
August 6, 2015
Release #2015-14

For more information contact:
Media Contact: [Lance Klug \(CalRecycle\)](mailto:Lance.Klug@CalRecycle.com)

Recycling Fraud Team Hits a Vegas "Jackpot": California agents make fourth border bust of 2015

SACRAMENTO—The California Department of Resources Recycling and Recovery (CalRecycle) is announcing the arrest of a Los Angeles area truck driver on felony charges of recycling fraud and attempted grand theft. Rogelio Perez of South Gate, 51, is accused of trying to defraud the California Redemption Value (CRV) fund through the illegal transport of out-of-state used beverage containers into California.

"If truck drivers haven't gotten the message yet, CalRecycle hopes these continued arrests will show how hard we're working to protect the integrity of the California Redemption Value fund," CalRecycle Director Scott Smithline said. "Our partnerships with the California Department of Justice and the California Department of Food and Agriculture are proving to be invaluable resources in our fight against fraud."

On July 20, 2015, CalRecycle's enforcement partners in the California Department of Justice's Recycling Fraud Team were conducting surveillance on a North Las Vegas truck storage yard. That afternoon, agents observed a group of unidentified individuals load a 53-foot trailer with used beverage containers. A short time later, a white truck labeled "Isaac Transportation" pulled into the lot, coupled to the trailer, and left the yard. Recycling Fraud Team agents followed the vehicle until it arrived at the Yermo, Calif., agricultural checkpoint, where the driver, later identified as Rogelio Perez, informed the inspector that his trailer was empty. Upon inspection, the trailer was found to contain approximately 8,000 pounds of used beverage containers with an estimated redemption value of \$11,596. The truck was impounded, and Perez was arrested and booked into the San Bernardino County West Valley Detention Center in Rancho Cucamonga. He faces six months to three years in prison if convicted.

California's Beverage Container Recycling and Litter Reduction Act incentivizes recycling through a CRV fee paid by California consumers at the time of purchase and refunded upon return of the empty beverage containers. Since the fee is not paid on beverages purchased outside the state, those containers are not eligible for CRV redemption. The California Department of Justice investigates and prosecutes criminal cases on behalf of CalRecycle, which has administrative authority over the state's beverage container recycling program. DOJ's efforts are funded through an interagency agreement between CalRecycle and California Department of Justice.

In addition to CalRecycle's interagency agreements with California Department of Justice and California Department of Food and Agriculture, the department aggressively combats fraud through enhanced pre-certification training of recycling center owners, documentation requirements for imported materials, increased scrutiny of payment claims, and daily load limits on the amount of material that can be brought to a recycling center for redemption.

Connect With Us:     

###

CalRecycle is the state's leading authority on recycling, waste reduction, and product reuse. CalRecycle plays an important role in the stewardship of California's vast resources and promotes innovation in technology to encourage economic and environmental sustainability. For more information, visit www.calrecycle.ca.gov.

News Room <http://www.calrecycle.ca.gov/NewsRoom/>
Public Affairs Office: opa@calrecycle.ca.gov (916) 341-6300

[Conditions of Use](#) | [Privacy Policy](#) | [Language Complaint Form](#)
©1995, 2015 California Department of Resources Recycling and Recovery (CalRecycle). All rights reserved.

**Change Sheet # 1 State Water Resources Control Board
Order 2015-XXXX-DWQ
Amending
NPDES No. Cas000001
National Pollutant Discharge Elimination System
(NPDES)
Order 2014-0057-DWQ
General Permit for Storm Water Discharges Associated
With Industrial Activities (Industrial General Permit)**

Changes in ~~double blue line strike out~~ are **NEW deletions** since the amendment proposed on July 3, 2015.

Changes in double blue underline are **NEW additions** since the amendment proposed on July 3, 2015.

Changes in ~~double red line strike out~~ are **deletions** made as part of the amendment proposed on July 3, 2015.

Changes in red underline are **additions** made as part of the amendment proposed on July 3, 2015.

STATE WATER RESOURCES CONTROL BOARD
ORDER 2015-XXXX-EXECDWQ
AMENDING
NPDES NO. CAS000001
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
ORDER 2014-0057-DWQ
GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH
INDUSTRIAL ACTIVITIES

The California State Water Resources Control Board (hereafter State Water Board) finds:

1. The general permit for storm water discharges associated with industrial activities¹ (General Permit) was issued by the State Water Board as a National Pollutant Discharge Elimination System (NPDES) permit under the authority delegated by the U.S. Environmental Protection Agency. The General Permit was adopted on April 1, 2014, and became effective on July 1, 2015.
2. The General Permit requires Dischargers to submit permit registration documents to obtain Notice of Intent (NOI) coverage under the General Permit using the State Water Board's Storm Water Multiple Application and Report Tracking System (SMARTS) website by July 1, 2015. Leading up to the July 1, 2015 deadline, SMARTS experienced technical difficulties that rendered SMARTS inaccessible to Dischargers attempting to file permit registration documents as well as State Water Board staff who were assisting Dischargers with enrollment. State Water Board staff diligently worked to resolve the technical issues before the July 1, 2015 deadline, but technical problems persisted, particularly as there was a surge in online traffic on SMARTS in the days before the July 1, 2015 effective date.

¹ State Water Board Order 2014-0057-DWQ

**08/04/15 BD MEETING – ITEM #9
CHANGE SHEET #1 (CIRCULATED 07/29/15)**

3. Because of ongoing technical difficulties, a large number of Dischargers were unable to submit the required permit registration documents through SMARTS by July 1, 2015 despite repeated attempts to use SMARTS. The deadline for Existing Dischargers to electronically submit permit registration documents for NOI coverage is extended to August 14, 2015 in accordance with Attachment A to this Order so that State Water Board staff has additional time to resolve technical issues with SMARTS. The filing date for Dischargers who file for NOI coverage on or before August 14, 2015 will be deemed to be July 1, 2015. The deadline for New Dischargers registering for NOI coverage to electronically submit permit registration documents is extended to August 14, 2015 or at least seven (7) days prior to commencement of industrial activities, whichever is later, in accordance with Attachment A to this Order. The filing date for New Dischargers who file for NOI coverage on or before August 14, 2015 will be deemed to be July 1, 2015 or seven (7) days prior to commencement of industrial activities, whichever is later.
4. While technical issues are being resolved, the General Permit is in effect. The deadline extension does not affect any of the other requirements or deadlines in the General Permit. Dischargers must maintain permit registration documents on site until they are able to submit the documents using SMARTS, and they must submit permit registration documents electronically by August 14, 2015. Any other information required by the General Permit to be submitted electronically, such as monitoring data, must also be kept on site until Dischargers are able to submit the information using SMARTS, and that information must be submitted electronically by August 14, 2015. Until August 14, 2015, the permit registration documents maintained onsite by the Discharger shall determine compliance with Section II (Receiving General Permit Coverage) of the General Permit.
5. State Water Board Order 97-03-DWQ was rescinded (except for Order 97-03-DWQ requirements that annual reports be submitted by July 1, 2015 and except for enforcement purposes) as of July 1, 2015. Because of technical difficulties in SMARTS the deadline to submit Annual Reports under Order 97-03-DWQ is extended to August 14, 2015.
6. Per Code of Federal Regulations, part 40, sections 122.62 and 124.10, the State Water Board issued a Public Notice on July 3, 2015 for a 30-day public review and comment period on the proposed amendment to Order 2014-0057-DWQ, as specified in Attachment A to this Order. Formal comments were due by August 3, 2015.

IT IS HEREBY ORDERED THAT:

**08/04/15 BD MEETING – ITEM #9
CHANGE SHEET #1 (CIRCULATED 07/29/15)**

Order 2014-0057-DWQ is hereby amended as shown in Attachment A of this Order.
The amended Order shall become effective on August 4, 2015.

Date

Jeanine Townsend
Clerk to the Board

ATTACHMENT A
TO
ORDER WQ 2015-XXXX-~~EXEGDWQ~~
AMENDING
NPDES NO. CAS000001
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
ORDER WQ 2014-0057-DWQ
GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH
INDUSTRIAL ACTIVITIES

Permit Order

I.A.6, (p.2)

6. State Water Board Order 97-03-DWQ is rescinded as of the effective date of this General Permit (July 1, 2015) except for Order 97-03-DWQ's requirement that annual reports be submitted by ~~August~~ July 14, 2015 and except for enforcement purposes.

II.B, (p.14)

B. Coverages

This General Permit includes requirements for two (2) types of permit coverage, NOI coverage and NEC coverage. State Water Board Order 97-03-DWQ (previous permit) remains in effect until July 1, 2015. When PRDs are certified and submitted and the annual fee is received, the State Water Board will assign the Discharger a Waste Discharger Identification (WDID) number. ~~The Discharger shall submit PRDs by August 14, 2015 via SMARTS.~~

~~II.B.1.b, (p.14)~~

~~b. The Discharger shall register for coverage under this General Permit on August 14, 2015. The Discharger shall register for coverage by certifying and submitting PRDs via SMARTS (<http://smarts.waterboards.ca.gov>), which consist of:~~

Section II.B.4.a-b (p.16)

4. Schedule for Submitting PRDs - Existing Dischargers Under the Previous Permit.
 - a. Existing Dischargers with coverage under the previous permit shall register for NOI coverage by or on August July 14, 2015 or for NEC coverage by or on October 1, 2015. The filing date for Existing

Dischargers that register for NOI coverage by or on August 14, 2015 shall be deemed July 1, 2015. Existing Dischargers previously listed in Category 10 (Light Industry) of the previous permit, and continue to have no exposure to industrial activities and materials, have until October 1, 2015 to register for NEC coverage.

- b. Existing Dischargers with coverage under the previous permit, that do not register for NOI coverage by or on August July 14, 2015, may have their permit coverage administratively terminated as soon as August July 14, 2015.

Section II.B.5.a (p.17)

5. Schedule for Submitting PRDs - New Dischargers Obtaining Coverage On or After July 1, 2015
 - a. New Dischargers registering for NOI coverage on or after July 1, 2015 shall certify and submit PRDs via SMARTS at least seven (7) days prior to commencement of industrial activities or on August July 14, 2015, whichever comes later. The filing date for New Dischargers that register for NOI coverage by or on August 14, 2015 shall be deemed July 1, 2015 or seven (7) days prior to commencement of industrial activities, whichever comes later.

Fact Sheet

Section II.A.3 (p.12)

This General Permit requires all Dischargers to electronically certify and submit PRDs via SMARTS to obtain: (1) regulatory coverage, or (2) to certify that there are no industrial activities exposed to storm water at the facility and obtain regulatory coverage under the NEC provision of this General Permit. Facilities that were eligible to self-certify no exposure under the previous permit (see category 10 in Attachment 1 of the previous permit) are required to certify and submit via SMARTS PRDs for NOI coverage under this General Permit by or on August July 14, 2015 or for NEC coverage by or on October 1, 2015. The Water Board is estimating that 10,000 – 30,000 Dischargers may be registering for NOI or NEC coverage under this General Permit. Separate registration deadlines, one for NOI coverage and one for NEC coverage, provides Dischargers better assistance from Storm Water Helpdesk and staff.

Section II.A.3 (p.12)

All Existing Dischargers ~~who certify and submit PRDs via SMARTS for NOI coverage on or after July 1, 2015 or for NEC coverage on or after October 1, 2015, who previously~~

~~obtained regulatory coverage under Order 97-03-DWQ the current permit, shall immediately comply with the provisions in this General Permit by July 1, 2015. All Existing Dischargers who previously obtained regulatory coverage under Order 97-03-DWQ the current permit are required to certify and submit PRDs via SMARTS for NOI coverage on or after August 14, 2015 or for NEC coverage on or after October 1, 2015. All Dischargers who did not previously obtain regulatory coverage under Order 97-03-DWQ who certify and submit PRDs via SMARTS for NOI coverage on or after July 1, 2015 August 14, 2015 or for NEC coverage on or after October 1, 2015, shall immediately comply with the provisions in this General Permit. All Dischargers who obtained NOI coverage under this General Permit starting on the effective date (July 1, 2015), but who were unable to electronically submit PRDs via SMARTS until August 14, 2015 shall comply with the provisions in this General Permit on July 1, 2015.~~

Attachment C Glossary (p.2)

Effective Date

The date, set by the State Water Resources Control Board (State Water Board), when at least one or more of the General Permit requirements take effect and the previous permit expires. This General Permit requires most of the requirements (such as ~~SMARTS submittals~~ minimum BMPs, sampling and analysis requirements) to take effect on July 15, 2015. ~~This General Permit requires SMARTS submittals for Existing Dischargers to certify and submit PRDs via SMARTS for NOI coverage on or after August 14, 2015 or for NEC coverage on or after October 1, 2015.~~

Attachment D PRDs

Section D. (p.1)

D. When and How to Apply

Dischargers proposing to conduct industrial activities subject to this General Permit must electronically certify and submit PRDs via the Storm Water Multiple Application Reporting and Tracking System (SMARTS)² no less than seven (7) days prior to the commencement of industrial activity. Existing Dischargers must submit PRDs for NOI coverage by ~~or on August July~~ or on August 14, 2015 or for NEC coverage by or on October 1, 2015.

² The State Water Board has developed the SMARTS online database system to handle registration and reporting under this General Permit. More information regarding SMARTS and access to the database is available online at <https://smarts.waterboards.ca.gov>. [as of June 26, 2013].

8.0 FREQUENTLY ASKED QUESTIONS*

*The frequently asked questions are intended solely as guidance. This document is not intended to implement, interpret, or make specific any regulations or to create any new substantive or procedural requirements. This document is not intended, nor can it be relied on, to create any rights enforceable by any party in litigation with the State Water Quality Control Boards or the Regional Water Quality Control Boards. In the case of any conflict with existing statutes, regulations, or orders, the actual statute, regulation or order governs. This guidance may be revised at any time without public notice.

A. General

1. How do I know if I need coverage under the Industrial General Permit (Order 2014-0057-DWQ)?

A broad range of industrial facilities are required to obtain permit coverage per federal regulations. Facilities that must obtain permit coverage include manufacturing facilities, mining operations, disposal sites, recycling yards, transportation facilities, and other industrial facilities. See Attachment A of the [Industrial Storm Water General Permit \(IGP\)](#) for a complete list of facilities that are required to obtain coverage. [Click here](#) to view a list of the Standard Industrial Classification (SIC) codes that may be required to obtain coverage under the IGP. The Regional Water Boards are also authorized to designate facilities that must obtain coverage under the Industrial General Permit (see details in Section XIX.F of the IGP).

2. Who must apply?

All Dischargers that operate facilities that are described in Attachment A of the IGP or are designated by the Regional Water Board are required to submit either a new IGP application, referred to as a Notice of Intent (NOI), or a No Exposure Certification (NEC) certifying that no industrial pollutants associated with their industry are exposed to storm water. The NOI must be submitted to the State Water Board by August 14, 2015 (or at least seven days prior to commencing the industrial activity operations, whichever is later, for new dischargers), and shall comply with the Permit Registration Document (PRD) requirements in the IGP. The NEC must be submitted by October 1, 2015 (or at least seven days prior to commencement of industrial activities, whichever is later, for new dischargers).

The Discharger, which is defined in Attachment C of the Industrial General Permit, must submit an NOI for each industrial facility that is required by the federal regulations to obtain a storm water permit. The required industrial facilities are listed in Attachment A of the [IGP](#) and are also defined in 40 Code of Federal Regulations Section 122.26(b)(14). The facility operator is typically the owner of the business or operation where the industrial activities requiring a storm water permit occur. The facility operator may be responsible for all permit related activities at the facility. Where operations have discontinued and significant materials remain on site (such as closed landfills), the landowner may be responsible for filing an NOI and complying with the IGP. Landowners may also file an NOI for a facility if the landowner, rather than the facility operator, is responsible for compliance with the IGP.

3. Who is not required to submit a Notice of Intent (NOI) or a No Exposure Certification (NEC)?

Dischargers that operate facilities described below are not required to file for new IGP coverage unless the facilities have been designated by the Regional Water Board:

- a. Facilities that are not described in Attachment A;

- b. Facilities that are described in Attachment A but do not have discharges of storm water associated with industrial activity to waters of the United States (see details in Section XX.C. of the IGP); or,
- c. Facilities that are already covered by another National Pollutant Discharge Elimination System (NPDES) permit for discharges of storm water associated with industrial activity.

4. How do I file a new NOI or NEC?

File the NOI or NEC through [SMARTS](#). Only a Legally Responsible Person can certify and submit the NOI application or NEC certification.

5. What is required to file a new NOI?

- a. A completed NOI application
- b. A site map (See details in Section X.E of the IGP)
- c. A Storm Water Pollution Prevention Plan (See details in Section X of the IGP)
- d. A signed Electronic Authorization Form.

6. What is required to file a new NEC?

- a. NEC Application/NEC Checklist
- b. Site Map (See details in Section X.E of the IGP)

7. Electronic Authorization Form.

What is the IGP application fee?

- a. The NOI application fee is \$1632
- b. The NEC application fee is \$200
- c. Checks should be made payable to: SWRCB

Note: The Current Fee Schedule can be viewed [here](#)

8. What are the timelines for IGP applications and renewals?

Facility operators of existing facilities under the 1997 IGP (State Water Board Order 97-03-DWQ) must recertify their NOI in accordance with the new IGP (State Water Board Order 2014-0057-DWQ) on or by August 14, 2015.

Facility operators of new facilities (facilities beginning operations after July 1, 2015) must file an NOI in accordance with these instructions at least seven days prior to the beginning of operations or by August 14, 2015, whichever is later.

Once the completed NOI, site map, and appropriate new IGP fee have been submitted to the State Water Board, the NOI will be processed and the applicant will be issued a Waste Discharge Identification (WDID) Number. Please refer to this number when you contact either the [State Water Board](#) or a [Regional Water Quality Control Boards \(RWQCB\)](#).

NEC certifications must be submitted by October 1, 2015 (or for new dischargers, at least seven days prior to commencement of industrial activities or October 1, 2015, whichever is later.)

- 9. I have coverage under the expiring 1997 IGP (State Water Board Order 97-03-DWQ). How do I re-apply for coverage under the new IGP?**
Dischargers with an active WDID Number under the 97-03-DWQ Order must recertify their Notice of Intent through the Storm Water Multiple Application and Report Tracking System (also referred to as the SMARTS database). To recertify the Discharger must have a Secret Code Number generated by the State Water Board.
- 10. Where do I get the Secret Code Number?**
Contact the State Water Board at (866) 563-3107 or stormwater@waterboards.ca.gov to obtain the Secret Code Number if you cannot locate the Secret Code Number previously mailed by the State Water Board.
- 11. What is the annual compliance fee?**
The annual fee is the same as the IGP application fee. The annual fee is paid annually and is on the billing cycle of when the IGP application was processed (the Discharger received a Waste Discharge Identification Number - WDID) and maintains regulatory coverage under the new IGP. The amount of the annual fee is the same as the application fee submitted with the NOI or NEC.
- 12. How long is my coverage under the new IGP in effect?**
Your coverage under the IGP is in effect until you submit a valid Notice of Termination (NOT) through the Storm Water Multiple Application and Report Tracking System or until Order 2014-0057-DWQ expires (without being administratively extended) or is superseded. The [Regional Water Quality Control Boards \(RWQCB\)](#) however, may deny the NOT if the NOT is considered invalid.
- 13. How can I avoid the most common mistakes made in applying for the new IGP?**
Make sure the Legally Responsible Person mails in the original signed Electronic Authorization Form and correct application fee amount.
- 14. What are the regulations that apply to the new IGP? Where can I get copies?**
The [new IGP](#) is available from the [State Water Board's website at www.waterboards.ca.gov](#). The federal Clean Water Act is available [here](#).
- 15. How do I transfer the WDID number to a new owner or operator?**
The WDID number is not transferrable to a new owner or operator. The previous owner or operator must file a Notice of Termination and the new owner or operator must file a new NOI to obtain a new WDID number.
- 16. The Legally Responsible Person (LRP) is no longer with the company or agency. How does the new LRP gain access to the NOI records?**
Contact the State Water Board at (866) 563-3107 or stormwater@waterboards.ca.gov to request a change of the LRP. The new LRP must create a new User ID and enter the Secret Code Number generated by the State Water Board to certify and claim all existing applications.
- 17. What if I have further questions?**
If you have any questions or need assistance completing the NOI or NEC, please call the appropriate [Regional Water Quality Control Board](#) or the [State Water Board](#) at (866) 563-3107 or stormwater@waterboards.ca.gov.

B. SIC Codes



1. What is an “auxiliary” function? Do auxiliary facilities need permit coverage?

Please read IGP [Fact Sheet](#) Page 9-11.

2. I need to enter by SIC code in SMARTS. What is a SIC code?

You can watch the video on SIC codes here: https://www.youtube.com/watch?v=cTM_P2gwJMs

The SIC Code manual is available online at: https://www.osha.gov/pls/imis/sic_manual.html

A list of SIC codes that may be regulated under the IGP can be found here: http://www.waterboards.ca.gov/water_issues/programs/stormwater/sicnum.shtml

C. SMARTS

1. What are the SMARTs Deadlines?

For the complete PRD requirements, see Section II. Receiving General Permit Coverage in the new IGP order.

Existing Dischargers with an NOI under the 1997 IGP – recertify NOI by August 14, 2015 with the site map and SWPPP.

New NOI/New Operation – submit and NOI seven days prior to commencing the industrial activity operations (along with required PRDs) or by August 14, 2015, whichever is later.

NEC – for existing facilities obtaining NEC coverage – October 1, 2015 (along with required PRDs).

NEC – for a new facility the meets the NEC criteria - seven days prior to commencing industrial activity operations (along with required PRDs) or by October 1, 2015, whichever is later.

NONA – upon request by the Regional Water Board or when the Discharger decides to submit a NONA. For a NONA asserting no discharge to a Waters of the United States, the Discharger is required to meet the no discharge criteria in the new IGP on July 1, 2015 and must either obtain coverage under the new IGP or submit a NONA technical report signed by a California licensed professional engineer when requested by the Regional Water Board.

Annual Report – July 15 of the reporting year (starting July 2016)

Sampling results – 30 days after receiving the results from the analytical laboratory

2. To enroll under the new IGP, what do Dischargers need to do to recertify their Notice of Intent (NOI) in SMARTS? What information is needed to recertify an NOI? Is there an opportunity to make changes to the NOI as part of the recertification?

- a. Recertify existing WDID Numbers/Existing NOI
 - i. Things you will need:
 - ii. Access to the internet
 - iii. SMARTS Legally Responsible Person (LRP) User Account

- iv. WDID Number
- v. Secret Code Number (SCN)
- vi. Storm Water Pollution Plan (SWPPP)
- vii. Facility Site Map

- b. New WDID Numbers/new NOI
 - i. Permit Registration Documents (PRDs):
 - ii. NOI
 - iii. SWPPP
 - iv. Site Map
 - v. Application Fee
 - vi. Electronic Authorization Form
 - vii. NOTE: PRDs are required to be submitted in SMARTS
- c. Dischargers are allowed to update information during recertification and Dischargers enter the information when they apply for a new WDID/application.

3. When will the Annual Report be available in SMARTS?

The first electronic Annual Report due in SMARTS for the new IGP is July 15, 2016. The State Water Board will have this Annual Report available before this due date. The Annual Report under the 1997 IGP must be submitted via SMARTS by or on August 14, 2015.

4. How do I submit the Annual Report required in the new IGP?

The Discharger (LRP, DAR, DEP) will login into SMARTS, go to the reporting option, open the applicable Annual Report and answer the questions (yes, no and explanation text). The Discharger will then certify and submit the Annual Report to the Water Board in SMARTS.

5. If you qualify for an NEC as an existing Discharger, do you need a SWPPP by July 1, 2015?

Dischargers who file valid NECs in accordance with these instructions are not required to implement Best Available Technology Economically Achievable /Best Conventional Pollutant Control Technology and comply with the SWPPP and monitoring requirements of this General Permit. If you are an existing Discharger, recertify the NOI, then login to SMARTS and switch the NOI to an NEC, certify and ensure that the uploaded site map is correct and uploaded in SMARTS. If the Discharger does not switch the status by August 14, 2015, SMARTS will characterize the site as having an incomplete NOI recertification.

6. What is the "Industrial area exposed to storm water" field for?

This field is to provide data to the fee unit to explore the possibility of developing tiered fees in the future based upon percentage of industrial area/activity exposed to storm water.

7. Who can be an LRP?

Read Section XXI.K of the IGP order.

8. What samples do I have to report in SMARTS? When are samples required to be entered into SMARTS?

Dischargers are required to report all samples taken at compliance locations (discharge locations/sampling locations) in SMARTS from storm water discharge events that were collected and analyzed. Samples taken for run-on, and internal "BMP" characterization samples are not required to be entered in SMARTS. SMARTS allows the Discharger to enter other types of samples, if required.

9. Is the SMARTS storm water analytical sampling data average based equal area contributions?

No, the average is not based on equal area contributions. SMARTS calculates an arithmetic average based upon the Qualified Storm Event storm water sampling results entered by the Discharger.

D. SWPPP

1. What information is a Discharger required to include on the Site Map uploaded in SMARTS?

Section X.E of the new IGP describes the require elements:

X.E. Site Map Requirements

The Discharger may provide the required information on multiple site maps. The Discharger shall prepare a site map that includes notes, legends, a north arrow, and other data as appropriate to ensure the map is clear, legible and understandable.

- a. The facility boundary, storm water drainage areas within the facility boundary, and portions of any drainage area impacted by discharges from surrounding areas. Include the flow direction of each drainage area, on-facility surface water bodies, areas of soil erosion, and location(s) of nearby water bodies (such as rivers, lakes, wetlands, etc.) or municipal storm drain inlets that may receive the facility's industrial storm water discharges and authorized NSWDS;
- b. Locations of storm water collection and conveyance systems, associated discharge locations, and direction of flow. Include any sample locations if different than the identified discharge locations;
- c. Locations and descriptions of structural control measures¹¹ that affect industrial storm water discharges, authorized NSWDS, and/or run-on;
- d. Identification of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures;
Locations where materials are directly exposed to precipitation and the locations where identified significant spills or leaks (Section X.G.1.d) have occurred; and
- f. Areas of industrial activity subject to this General Permit. Identify all industrial storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and material reuse areas, and other areas of industrial activity that may have potential pollutant sources.

2. Do I need a QISP to develop my updated SWPPP?

No. QISP are only required to provide assistance to 1) New Dischargers discharging storm water associated with industrial activity to an impaired water body, 2) Discharges with level 1 ERA status, or 3) Dischargers with Level 2 ERA status.

E. Monitoring

1. What if I want to use a different test method than shown in SMARTS?

You will have to contact the State Water Board storm water unit so we can process the request. General Inquiries: stormwater@waterboards.ca.gov or Telephone Toll Free - 1-866-563-3107 or Fax - (916) 341-5543.

2. How soon are lab results required to be submitted into SMARTS?

Section XI.B.11: The Discharger shall submit all sampling and analytical results for all individual or Qualified Combined Samples via SMARTS within 30 days of obtaining all results for each sampling event.

F. Training

1. We have heard that SWRCB will require that Compliance Group Leaders be Trainers of Record.

Yes. Section XVI.B.1: A Compliance Group Leader must complete a State Water Board sponsored or approved training program for Compliance Group Leaders. The approved program chosen by the State Water Board was the Trainer of Record training. Compliance Group Leaders are able to begin groups in SMARTS July 1, 2015.

2. When will the QISP training be done?

The QISP training is expected to be available the winter of 2015.

G. Annual Report

1. When will monitoring forms for the new IGP be released?

Since the monitoring data will now be submitted into SMARTS, there are no template forms. Monitoring data is now submitted separate from the Annual Report. Visual observation records are no longer submitted in the Annual Report. Dischargers shall keep records in a manner consistent with the record keeping requirements in Section XXI.J. The analytical monitoring screens in SMARTS will be available July 1, 2015.

2. We have facilities that are relocating. Do they have to apply for a new permit?

IGP coverage is tied to a specific facility location. If a facility moves, a new application is required.

H. NEC

1. Will the State Board be developing a NEC checklist?

Yes, the NEC checklist is available in the SMARTS database.

I. NONA

1. When is the NONA required?

If a Discharger is eligible for NONA, the facility operator will be either told to submit a NONA report by the Regional Water Board or will submit one in SMARTS voluntarily instead of obtaining IGP coverage.

2. Where do we send the NONA application and the engineering report? Is it online or hard copy? Do we send a copy to the state or this is just at the regional level?

The NONA application and technical report must be submitted in SMARTS.

9.0 LIST OF ACRONYMS

AdHoc Report	AdHoc Monitoring Report
BMP	Best Management Practices
CBPELSG	California Board for Professional Engineers, Land Surveyors and Geologists
DAR	Duly Authorized Representative
DEP	Data Entry Person
DWQ	Division of Water Quality
ELGs	Effluent Limitations Guidelines and New Source Performance Standards
ERA	Exceedance Response Action
eAuthorization	Electronic Authorization Form
IGP	Industrial General Permit Order: 2014-0057-DWQ
LRP	Legally Responsible Person
NAL	Numeric Action Level
NEC	No Exposure Certification
NEL	Numeric Effluent Limitation
NOI	Notice of Intent
NONA	Notice of Non Applicability
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NSWD	Non Storm Water Discharges
PRDs	Permit Registration Documents
QISP	Qualified Industrial Storm water Practitioner
QSE	Qualifying Storm Event
SIC	Standard Industrial Classification
SMARTS	Storm Water Multiple Application and Report Tracking System
SWPPP	Storm Water Pollution Prevention Plan
WDID	Waste Discharge Identification Number

DRAFT GENERAL WASTE DISCHARGE REQUIREMENTS FOR COMPOSTING OPERATIONS



OVERVIEW

The State Water Resources Control Board (State Water Board) is preparing an Environmental Impact Report (EIR) for General Waste Discharge Requirements for Composting Operations (General Order) that would cover facilities that collect certain organic material such as leaves, tree trimmings, grass, food leftovers, and scrap paper products to create compost. Compost contains beneficial microorganisms that break down organics into a stable humus-rich soil amendment. Compost helps soils retain moisture and nutrients, potentially reducing runoff and irrigation needs.

Composting operations help keep organic material out of landfills and may help the state to meet its goal to recycle, compost, or reduce 75 percent of solid waste in landfills by 2020. However, composting operations have the potential to pose a threat to water quality. The State Water Board supports the goal of composting, when operated in a manner that protects water quality.

HOW DOES COMPOSTING AFFECT WATER QUALITY?

Composting piles form leachate – a liquid created when certain wastes decompose or as excess moisture flows through the pile. Depending on its source and composition, leachate can contain a wide variety of pollutants, which, if allowed to seep into groundwater or run off into surface waters, could cause water quality problems. Leachate can potentially deplete oxygen in waterways and may contain unacceptably high levels of nitrogen, phosphorus, metals, and other pollutants that could impact waters of the state.

WHO WILL BE AFFECTED BY THIS ORDER?

The proposed General Order will apply to existing and new composting operations, including commercial, agricultural, institutional, and governmental facilities. The General Order will exempt most small composting operations, such as home composting or community gardens.

The proposed General Order will set standards for the construction, operation, and maintenance of composting facilities to protect surface water and groundwater. The proposed General Order provides a number of requirements, including standards for the permeability of the ground underneath the composting piles, drainage, and specifications for leachate collection and containment. The Order will also include requirements for monitoring and reporting.

This is not a new regulatory endeavor. Regional Water Boards previously regulated composting operations under region-specific conditional waivers of waste discharge requirements or general orders. Some composting operations in California are currently operating under individual waste discharge requirements. Individual waste discharge requirements address site-specific conditions and may contain more stringent requirements than what is in the proposed General Order.

PUBLIC PROCESS

The State Water Board follows a strict, legally-mandated process when adopting general orders. There will be multiple opportunities for public comment and discussion. The Draft EIR and General Order was released for public comment on January 13, 2015. State Water Board members consider items for adoption at publicly noticed meetings that are open to the general public. The General Order will be presented to the State Water Board for consideration in June 2015.

HOW TO STAY INFORMED

To keep apprised of the status of the proposed General Order, you can sign up for State Water Board notifications at the link below, check the box for "Composting Operations."

http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml#quality

And you can get more information on the State Water Board web site:

http://www.waterboards.ca.gov/water_issues/programs/compost/

If you have any questions, you can submit them via email to Composting@waterboards.ca.gov.

(Fact Sheet updated 2.9.2015)



DRAFT REQUIREMENTS
General Waste Discharge Requirements for Composting Operations
(Revised July 20, 2015)

[Proposed Additions - Blue Double Underlined & Proposed Deletions - ~~Red Strikethrough~~]

Requirement Type	Tier I	Tier II
Applicability		
Activities not required to obtain coverage under this General Order	<ul style="list-style-type: none"> a. Agricultural Composting; b. Chipping and grinding facilities and operations. This includes chipping and grinding facilities and operations at a composting facility if located outside of the composting operations area. c. Lot clearing by local governmental agencies (i.e., grubbing, tree trimming, etc.) for fire protection; d. Composting activities that are within a fully-enclosed vessel; e. Composting operations that receive, process, and store less than 500 cubic yards (cy) of allowable materials at any given time; f. Composting operations that receive, process, and store less than 5,000 cy per year of allowable Tier I or Tier II feedstocks, additives, and amendments, and implement the following management practices: <ul style="list-style-type: none"> (1) Completely cover all materials during rain events to reduce the generation of wastewater; and (2) Manage the application of water to reduce the generation of wastewater. 	
Total Facility Capacity	< 25,000 cy (combination of Tier I allowable materials received, processed, and stored: feedstocks, amendments) and meets the siting criteria below.	≥ 25,000 cy (all allowable materials received, processed, and stored: feedstocks, amendments) or < 25,000 cy which does not meet the site-specific hydrogeologic conditions do not meet the Tier I percolation rate and depth to groundwater standards.
Depth to Groundwater	Dependent on Soil Percolation Rate as follows (minutes per Inch - MPI using percolation test): < 1 MPI : 50 feet 1 MPI - 5 MPI: 20 feet > 5 MPI - 30 MPI: 8 feet > 30 MPI : 5 feet	
Distance to Surface Water	≥ 100 feet	≥ 100 feet
Distance to nearest water supply well	≥ 100 feet	≥ 100 feet
Allowable Feedstocks	<ul style="list-style-type: none"> • Agricultural materials • Green materials • Paper materials • Vegetative food materials • Anaerobic digestate derived from allowable Tier I feedstocks • <u>Residentially co-collected food and green materials</u> 	<ul style="list-style-type: none"> • Food materials (non-vegetative) • Biosolids (Class A, B, and/or EQ) • Manure • Anaerobic digestate derived from allowable Tier II feedstocks • A combination of allowable Tier I and Tier II feedstocks
Prohibited Feedstocks	<ul style="list-style-type: none"> a. Animal carcasses; b. Liquid wastes other than those of food origin; c. Medical wastes as defined in the Health and Safety Code, section 117690; d. Radioactive wastes; e. Septage; f. Sludges, including but not limited to sewage sludge, water treatment sludge, and industrial sludge; g. Wastes classified as "designated" as defined in Water Code section 13173; h. Wastes classified as "hazardous" as defined in the Cal. Code Regs., title 22, section 56261.3; i. Wood containing lead-based paint or wood preservatives, or ash from such wood; or j. Any feedstock, additive, or amendment other than those specifically described in the General Order, unless approved by the Regional Water Board. 	
Additives	No more than 10 percent combined, on a total volume basis, of the total feedstocks for any given batch of compost, of the following: fertilizing material at rates that will be consumed or fixed/immobilized during composting; manure; anaerobic digestate (solid) from other feedstocks not listed in this tier or under the Prohibitions section; and other materials approved by the Regional Water Board.	No more than 30 percent combined (other than liquid food material), on a total volume basis, of the total feedstocks for any given batch of compost, of the following: fertilizing material at rates that will be consumed or fixed/immobilized during composting, liquid food material, anaerobic digestate (solid) derived from any material other than allowable Tier I and Tier II feedstocks, and other materials approved by the Regional Water Board.
Amendments	For Tier I and Tier II facilities, the type and amounts of amendments must be specified in a NOI and/or a technical report, and approved by the Regional Water Board.	
Prohibited Additives and Amendments	Use of biosolids as an additive or amendment is prohibited.	Use of biosolids as an additive or amendment is prohibited.

Requirement Type	Tier I	Tier II
Construction		
Pads	<p>Surfaces must be capable of preventing degradation of waters of the state. Such structures are designed, constructed, operated, and maintained to: (1) facilitate drainage and minimize ponding by sloping or crowning pads to reduce infiltration; (2) reliably transmit any free liquid to a containment structure; and (3) prevent conditions that could lead to contamination, pollution, or nuisance.</p> <p>Control and manage all run-on, runoff, and precipitation from all areas used for receiving, processing, or storage, under conditions of a 25-year, 24-hour peak storm event. Protect areas from inundation by surface flows associated with a 25-year, 24-hour peak storm event.</p>	<p>Working surfaces must be capable of resisting damage from movement of operating equipment and weight of piles, have a hydraulic conductivity of 1.0×10^{-5} cm/s or less, and consist of one of the following:</p> <ul style="list-style-type: none"> (a) Compacted soils, with a minimum thickness of one foot; (b) Asphaltic concrete or Portland cement concrete; or (c) An equivalent engineered alternative approved by the Regional Water Board. <p>In lieu of meeting the hydraulic conductivity requirement prescribed above, the applicant may propose to implement a groundwater protection monitoring program. If this choice is selected, the applicant must submit a Groundwater Protection Monitoring Program Plan in the Technical Report with the Notice of Intent.</p>
Wastewater Handling System (e.g. pond, tanks)	<p>Applicant must submit for approval a <i>Water and Wastewater Management Plan</i> that describes how the wastewater will be managed to prevent discharge. The plan must describe the design, operations, and maintenance of the systems, including water balance calculations and assumptions.</p> <p>Detention ponds, if used, must be designed, constructed, and maintained to prevent conditions contributing to, causing, or threatening to cause contamination, pollution, or nuisance, and must be capable of containing, without overflow or overtopping (taking into consideration the crest of wind-driven waves and water reused in the composting operation), all wastewater from the working surfaces in addition to precipitation that falls into the detention pond from a 25-year, 24-hour peak storm event at a minimum.</p>	<p>Applicant must submit for approval a <i>Water and Wastewater Management Plan</i> that describes how the wastewater will be managed to prevent discharge. The plan must describe the design, operations, and maintenance of the systems, including water balance calculations and assumptions.</p> <p>Detention ponds, if used, must be designed, constructed, and maintained to prevent conditions contributing to, causing, or threatening to cause contamination, pollution, or nuisance, and must be capable of containing, without overflow or overtopping (taking into consideration the crest of wind-driven waves and water reused in the composting operation), all wastewater from the working surfaces in addition to precipitation that falls into the detention pond from a 25-year, 24-hour peak storm event at a minimum.</p> <p>Detention pond liners must meet a hydraulic conductivity of 1.0×10^{-5} cm/s or less and include one of the following:</p> <ul style="list-style-type: none"> (a) A liner system consisting of a 40-mil synthetic geomembrane (60-mil if high-density polyethylene) underlain by either one foot of compacted clay, or a geosynthetic clay liner installed over a prepared base; (b) A liner system that includes Portland cement concrete underlain by a 40-mil synthetic geomembrane (60-mil if high-density polyethylene); or (c) An equivalent engineered alternative approved by <p>Detention ponds must be designed and constructed with a pan lysimeter monitoring device under the lowest point of the pond or equivalent alternative approved by the Regional Water Board. In addition, ponds must be designed and operated to maintain a dissolved oxygen concentration of at least 1.0 mg/L to prevent anaerobic conditions.</p> <p>Tanks, if used (i.e. above or underground), must be designed, operated, maintained and monitored in accordance with applicable laws and regulations.</p>

Requirement Type	Tier I	Tier II
Construction, continued		
Drainage/ Conveyance	Drainage conveyance systems must be designed, constructed, and maintained for conveyance of wastewater from the working surface in addition to direct precipitation from a 25-year, 24-hour peak storm event at a minimum. Ditches must be properly sloped to minimize ponding and kept free and clear of debris to allow for continuous flow of liquid. Ditches must be inspected and cleaned out prior to the rainy season every year.	Drainage conveyance systems must be designed, constructed, and maintained for conveyance of wastewater from the working surface in addition to direct precipitation from a 25-year, 24-hour peak storm event at a minimum and meet a hydraulic conductivity of 1.0×10^{-5} cm/s or less, and consist of one of the following: (a) Compacted soils, with a minimum thickness of one foot; (b) Asphaltic concrete or Portland cement concrete; or (c) An equivalent engineered alternative approved by the Regional Water Board. Ditches must be properly sloped to minimize ponding and kept free and clear of debris to allow for continuous flow of liquid. Ditches must be inspected and cleaned out prior to the rainy season every year.
Berms	Berms must prevent run-on to and runoff from a 25-year, 24-hour peak storm event.	Berms must prevent run-on to and runoff from a 25-year, 24-hour peak storm event.
Storm Water/ Wastewater	Composting Operations may be required to enroll under the Industrial Storm Water General Permit Order 97-03-DWQ (<i>Industrial General Permit, new Industrial General Permit 2014-0057-DWQ will be effective July 1, 2015</i>) or obtain appropriate National Pollutant Discharge Elimination System (NPDES) wastewater discharge permit.	
Monitoring		
Facility Inspections	The Discharger must regularly inspect and maintain all containment structures pursuant to this General Order, the Monitoring and Reporting Program, and Notice of Applicability. Inspection frequency must be sufficient to prevent discharges of feedstocks, additives, amendments, compost, or wastewater from creating or contributing to contamination, pollution or nuisance. Dischargers must perform quarterly site inspections of the working surface, berms, ditches, facility perimeter, erosion control best management practices, and any other operational surfaces.	
Water Quality	Wastewater Management System: perform quarterly inspections of the system, estimate available capacity and volume. If using a pond, conduct quarterly sampling of the liquid within the pond. (when there is sufficient water to sample).	
		The detention pond leak detection monitoring device (i.e., the pan lysimeter) must be checked monthly during the wet season for liquid. Upon detection of liquid, contact the Regional Water Board within 48 hours; collect a sample and analyze for the list of constituents below; remove liquid from the monitoring device; and continue to monitor weekly. If liquid reappears, collect and analyze the sample for the same list of constituents. If wastewater is confirmed, submit a <i>Response Action Plan</i> for review and approval by Regional Board staff.
		Tanks, if used, must be monitored in accordance with applicable laws and regulations.
Monitoring Requirements	**See below for revised Monitoring Requirements** Monitoring is required if applicable.	
- Pond	Quarterly Monitoring: pH, dissolved oxygen, total dissolved solids, fixed dissolved solids, total nitrogen, specific conductance (electrical conductivity)	
- Groundwater	Quarterly Monitoring: groundwater elevation, depth to groundwater, gradient, gradient direction, pH, TDS, nitrate as nitrogen, sodium, chloride, total coliform organisms	
- Biosolids	Proof of compliance with ceiling concentrations of 40 CFR 503.13, Table 1, or conduct testing for each load delivered	

Requirement Type	Tier I	Tier II
Reporting		
Revised Notice of Intent	Submit a revised Notice of Intent at least 90 days prior to: (1) adding a new feedstock, additive, or amendment; (2) changing material or construction specifications; (3) changing a monitoring program; or (4) changing an operation or activity not described in the approved NOI and technical report.	
Technical Report	Submit a Technical Report prior to any new construction of any working surfaces, detention ponds, berms, ditches, or other water quality protection containment structure.	
Final Post-Construction Report	Submit a <i>Final Post-Construction Report</i> , including as-built plans and specifications, within 60 days of completing construction activities, to document that structures were constructed in accordance with the Technical Report.	
Monitoring Report	Submit an Annual Monitoring and Maintenance Report no later than April 1st of each year.	
Notification of Violations	If a violation of requirements of this Order or MRP occurs, the Discharger must notify the appropriate Regional Water Board staff by telephone or email, within 48-hours, once the Discharger has knowledge of the violation. This notification must include a description of the noncompliance and its cause, the period of noncompliance (providing exact dates and times); and if the noncompliance has not been corrected, the anticipated time to complete the corrective action. The notification must also include steps taken or planned to reduce, eliminate, or prevent recurrence of the noncompliance. Depending on the severity of the violation, the Regional Water Board staff may require the discharger to submit a separate technical report regarding the violation within 10 working days of the initial notification.	
Enrollment		
New Operations	Must file a complete Notice of Intent, filing fee, and technical report not less than 90 days prior to commencement of composting operations. The Regional Water Board will issue a Notice of Applicability that, at a minimum, confirms the Discharger's Tier, timeline for compliance, monitoring requirements and monitoring methods.	
Existing Operations	Must file a complete Notice of Intent, filing fee, and technical report within one year of adoption of the General Order. The technical report shall include a proposed schedule for full compliance and must be as short as practicable but may not exceed 6 years from the date of the NOI. The Regional Water Board will issue a Notice of Applicability that, at a minimum, confirms the Discharger's Tier, timeline for compliance, monitoring requirements and monitoring methods.	
Fees		
Annual Fees	The filing fee accompanying the NOI is the first year's annual fee. Annual fees are based on the threat to water quality (TTWQ) and complexity (CPLX) of the discharge. (Cal. Code Regs., tit. 23, § 2200.) The ratings are available at: http://www.waterboards.ca.gov/resources/fees/docs/fy1415_fee_schedule.pdf	



Water Quality Fees Stakeholder Meeting

DATE:	Friday, August 7, 2015
TIME:	10:00 am – 12:00 pm
LOCATION:	Cal/EPA Headquarters 1001 I Street, Sacramento, CA 95814 Coastal Hearing Room, 2 nd Floor
WEBCAST LINK:	http://www.calepa.ca.gov/broadcast/
QUESTIONS:	Fee_Branch@waterboards.ca.gov – Questions received prior to and during the meeting will be addressed during the meeting unless otherwise requested.

AGENDA

1. Welcome and Introductions
2. Waste Discharge Permit Fund Condition (Attachment 1)
3. Waste Discharge Permit Fund – FY 2014-15 Revenue and Expenditures (Attachment 2)
4. Waste Discharge Permit Fund Budget Cost Drivers (Attachment 3)
5. Waste Discharge Permit Fund – FY 2014-15 Expenditures by Program (Attachment 4)
6. Waste Discharge Permit Fund – FY 2014-15 Staffing by Program (Attachment 5)
7. Open Discussion

WDPF Fund Condition (\$000)

											Forecast		Forecast FY 15-16 w/ Fee Changes				
	FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 15-16							
BEGINNING BALANCE	\$19,131	\$17,288	\$9,795	\$8,204	\$6,604	\$10,774	\$6,403	\$3,799	\$8,531	\$12,839	\$12,839	\$12,839	\$12,839	\$866	(\$229)	\$13,476	
Prior Year Adjustments ¹	\$1,247	\$1,807	(\$56)	(\$3,010)	\$2,097	(\$1,913)	(\$713)	\$1,132	(\$229)	(\$229)	(\$229)	(\$229)	(\$229)	(\$229)	(\$229)	(\$229)	(\$229)
Restricted Revenue ²																	
Adjusted Beginning Balance	\$20,378	\$19,095	\$9,739	\$5,194	\$8,701	\$8,861	\$5,690	(\$85)	\$8,302	\$13,476	\$13,476	\$13,476	\$13,476	\$13,476	\$13,476	\$13,476	
Revenue																	
Regulatory Fees	\$62,435	\$60,958	\$77,340	\$74,902	\$74,864	\$97,064	\$99,037	\$117,158	\$121,320	\$126,848	\$126,848	\$126,848	\$126,848	\$126,848	\$126,848	\$126,848	\$126,848
Penalty Assessments																	
Other ³	\$2,622	\$3,038	\$2,027	\$900	\$630	\$2,647	\$393	\$102	\$75	\$75	\$75	\$75	\$75	\$75	\$75	\$75	\$75
Total Revenue	\$65,057	\$63,996	\$79,367	\$75,802	\$75,494	\$99,711	\$99,430	\$118,472	\$121,624	\$127,152	\$127,152	\$127,152	\$127,152	\$127,152	\$127,152	\$127,152	\$127,152
Expenditures																	
Water Board State Operations	\$67,651	\$72,977	\$80,597	\$74,079	\$72,693	\$101,546	\$100,480	\$107,433	\$114,868	\$118,856	\$118,856	\$118,856	\$118,856	\$118,856	\$118,856	\$118,856	\$118,856
Local Assistance ⁴								\$1,610	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800
Other State Operations ⁵	\$496	\$319	\$305	\$313	\$728	\$623	\$841	\$813	\$419	\$543	\$543	\$543	\$543	\$543	\$543	\$543	\$543
Marijuana (Cannabis) ⁶																	
Water Recycling ⁶									\$262	\$331	\$408	\$408	\$408	\$408	\$408	\$408	\$408
Regional Water Planning ⁶																	
Drinking Water ⁶																	
Cal/EPA ⁷																	
Total Expenditures	\$68,147	\$73,296	\$80,902	\$74,392	\$73,421	\$102,169	\$101,583	\$110,187	\$121,294	\$122,608	\$122,608	\$122,608	\$122,608	\$122,608	\$122,608	\$122,608	\$122,608
Non-Fee Expenditure Adj ⁸																	
Total Fee Program Expenditures	\$68,147	\$73,296	\$80,902	\$74,392	\$73,421	\$102,169	\$101,583	\$110,187	\$121,294	\$122,608	\$122,608	\$122,608	\$122,608	\$122,608	\$122,608	\$122,608	\$122,608
Gain/(Loss)	(\$3,090)	(\$9,300)	(\$1,535)	\$1,410	\$2,073	(\$2,458)	(\$1,891)	\$8,616	\$4,537	\$5,953	\$5,953	\$5,953	\$5,953	\$5,953	\$5,953	\$5,953	\$5,953
ENDING BALANCE	\$17,288	\$9,795	\$8,204	\$6,604	\$10,774	\$6,403	\$3,799	\$8,531	\$12,839	\$19,429	\$19,429	\$19,429	\$19,429	\$19,429	\$19,429	\$19,429	\$19,429
Fund Reserve	25.4%	13.4%	10.1%	8.9%	14.7%	6.3%	3.7%	7.7%	10.6%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%

Footnotes:

- ¹ Most adjustments represent unspent contract dollars that revert to the Fund.
- ² Restricted revenue is revenue received from fines and penalties that must be expended on cleanup and abatement activities.
- ³ Other revenue includes fines and penalties, interest from the state's pooled money investment fund, and escheat from unclaimed checks.
- ⁴ Local Assistance for Beach Monitoring
- ⁵ Other state operations includes appropriations for Cal/EPA, FiSCAL, and the State Controller's Office.
- ⁶ Legislative Augmentation. Funded by revenue received from fines and penalties.
- ⁷ Cal/EPA expenditure for Environmental Justice grants. No impact to fee programs.
- ⁸ Total budgeted expenditures that do not impact fees.

**Waste Discharge Permit Fund
FY 2014-15 Revenue and Expenditures
(\$000)**

Program	Budgeted Expenditures¹	Projected Expenditures¹	Projected Revenue	Projected Over/(Under)
NPDES	\$29,627	\$30,607	\$29,900	(\$707)
Stormwater	\$29,560	\$25,045	\$33,294	\$8,249
WDR	\$27,587	\$28,924	\$27,375	(\$1,550)
Land Disposal	\$15,149	\$10,511	\$15,137	\$4,626
401 Cert	\$7,102	\$9,132	\$6,509	(\$2,623)
CAF	\$4,607	\$4,536	\$4,467	(\$69)
ILRP	\$4,312	\$6,113	\$4,639	(\$1,474)
Total	\$117,945	\$114,868	\$121,320	\$6,452

¹ Includes redirected expenditures for SWAMP/GAMA, Enforcement, Fee Unit and pro rata.

**WDPF Budget Cost Drivers
FY 2015-16 (\$000)**

A	B	C	D	E	F	G	H	I	J	K
WDPF Program	FY 14-15 Base Budget	Staff Cost Adjustments	Resource Reallocation	BCP & Program Adjustments	FY 15-16 Budget	Revenue Forecast FY 15-16	Revenue Adjustment	Revenue Reduction for 5% Fund Reserve	Adjusted Total Revenue FY 15-16	Adjusted Average Program Percent Change
NPDES	\$29,626	\$377	(\$650)	\$0	\$29,353	\$29,708	(\$355)		\$29,353	-1.2%
Storm Water	\$29,559	\$444	(\$520)	\$381	\$29,864	\$35,541	(\$5,677)	(\$4,408)	\$25,456	-28.4%
WDR	\$26,887	\$1,063	\$910	\$828	\$29,689	\$29,457	\$232	(\$232)	\$29,457	0.0%
LD - No Tipping Fee	\$11,058	\$187	(\$260)	\$0	\$10,985	\$11,291	(\$306)	(\$1,857)	\$9,129	-19.2%
LD - Tipping Fee	\$3,707	\$63	(\$130)	\$0	\$3,640	\$3,726	(\$87)	(\$615)	\$3,025	-18.8%
401 Cert	\$7,106	\$208		\$0	\$7,313	\$7,313	\$0		\$7,313	0.0%
CAF	\$4,490	\$32	\$130	\$0	\$4,652	\$4,652	\$0		\$4,652	0.0%
ILRP	\$4,312	\$327	\$520	\$0	\$5,159	\$5,159	\$0		\$5,159	0.0%
TOTAL	\$116,745	\$2,702	\$0	\$1,209	\$120,656	\$126,848	(\$6,192)	(\$7,112)	\$113,544	-5.6%

FY 15-16 Primary Expense Changes:	Change Amount:
Pro Rata/Health Care/Retirement	\$2,532,000
Oil & Gas Wastewater Disposal	\$828,000
BCP Storm Water Resource Planning	\$381,000
FL3 Fac Ops	\$169,920
	<u>\$3,910,920</u>

**Waste Discharge Permit Fund
FY 2014-15 Expenditures by Program**

Task	Description	PY's	Labor	Benefits	Temp Help	Overtime	Op Exp	Contracts	Other/ Pro Rata	Indirect	Total
100/107	401 Cert Program	25.4	\$1,992,537	\$920,309	\$53,908	\$675	\$0	\$10,834	\$0	\$2,588,458	\$5,566,721
102	NPDES	71.5	\$6,655,435	\$2,973,084	\$12,223	\$49	\$233,334	\$228,092	0	\$8,387,401	\$18,489,617
105	Storm Water	62.0	\$5,415,241	\$2,443,022	\$104,277	\$22	\$0	\$246,161	\$0	\$6,940,024	\$15,148,748
126	WDR/Non-Chapter 15	66.5	\$6,206,845	\$2,752,490	\$25,088	\$1,369	\$233,333	\$787,609	\$8,889	\$7,820,846	\$17,836,469
127	CA Dept of Justice - Legal Services	0.0	\$0	\$0	\$0	\$0	\$0	\$600,000	\$0	\$0	\$600,000
128	Ag Waivers - ILRP	18.4	\$1,521,878	\$677,215	\$0	\$21	\$0	\$134,652	\$0	\$1,913,834	\$4,247,600
130	Fee Unit	5.2	\$230,423	\$155,973	\$109,164	\$0	\$0	\$245,455	\$3,216,713	\$431,350	\$4,389,077
131	Land Disposal	23.8	\$2,353,910	\$1,035,173	\$13,533	\$884	-\$949	\$25,700	\$0	\$2,954,860	\$6,383,111
141	Statewide Enforcement	17.0	\$1,491,687	\$680,801	\$15,556	\$0	\$0	\$16,364	\$0	\$1,901,631	\$4,106,040
151	Trend Monitoring (GAMA)	4.2	\$392,483	\$163,735	\$0	\$0	\$0	\$3,092,506	\$0	\$485,734	\$4,134,458
156/159	Ambient Monitoring (SWAMP)	12.9	\$1,045,965	\$468,229	\$16,671	\$0	\$0	\$3,930,735	\$1,435	\$1,345,167	\$6,808,201
191	Confined Animal Facilities	10.4	\$947,581	\$448,851	\$268	\$0	\$0	\$8,148	\$0	\$1,214,409	\$2,619,257
401	WQ Control Planning	81.1	\$6,795,947	\$3,095,091	\$66,757	\$0	\$0	\$2,068,191	\$0	\$8,720,807	\$20,746,793
412/553	Quality Assurance / CIWQS	1.5	\$216,493	\$85,982	\$0	\$0	\$0	\$1,032,797	\$616,762	\$262,402	\$2,214,436
	Total	399.8	\$35,266,425	\$15,899,956	\$417,445	\$3,020	\$465,718	\$12,427,243	\$3,843,798	\$44,966,924	\$113,290,529

**Waste Discharge Permit Fund
FY 2014-15 Staffing by Program**

100 & 107	Job Classification	PY's
401 Cert Program	Assistant Chief Council	0.1
	Associate Governmental Program Analyst	0.03
	Attorney	0.1
	Attorney III	0.8
	Attorney IV	0.02
	Environmental Geologist	2.5
	Environmental Geologist - Senior	0.5
	Environmental Geologist - Supervising	0.01
	Environmental Program Manager I	0.004
	Environmental Scientist	13.8
	Environmental Scientist - Senior	1.4
	Legal Secretary	0.04
	Legal Support Supervisor I	0.2
	Sanitary Engineering Associate	0.3
	Scientific Aid	0.1
	Staff Services Analyst	0.004
	Water Resource Control Engineer	3.9
	Water Resource Control Engineer - Senior	1.7
	Water Resource Control Engineer - Supv	0.1
	Total PY's	

105	Job Classification	PY's	
Storm Water	Assistant Chief Council	0.3	
	Attorney	0.9	
	Attorney III	1.1	
	Attorney IV	0.05	
	Environmental Geologist	5.5	
	Environmental Geologist - Senior	2.1	
	Environmental Scientist	14.8	
	Environmental Scientist - Senior	4.0	
	Environmental Scientist - Senior Spec	1.7	
	Executive	0.1	
	Information Systems Analyst - Associate	0.02	
	Office Technician	0.8	
	Sanitary Engineering Associate	2.0	
	Scientific Aid	0.9	
	Staff Services Analyst	0.4	
	Water Resource Control Engineer	21.4	
	Water Resource Control Engineer - Senior	5.1	
	Water Resource Control Engineer - Supv	0.8	
	Total PY's		62.0

102	Job Classification	PY's
NPDES	Assistant Chief Council	0.3
	Associate Governmental Program Analyst	0.1
	Attorney	0.8
	Attorney III	1.3
	Attorney IV	0.2
	Environmental Geologist	3.7
	Environmental Geologist - Senior	0.6
	Environmental Scientist	1.6
	Environmental Scientist - Senior	1.7
	Executive	0.05
	Information System Technician	1.0
	Information System Technician - Assistant	0.8
	Information Systems Analyst - Associate	0.8
	Information Systems Analyst - Senior	0.8
	Information Systems Analyst - Staff	0.8
	Sanitary Engineer Tech	0.8
	Sanitary Engineering Associate	3.2
	Staff Services Analyst	0.1
	Student Assistant	0.2
	Water Resource Control Engineer	43.6
Water Resource Control Engineer - Senior	8.8	
Water Resource Control Engineer - Supv	0.2	
Total PY's		71.5

126	Job Classification	PY's
WDR/Non-Chapter 15	Assistant Chief Council	0.4
	Associate Governmental Program Analyst	0.5
	Attorney	0.7
	Attorney III	2.1
	Attorney IV	0.2
	Environmental Geologist	11.7
	Environmental Geologist - Senior	4.0
	Environmental Geologist - Supervising	0.6
	Environmental Scientist	6.1
	Environmental Scientist - Senior	0.2
	Executive	0.1
	Information Systems Analyst - Associate	2.5
	Legal Secretary	0.002
	Legal Support Supervisor I	0.005
	Office Technician	0.8
	Sanitary Engineering Associate	2.8
	Staff Services Analyst	0.9
	Student Assistant	0.2
	Water Resource Control Engineer	27.4
	Water Resource Control Engineer - Senior	5.0
Water Resource Control Engineer - Supv	0.4	
Total PY's		66.5

128	Job Classification	PY's
Ag Waivers - ILRP	Assistant Chief Council	0.01
	Environmental Geologist	4.3
	Environmental Geologist - Senior	1.1
	Environmental Scientist	7.2
	Environmental Scientist - Senior	1.9
	Environmental Scientist - Senior Spec	0.4
	Sanitary Engineering Associate	0.3
	Water Resource Control Engineer	3.1
	Water Resource Control Engineer - Senior	0.04
	Total PY's	

156 & 159	Job Classification	PY's
Ambient Monitoring (SWAMP)	Environmental Geologist	2.2
	Environmental Geologist - Senior	0.05
	Environmental Program Manager I	0.8
	Environmental Scientist	3.9
	Environmental Scientist - Senior	1.4
	Environmental Scientist - Senior Spec	4.1
	Scientific Aid	0.1
	Student Assistant	0.05
	Water Resource Control Engineer	0.1
	Water Resource Control Engineer - Senior	0.2
Water Resource Control Engineer - Supv	0.004	
Total PY's		12.9

**Waste Discharge Permit Fund
FY 2014-15 Staffing by Program**

131	Job Classification	PY's
Land Disposal	Assistant Chief Council	0.02
	Associate Governmental Program Analyst	0.6
	Attorney	0.002
	Attorney III	0.3
	Attorney IV	0.02
	Environmental Geologist	9.7
	Environmental Geologist - Senior	4.7
	Environmental Geologist - Supervising	0.2
	Environmental Scientist	1.4
	Information Systems Analyst - Associate	0.03
	Sanitary Engineering Associate	0.1
	Staff Services Analyst	0.04
	Water Resource Control Engineer	6.4
	Water Resource Control Engineer - Senior	0.1
Water Resource Control Engineer - Supv	0.2	
Total PY's	23.8	

130	Job Classification	PY's
Fee Unit	Accounting Officer - Specialist	0.01
	Associate Governmental Program Analyst	1.8
	Management Services Technician	0.8
	Research Program Specialist I	0.9
	Staff Services Manager I	0.9
	Staff Services Manager II	0.8
	Total PY's	5.2

141	Job Classification	PY's
Statewide Enforcement	Assistant Chief Council	0.1
	Attorney	0.1
	Attorney III	0.6
	Attorney IV	0.1
	Environmental Geologist	0.5
	Environmental Geologist - Senior	0.8
	Environmental Geologist - Supervising	0.6
	Environmental Program Manager I	0.1
	Environmental Scientist	4.3
	Environmental Scientist - Senior	1.9
	Executive	0.0005
	Sanitary Engineering Associate	0.3
	Scientific Aid	0.1
	Staff Services Analyst	0.6
	Water Resource Control Engineer	5.1
Water Resource Control Engineer - Senior	1.9	
Total PY's	17.0	

412 & 553	Job Classification	PY's
Quality Assurance / CIWQS	Environmental Scientist - Senior Spec	0.8
	Water Resource Control Engineer - Senior	0.7
	Total PY's	1.5

191	Job Classification	PY's
Confined Animal Facilities	Environmental Geologist	3.8
	Environmental Geologist - Senior	0.8
	Environmental Geologist - Supervising	0.2
	Environmental Scientist	3.0
	Water Resource Control Engineer	1.7
	Water Resource Control Engineer - Senior	0.9
Total PY's	10.4	

401	Job Classification	PY's
WQ Control Planning	Assistant Chief Council	0.2
	Associate Governmental Program Analyst	1.3
	Attorney	0.6
	Attorney III	2.3
	Attorney IV	0.1
	Environmental Geologist	5.5
	Environmental Geologist - Senior	2.9
	Environmental Geologist - Supervising	0.9
	Environmental Program Manager I	1.2
	Environmental Program Manager II	0.4
	Environmental Scientist	26.5
	Environmental Scientist - Senior	5.8
	Environmental Scientist - Senior Spec	5.7
	Executive	0.04
	Information System Technician	0.4
	Information Systems Analyst - Staff	0.9
	Office Technician	1.4
	Sanitary Engineering Associate	0.8
	Scientific Aid	0.2
	Staff Services Analyst	0.5
Water Resource Control Engineer	18.3	
Water Resource Control Engineer - Senior	5.3	
Total PY's	81.1	

151	Job Classification	PY's
Trend Monitoring (GAMA)	Associate Governmental Program Analyst	0.4
	Attorney III	0.0005
	Environmental Geologist	3.0
	Environmental Geologist - Senior	0.4
	Environmental Geologist - Supervising	0.3
	Office Technician	0.01
	Scientific Aid	0.01
	Water Resource Control Engineer - Principal	0.1
	Total PY's	4.2

State Water Resources Control Board - Landfill Threat and Complexity Rating

Proposed for FY2015-2016

Status	TTWQ/CPLX	County	Region	Facility Name	WDR FEE
No Tip Fee	1B	Amador	5S	BUENA VISTA CLASS II LANDFILL	\$38,630
TIP FEE	2B	Butte	5R	NEAL ROAD CLASS III LANDFILL	\$13,864
TIP FEE	2B	Calaveras	5S	ROCK CREEK LANDFILL	\$13,864
No Tip Fee	2B	Colusa	5	EVANS ROAD LANDFILL	\$16,557
TIP FEE	3B	Colusa	5S	LANDFILL SITE 2, STONYFORD SWD	\$5,203
TIP FEE	1A	Del Norte	1	DEL NORTE CO SWDS	\$40,054
TIP FEE	1B	El Dorado	5S	UNION MINE LANDFILL	\$32,350
TIP FEE	2B	Glenn	5R	GLENN COUNTY CLASS III SANITARY LANDFILL	\$13,864
No Tip Fee	3B	Humboldt	1	Humboldt County-DPW	\$6,209
No Tip Fee	1A	Humboldt	1	Humboldt Waste Management Authority	\$47,829
TIP FEE	1B	Imperial	7	BRAWLEY CLS III WMF 97-007	\$32,350
TIP FEE	1B	Imperial	7	CALEXICO CLS III WMF 02-104	\$32,350
TIP FEE	1B	Imperial	7	HOLTVILLE CLS III WMF 03-066	\$32,350
TIP FEE	3B	Imperial	7	HOT SPA WMF	\$5,203
TIP FEE	1B	Imperial	7	IMPERIAL CLS III WMF 02-105	\$32,350
No Tip Fee	2B	Imperial	7	NILAND III WMF 97-046	\$16,557
TIP FEE	3B	Imperial	7	OCOTILLO WMF 97-044	\$5,203
No Tip Fee	2B	Imperial	7	PALO VERDE III WMF	\$16,557
TIP FEE	3B	Imperial	7	PICACHO SWDS 88-005	\$5,203
No Tip Fee	3 B	Imperial	7	SALTON CITY WMF	\$6,209
TIP FEE	1B	Inyo	6B	BISHOP(SUNLAND)CLASS III LF	\$32,350
TIP FEE	3B	Inyo	6B	INDEPENDENCE CLASSIII LANDFILL	\$5,203
No Tip Fee	3C	Inyo	6B	KEELER CLASS III LANDFILL	\$2,759
TIP FEE	3B	Inyo	6B	LONE PINE CLASS III LANDFILL	\$5,203
No Tip Fee	3C	Inyo	6B	SHOSHONE CLASS III LANDFILL	\$2,759
No Tip Fee	3C	Inyo	6B	TECOPA CLASS III LANDFILL	\$2,759
TIP FEE	2B	Lake	5S	LAKE CO., DPS-SW	\$13,864
No Tip Fee	2B	Lassen	2B	BIEBER CLASS III LANDFILL	\$16,557
TIP FEE	3C	Lassen	6A	HERLONG SOLID WDS	\$2,311
TIP FEE	2B	Lassen	6A	LASSEN CO SANITARY LANDFILL	\$13,864
No Tip Fee	3 C	Lassen	3C	MADLINE SWDS	\$2,759
No Tip Fee	3 C	Lassen	3C	RAVENDALE SWDS	\$2,759
TIP FEE	2B	Lassen	5R	WESTWOOD CLASS III LANDFILL	\$13,864
TIP FEE	2B	Madera	5F	AVENAL SWDS	\$13,864
TIP FEE	1B	Madera	5F	FAIRMEAD SWDS	\$32,350
No Tip Fee	3 C	Madera	5F	NORTH FORK SWDS	\$2,759
TIP FEE	1B	Mariposa	5F	MARIPOSA CO LANDFILL	\$32,350
No Tip Fee	2B	Mendocino	1	Mendocino Co Solid Waste Div.	\$16,557
No Tip Fee	3B	Mendocino	1	Mendocino Co Solid Waste Div.	\$6,209
No Tip Fee	3B	Mendocino	1	Mendocino Co Solid Waste Div.	\$6,209
No Tip Fee	3B	Mendocino	1	Mendocino Redwood Company	\$6,209
No Tip Fee	2A	Mendocino	1	Ukiah, City of	\$20,694
No Tip Fee	2B	Mendocino	1	Willits City	\$16,557
TIP FEE	2B	Merced	5F	BILLIE WRIGHT LANDFILL	\$13,864
TIP FEE	1B	Merced	5F	HIGHWAY 59 LANDFILL	\$32,350
TIP FEE	2B	Modoc	5R	ALTURAS CLASS III LANDFILL	\$13,864
No Tip Fee	3C	Modoc	6A	CEDARVILLE SOLID WDS (OLD)	\$2,759
No Tip Fee	3C	Modoc	6A	CEDARVILLE SWDS	\$2,759
No Tip Fee	3C	Modoc	6A	EAGLEVILLE SOLID WDS	\$2,759
No Tip Fee	3C	Modoc	6A	FORT BIDWELL SWDS	\$2,759
No Tip Fee	3C	Modoc	6A	LAKE CITY SWDS OLD	\$2,759
TIP FEE	1B	Mono	6B	BENTON CROSSING LANDFILL	\$32,350
TIP FEE	3C	Mono	6B	BRIDGEPORT SWDS	\$2,311
TIP FEE	1B	Mono	6B	PUMICE VALLEY CLASS III LF	\$32,350
TIP FEE	2B	Mono	6B	WALKER LANDFILL	\$13,864

State Water Resources Control Board - Landfill Threat and Complexity Rating

Proposed for FY2015-2016

Status	TTWQ/CPLX	County	Region	Facility Name	WDR FEE
TIP FEE	2B	Mono	6B	WALKER SANITARY LANDFILL	\$13,864
No Tip Fee	1B	Nevada	5S	MCCOURTNEY ROAD LANDFILL	\$38,630
No Tip Fee	3B	Placer	5S	CITY OF COLFAX	\$6,209
No Tip Fee	2B	Placer	5S	City of Lincoln	\$16,557
No Tip Fee	2B	Placer	5S	Placer Cnty Facility Services	\$16,557
No Tip Fee	2B	Placer	5S	PLACER CO. FACILITY SERVICES	\$16,557
No Tip Fee	3B	Placer	5S	PLACER CO. FACILITY SERVICES	\$6,209
No Tip Fee	3C	Placer	5S	PLACER CO. FACILITY SERVICES	\$2,759
No Tip Fee	2B	Placer	6A	PLACER COUNTY FACILITY SVCS	\$16,557
No Tip Fee	2B	Placer	5S	ROSEVILLE, CITY OF	\$16,557
TIP FEE	1B	Placer	5S	WRSL - Facility Services	\$32,350
TIP FEE	2B	Plumas	5R	CHESTER CLASS III LANDFILL	\$13,864
No Tip Fee	2B	Plumas	5R	GOPHER HILL CLASS III LANDFILL	\$16,557
No Tip Fee	2B	Plumas, Portal	5R	PORTOLA CLASS III LANDFILL	\$16,557
TIP FEE	2B	San Benito	3	SAN BENITO CO	\$13,864
No Tip Fee	2B	Shasta	5R	Redding City (Solid Waste)	\$16,557
No Tip Fee	2B	Shasta	5R	SHASTA CO	\$16,557
No Tip Fee	2B	Shasta	5R	SHASTA CO	\$16,557
No Tip Fee	2B	Shasta	5R	SHASTA CO	\$16,557
TIP FEE	2B	Shasta	5R	Shasta County	\$13,864
TIP FEE	2B	Sierra	5S	LOYALTON SANITARY LANDFILL	\$13,864
No Tip Fee	2B	Siskiyou	5R	BLACK BUTTE CLASS III LANDFILL	\$16,557
No Tip Fee	2B	Siskiyou	5R	MCCLOUD CLASS III LANDFILL	\$16,557
No Tip Fee	3 B	Siskiyou	2B	SISKIYOU CO HAPPY CAMP SWDS	\$6,209
TIP FEE	2B	Siskiyou	1	YREKA CITY SWDS	\$13,864
TIP FEE	2B	Tehama	5R	TEHAMA COUNTY RED BLUFF LANDFILL	\$13,864
No Tip Fee	1B	Trinity	5R	TRINITY CO SWDS WEAVERVILLE	\$38,630
No Tip Fee	1B	Tulare	5F	CITY OF LINDSAY	\$38,630
No Tip Fee	1B	Tulare	5F	RESOURCE MANAGEMENT AGENCY	\$38,630
No Tip Fee	2B	Tulare	5F	RESOURCE MANAGEMENT AGENCY	\$16,557
No Tip Fee	3B	Tulare	5F	RESOURCE MANAGEMENT AGENCY	\$6,209
No Tip Fee	3B	Tulare	5F	RESOURCE MANAGEMENT AGENCY	\$6,209
TIP FEE	1B	Tulare	5F	TULARE CO RESOURCE MGMT AGENCY	\$32,350
TIP FEE	1B	Tulare	5F	TULARE CO RESOURCE MGMT AGENCY	\$32,350
TIP FEE	1B	Tulare	5F	TULARE CO RESOURCE MGMT AGENCY	\$32,350
No Tip Fee	2B	Tulare	5F	TULARE CO RESOURCE MGMT AGENCY	\$16,557
No Tip Fee	3B	Tulare	5F	TULARE CO RESOURCE MGMT AGENCY	\$6,209
No Tip Fee	3B	Tulare	5F	TULARE CO RESOURCE MGMT AGENCY	\$6,209
No Tip Fee	2B	Tuolumne	5S	BIG OAK FLAT DISPOSAL SITE	\$16,557
No Tip Fee	2B	Tuolumne	5S	JAMESTOWN SAN LF - CLASS III	\$16,557
TIP FEE	1B	Yolo	5S	YOLO COUNTY LANDFILL	\$32,350

A PRESCRIPTION FOR CHANGE

HOW IMPROPERLY STORED AND DISPOSED MEDS AFFECT OUR COMMUNITY HEALTH



NEW SOLUTIONS FOR A GROWING PROBLEM

Prescription medications around the home pose risks, but San Mateo County has taken action

BY EVAN TUCHINSKY

Prescription medication can save lives, but it can also take lives. Overdoses and accidental poisonings are just two tragic consequences of the national drug epidemic that includes San Mateo County.

The use of prescription medication is on the rise. This leads to a lot of pills in household medicine cabinets, easily accessed by anyone: unsuspecting children, curious teens or burglars who sell drugs on the street. A 2015 survey indicated that 27 percent of county residents polled keep prescription medications in an unsecured medicine cabinet. Some officials worry that improperly stored medications can



contribute to the growing problem of prescription medication abuse.

In addition to improper storage of medications, many people don't know how to safely dispose of leftover medications when they're no longer needed. Throwing leftover pills in the trash, or flushing them down the drain or toilet, may have negative environmental and public health consequences.

San Mateo County is addressing this serious problem head-on. The Board of

Supervisors recently passed a new ordinance calling for manufacturers of medication sold in the county to help expand options for free, safe disposal of medication in our communities. This will help get unneeded medication out of the home and help protect your family from potential harm.

Read on to find out more about the consequences of improper storage and disposal of medication, and learn how you can help keep your family and our community safe.

PRESCRIPTION DRUG ABUSE TAKES A TOLL IN SAN MATEO COUNTY

Prescription medication abuse is a serious issue in San Mateo County. Safely store and dispose of your meds to keep them out of the wrong hands.



In 2014, **53 PEOPLE DIED** from an accidental drug overdose.



There were **432 UNINTENTIONAL DEATHS** from prescription medication from 1990-2010.



53% of **ALL UNINTENTIONAL DEATHS** in the county from 1990-2010 were caused by overdose.



151 PEOPLE in the county were discharged from the hospital for accidental poisoning by drugs, medicinal substances and biologicals in 2010.

Sources: San Mateo County death certificates from 1990-2010, hospitalization discharge data from the Office of Statewide Health Planning and Development and the National Institute on Drug Abuse.

THE THREAT TO OUR COMMUNITY

What do the professionals say? BY EVAN TUCHINSKY

PRESCRIPTION DRUG ABUSE

National trends indicate that the abuse of prescription drugs is on the rise. Diana Hill, Supervisor for San Mateo County Behavioral Health and Recovery Services, says the anxiety drug Xanax is popular locally among teens.

"Xanax bars are meant to be split into four separate doses," Hill explains. "Youth often take the entire Xanax bar at once."

This type of abuse of prescription medication can cause dangerous side effects as well as addiction.

"Overall, use of these drugs is rising," Hill says. "Medications left unused and unmonitored in medicine cabinets are very easily stolen by youth or a guest."



PRESCRIPTION FOR CRIME

Unsecured prescription medications in your medicine cabinet may make your home a target for criminals.

"Much like with the abuse of illegal drugs, we often see other crimes motivated by illicit prescription drug addiction, including theft, burglary or even robbery," says San Mateo County Sheriff Greg Munks. "Narcotic investigators have seized weapons from dealers of prescription drugs ... and have seen a recent rise in pharmacy thefts, thefts of prescription pads and other fraudulent ways to obtain prescription medication. Also, as is the case statewide, locally we have seen a rise in impaired driving as a result of prescription drugs."

Authorities identify medication abuse as the fastest-growing drug problem in the nation.



WHAT'S IN THE WATER?

When it comes to medication, don't flush. Disposing of unused medication via the toilet or the sink creates problems downstream, since water treatment plants aren't designed to handle these sophisticated chemical compounds.

Brian Schumacker, plant Superintendent for South San Francisco and San Bruno Water Control, says the State has not yet established water-purity standards for medication levels since "it's such a new concern." Schumacker says it's difficult to accurately measure the impact of water-soluble medications, but scientists are studying the problem.

There are many unknowns when it comes to medication in water, but pollution prevention is the least costly option.



ACCIDENTAL EXPOSURE

In most households, medication is stored in cabinets or drawers that are easy to access. Convenience carries risk — patients can easily access their meds, but so can anyone else. Children who discover pills may accidentally poison themselves. Curious pets may also gobble up pills tossed in the trash and suffer overdose. Securing medications in the home and disposing of them securely at the County's official collection locations is the best way to avert tragedy. See back page for disposal locations.



IMPACT OF ADDICTION HITS HOME

Preventing prescription medication abuse in youth and teens

BY BRITTANY WESELY



"We need to be more involved in limiting access."

Mary Bier
Prevention Specialist at North County
Prevention Partnership

Mary Bier understands firsthand the devastating impact of the abuse of prescription medication. She recalls the pain of watching the struggle of many people in her family, including one family member who accessed a parent's prescription medication at age 10 and has struggled with addiction ever since.

"It was painful for me to watch as a young girl," Bier says. "The disease of addiction has been hard for my family member to battle and it remains a constant struggle."

Today Bier applies her personal history to her job as a Prevention Specialist at North County Prevention Partnership, a nonprofit focused on reducing the impact of drugs and alcohol in the community.

"Recreational use of prescription drugs is such a big deal on our [school] campuses right now, even more so than it was five years ago," Bier says.

According to the Centers for Disease Control and Prevention, three out of four drug overdoses are caused by prescription painkillers. In 2011, the CDC declared prescription drug abuse an epidemic

and the White House defined it as "the nation's fastest growing drug problem."

Misuse of prescription drugs is becoming more prevalent due to a rise in accessibility, according to Bier. A 2014 study by Monitoring the Future reported that more than 40 percent of 12th-graders nationwide say that it is "very easy" to get access to controlled medications.

Bier has worked with many San Mateo County youth whose recreational use of prescription medication has taken a toll, like a group of local 11th-graders who were recently nearly expelled for using pills at school.

"A lot of parents don't think about locking up or properly disposing of prescriptions because it's not something they're used to doing," Bier says. "We need to be more involved in limiting access."

Bier recommends that parents keep prescription medications locked up at home and properly dispose of unneeded medications at secure collection locations.

Resources for parents are available through San Mateo County's Behavioral Health and Recovery Services. To find out more, call the ACCESS Call Center at 800-686-0101 or visit <http://smchealth.org/bhrs/>.

TEENS AND PRESCRIPTION DRUGS

1/3 of teens believe it's **OK** to use prescription drugs that were **NOT PRESCRIBED** to them.



43% of teens say prescription drugs are **EASIER TO GET** than illegal drugs.



More than **4 IN 10** teens who have misused or abused a prescription drug **GOT IT FROM A PARENT'S MEDICINE CABINET.**



1 IN 5 kids who have misused or abused a prescription drug **STARTED BEFORE AGE 14.**

Source: The Partnership at Drugfree.org, www.drugfree.org/MedicineAbuseProject

BOARD OF SUPERVISORS ADOPTS ORDINANCE TO IMPROVE ACCESS TO SAFE MEDICINE DISPOSAL

Medication manufacturers will share responsibility

BY EVAN TUCHINSKY

A new San Mateo County ordinance is aimed at helping make our communities safer by expanding the public's access to disposal sites for unwanted medication.

San Mateo County has long been on the vanguard of this issue. County Supervisor Adrienne Tissier initiated the County's prescription medication take-back program at law enforcement agencies in 2006, one of the first of its kind in the nation.

However, a 2015 survey of about 1,800 county residents revealed that 38 percent still throw unneeded medicines in the trash or toilet, and 27 percent store them in a medicine cabinet.

Addressing this concern, the Board of Supervisors recently approved the Safe Medicine Disposal ordinance. The goal of the ordinance is to increase the number of sites that can securely take unused or expired drugs, "thus providing greater convenience to

the public," according to Waymond Wong, Pollution Prevention Program Supervisor for the County's Environmental Health Division.

The ordinance followed the proven concept of Extended Producer Responsibility (EPR), a policy approach that involves manufacturers of goods in the financial and operational responsibility for product disposal. Taxpayers have traditionally assumed all costs for the disposal of manufactured goods.

"It is important for the producers to be part of the solution to the growing public health and environmental problems associated with improper medication disposal," explains Wong.

The San Mateo County ordinance was built on previously adopted ordinances in San Francisco and Alameda County. The new, expanded collection program is expected to start around January 2017. Collection options have yet to be determined.



Sheriff Greg Munks and County Supervisor Adrienne Tissier both support the recently approved Safe Medicine Disposal ordinance.

PHOTO COURTESY OF SAN MATEO COUNTY

POSSIBLE FUTURE COLLECTION OPTIONS INCLUDE:



MAIL-BACK PROGRAM



SECURE DISPOSAL BINS IN:



PHARMACIES



LAW ENFORCEMENT AGENCIES



HOSPITALS

Top: SINGREM, Mexico's producer-funded pharmaceutical collection program, collected and safely disposed of more than 420,000 kilograms of drug waste in 2014.

Bottom: SINGREM places secure collection containers in pharmacies for consumer convenience.

PHOTOS COURTESY OF JOSE ANTONIO AEDO



LEADING THE WAY

Mexico offers model of successful producer-funded pharmaceutical disposal program

BY ALYSSA NOELLE RASMUSSEN

For years, San Mateo County has operated a successful pharmaceutical disposal program, disposing of more than 76 tons of medication. The newly adopted Safe Medicine Disposal ordinance will expand the collection program with funding from pharmaceutical manufacturers.

Will it work? A look at what Mexico has done in recent years with similar regulations offers a promising outlook for how the program might be expanded in San Mateo County.

Jose Antonio Aedo is the General Manager of SINGREM, a Spanish acronym for the National Management System for Drug and Packaging Waste. SINGREM is Mexico's Extended Producer Responsibility (EPR) collection program for pharmaceuticals. The nonprofit group, founded in 2007, is organized and funded by pharmaceutical manufacturers to administer the collection and disposal of unused prescription drugs.

To support the program, all manufacturers contribute funding in

proportion to the number of units they sell. Manufacturers pay just 1.5 to 3 Mexican cents per unit to fund the program, says Aedo, and the program costs nothing to consumers and participating pharmacies that host the containers.

“With containers in the large pharmacy chains, it’s easy to find a place to drop off these expired or leftover products.”

Jose Antonio Aedo
General Manager of SINGREM

“Almost everything we receive goes to containers, transport and destruction. The administrative costs are less than 10 percent of the program,” Aedo says. “We strive to be highly efficient.”

Today SINGREM has 3,739 containers conveniently located in pharmacies throughout 24 of Mexico’s

31 states. Public awareness and participation has been steadily on the rise. More than 420,000 kilograms of drug waste was collected last year, up from 8,000 kilograms just four years prior.

“Manufacturers, pharmacies, and consumers are increasingly more aware of the significance of leftover medications, given that, in Mexico, they are taken out of the trash and sold illegally or they contaminate the land and water,” Aedo says. “There is more environmental awareness. Moreover, with containers in the large pharmacy chains, it’s easy to find a place to drop off these expired or leftover products.”



MANAGE YOUR MEDS THE SAFE WAY

It's important to store medications securely while they're in use, and dispose of leftover or expired medications quickly and safely. Here's how:



Store meds safely

- Store medicines out of reach of children or pets.
- Ask your pharmacist if any of your prescriptions are at risk for abuse.
- Lock up medications.
- Keep an updated inventory of all prescription medicine in your home.
- Pay attention to unexpected changes in pill quantities.

Dispose of meds safely

1 CHECK TO SEE IF YOUR ITEMS ARE ACCEPTED:



Accepted:

- Over-the-counter and prescription medications, including controlled substances
- Medicated ointments, lotions and creams
- Liquid medication
- Pet medication

Not Accepted:

- Sharps/needles
- IV bags
- Waste containing blood or infectious material
- Personal care products
- Empty pill containers
- Hydrogen peroxide
- Aerosol cans



2 PREP YOUR MEDS.



- Dump unneeded pills into plastic baggies. It's OK to use one bag for different types of pills.
- Peel off or black out the labels on pill containers and recycle the containers at home.
- Keep liquids, creams and gels in original packaging.

3 DROP OFF MEDS!



Approved San Mateo County drop-off locations can be found at smchealth.org/RxDisposal.

Don't flush or throw medications in the trash.



TAKE IT BACK. DON'T TRASH OR FLUSH!



Safely dispose of prescription medications, including controlled substances, at the following locations:

Belmont

Belmont Police Department
1 Twin Pines Lane
650-595-7400

Brisbane

Brisbane Police Department
50 Park Place
415-467-1212

Burlingame

Burlingame Police Department
1111 Trousdale Drive
650-777-4100

Daly City

Daly City Police Department
333 90th St.
650-991-8119

Half Moon Bay

San Mateo County Sheriff's Office
537 Kelly Ave.
650-726-8288

Hillsborough

Hillsborough Police Department
1600 Floribunda Ave.
650-375-7400

Millbrae

San Mateo County Sheriff's Office
Millbrae Police Bureau
581 Magnolia Ave.
650-259-2300

Moss Beach

San Mateo County Sheriff's Office
500 California Ave.
650-573-2801

Pacifica

Pacifica Police Department
2075 Coast Highway
650-738-7314

Redwood City

San Mateo County Sheriff's Office
400 County Center, Third Floor
650-599-1536

San Bruno

San Bruno Police Department
1117 Huntington Ave.
650-616-7100

San Carlos

San Mateo County Sheriff's Office
San Carlos Police Bureau
600 Elm St.
650-802-4277

San Mateo

San Mateo Police Department
200 Franklin Parkway
650-522-7710

South San Francisco

South San Francisco Police Department
33 Arroyo Drive, Suite C
650-877-8900



ENVIRONMENTAL HEALTH



*Call for access hours and capacity

Check the website often
SMCHEALTH.ORG/RXDISPOSAL
for new locations!

If you have other questions, call 650-372-6200.



Mary Pitto

From: cpsc-pharmaceuticals-listserv@googlegroups.com on behalf of Heidi Sanborn [Heidi@calpsc.org]
Sent: Wednesday, August 12, 2015 6:47 AM
To: CPSC Pharmaceutical Listserv (cpsc-pharmaceuticals-listserv@googlegroups.com)
Subject: Marin: Article on Ordinance for Meds Passing

Marin: Drug firms must pay for disposal of their medications

By Nels Johnson, Marin Independent Journal

Posted: 08/11/15, 6:28 PM PDT | Updated: 2 hrs ago

0 Comments

Pharmaceutical firms that make drugs sold in Marin County must pay to get rid of them safely when they are no longer needed.

County supervisors Tuesday approved a law compelling drug firms catering to Marin residents to participate in a “take back” program that collects and disposes of unused medications.

The action came on a 4-0 vote in the absence of Supervisor Kate Sears, who recused herself after noting she owns drug company stocks.

Sears’ statement of economic interests on file with the county includes a blue chip portfolio of more than 70 stocks ranging from Exxon Mobil to McDonald’s, and includes about a dozen drug companies. She valued her stakes in five of the drug firms at anywhere from \$10,000 to \$100,000 each.

Support for the ordinance was rallied by Supervisor Katie Rice and two weeks ago drew support from a parade of organizations, residents and doctors. Experts reported there were more overdose deaths from prescription drugs in Marin than from heroin and cocaine combined.

There were 27 unintentional prescription drug deaths in Marin in 2012, up from nine in 2009, 15 in 2010 and 13 in 2011. Non-fatal opiate-related visits to Marin emergency rooms rose from 198 in 2006 to 471 in 2012.

Only a handful of residents spoke when the measure came up for adoption Tuesday as an audience of 20 looked on. “We had the big presentation and everyone showed up two weeks ago,” Rice noted.

All must take responsibility for the fight against drug abuse, Rice added, calling the drug firm measure “one piece of a broader effort.”

The ordinance requires pharmaceutical firms that sell medicine in Marin to design and pay for a prescription drug take back system that is “free, convenient, and easily accessible to all residents,” said Public Health Officer Dr. Matt Willis. Although the plan allows flexibility, one result will be expansion of the occasional drop-off pill collection days the county already hosts.

“This would function the way almost all product stewardship programs do — for products that have ‘end of life impact’ like batteries, electronics, mattresses, paint,” where manufacturers share responsibility for safe disposal, Willis noted.

A letter of protest was submitted by the California Life Sciences Association, an industry group serving more than 750 biotechnology, pharmaceutical and medical firms. Reese Aaron Isbell, associate director of government affairs for the group, challenged the rationale for the ordinance, saying there is no evidence it will prevent abuse and called disposal legislation a matter for the state or federal government to tackle.

Advertisement

“The implementation of various local ordinances will do little more than create a patchwork of inconsistent regulations that will only confuse consumers and forestall conversations at the state and federal level around truly effective and equitable solutions,” Isbell warned.

The ordinance carries a \$40,000 start-up cost because a half-time employee will be assigned to implement it by expanding a local drug disposal project, but the program will become self-sufficient as fees are charged to drug producers. “The fees will be established for consideration by the board ... soon after the ordinance is adopted,” Willis said.

The ordinance takes effect in a month.



Reach the author at njohnson@marinij.com or follow Nels on Twitter: [@NelsJohnsonNews](https://twitter.com/NelsJohnsonNews).

- [Full bio and more articles by Nels Johnson](#)
- [Back to top](#)

**FACT SHEET ON HOW TO DRAFT
PHARMACEUTICAL STEWARDSHIP ORDINANCES
(Revised 10/29/2014)**

This fact sheet is intended to be used as a tool for anyone considering a producer responsibility ordinance for household pharmaceuticals. It summarizes key elements of the two existing pharmaceutical ordinances that have passed in the U.S. for Alameda County California and King County Washington. In addition, it includes San Francisco's new ordinance that was introduced October 21, 2014. The consensus is that the best ordinance to start with is San Francisco's which was the most recently introduced and was based on the best of both Alameda and King County ordinances.

Questions to ask and have policy leadership answer before going to Counsel to draft an Ordinance:

1. What medications must be accepted by the program? (OTC, vitamins, controlled)?
2. Will producers pay 100% of the program hard costs?
3. Will it include convenience requirements?
4. Will it require a producer funded and managed public education/outreach program?
5. Will pharmacies be required to (1) host bins, and/or (2) advertise the program?
6. Will it allow producers to charge the cost to the consumer visibly or be internalized in price?
7. Will it require producers to pay fees to reimburse for public agency oversight costs?
8. Will it allow the public agency to assess a penalty/fine for failure to comply, and if so what?

Comparison of Ordinances by the Counties of Alameda, King and San Francisco:

Question	Alameda County Safe Medication Disposal Ordinance Adopted 7/24/12	King County Secure Medicine Return Ordinance Adopted 6/20/13	San Francisco Safe Drug Disposal Ordinance Introduced 10/21/14
Are over-the-counter medications covered?	No	Yes	Yes
Are vitamins/ supplements covered?	No	No	No
Are controlled substances covered?	Yes, partially, special provisions for how controlled are handled.	Yes	Yes
Will producers pay 100% of the program hard costs?	Yes	No – The County funds collection bins up to maximum of 400 bins.	Yes

Will it have convenience standards, and if so what?	No , but an explanation of how the system will be convenient and adequate to serve the needs of residents is required in the plan.	Yes – Every retail pharmacy and law enforcement office that volunteers must be included in the system. If a jurisdiction does not have at least 1 site plus one additional site for every 30,000 population, then producers must also provide periodic collection events or mail-back services, or some combination.	Yes – Every Supervisorial District must have at least 5 drop-off sites geographically distributed to provide reasonably convenient & equitable access. If this cannot be achieved due to lack of drop-off sites, periodic collection events and/or mail-back services shall be provided.
Will it require a public education/outreach program?	Yes	Yes	Yes
Will pharmacies be required to (1) host bins, or (2) advertise the program?	No	No , all potential collectors will participate voluntarily.	No , the separate Safe Drug Disposal Information ordinance requires pharmacies to display ads for the collection program.
Will it allow producers to charge visible fees?	No	No	No
Will it provide oversight fees to reimburse costs incurred by the public agency?	Yes	Yes	Yes
Allows the public agency to assess a penalty/ fine?	Yes , max. penalty of \$1,000/day.	Yes , max. penalty of \$2,000/ day.	Yes , \$50-\$500 per day fines/up to 6 mo. jail

Ordinance Lead Attorney and Technical Staff by Jurisdiction:

Alameda County, CA:

Kathleen Pacheco, Senior Deputy County Counsel - Ph: 510-272-6700 kathleen.pacheco@acgov.org
 Bill Pollock, Hazardous Waste Manager - Ph: 510-670-6460 bill.pollock@acgov.org

King County, WA:

Amy Eiden, Deputy Prosecuting Attorney - Ph: 206-477-1082 amy.eiden@kingcounty.gov
 Taylor Watson, Program Implementation Manager - Ph: 206-263-3072 taylor.watson@kingcounty.gov

San Francisco, CA:

Joshua S. White, Deputy City Attorney - Ph: 415-554-4661 Joshua.White@sfgov.org
 Maggie Johnson, Residential Toxics Reduction Coordinator - Ph: 415-355-5006
margaret.johnson@sfgov.org

Mary Pitto

From: CARE California Carpet Stewardship Program [info@carpetrecovery.ccsend.com] on behalf of CARE California Carpet Stewardship Program [bjensen@carpetrecovery.org]
Sent: Wednesday, August 05, 2015 9:07 AM
To: Mary Pitto
Subject: California Update: August News and Events



California Carpet Stewardship Program

An initiative of CARE: Carpet America Recovery Effort

California Carpet Stewardship Program

August 2015 Update

Stakeholder Workshops Reveal Challenges to Carpet Recycling, Gather Input

Representatives from industry and government concerned about the future of carpet recycling in California gathered for the second annual California Carpet Stewardship Program Stakeholder Workshops held in Lakewood (July 14) and Sacramento (July 15). See more and download the presentations on [our blog](#). Input from the Workshops and the upcoming presentation at CRRA will be compiled and presented to the September meeting of CARE's Sustainable Plan Committee (SPC), which oversees the California program.



CARE Presents at CRRA Conference

CARE will present at the [California Resource Recovery Association's 39th Annual Conference](#) this month in Los Angeles. CARE representatives will give an update on the most recent Annual Report

numbers and solicit feedback from recycling professionals in attendance. The CARE session is Thursday, August 6 at 2:00pm. CARE staff also will participate in the Extended Producer Responsibility session along with other product stewardship program representatives on Friday, August 7 at 10:45 am, to be moderated by Heidi Sanborn of the [California Product Stewardship Council](#).



Collector Map Updated and Improved

The Carpet Collector map on CARE's website has been updated and improved. The new tool allows anyone seeking to responsibly dispose of used carpet to search for a site by name, city or zip code, and provides more information on hours of operation, tipping fees and types of carpet accepted.



New Rural County Sites Welcomed

The Rural Program is delighted to welcome seven new counties to the Program so far this year, including:

- Colusa
- Lake
- Marin
- Mendocino
- Mariposa
- Sutter
- Yuba

To learn more about the Rural Counties program, which provides support to qualifying rural counties to expand access to carpet collection and recycling, visit the [CARE website](#).



[Forward this email](#)



This email was sent to mpitto@rcrcnet.org by bjensen@carpetrecovery.org ;
[Update Profile/Email Address](#) | Rapid removal with [SafeUnsubscribe™](#) | [Privacy Policy](#)

Mary Pitto

From: Mattress Recycling Council [jspa@sleepproducts.ccsend.com] on behalf of Mattress Recycling Council [awall@mattressrecyclingcouncil.org]
Sent: Friday, June 19, 2015 11:04 AM
To: Mary Pitto
Subject: MRC Program Updates - June 2015

Having trouble viewing this email? [Click here](#)

You are receiving this email because you signed up to receive MRC Program Updates, have completed one of our collection site interest surveys or are the primary contact for your company's MRCreporting.org registration.

You may [unsubscribe](#) if you no longer wish to receive our emails.

MRC Program Updates



June 19, 2015

[\[HOME \]](#) [\[ABOUT \]](#) [\[CONTACT \]](#)



In This Issue

- [MRC to Present California Program Details at CRRA Annual Conference](#)
- [Save the Date for MRC's Las Vegas Market Information Session](#)
- [Rhode Island Producers & Importers Must Register by July 1](#)
- [Resources for Registration Assistance & Customer Communication](#)

MRC to Present California Program Details at CRRA Annual Conference

Thursday, August 6

Session 19: "Implementing California's Used Mattress and Recovery Act"

10:15- 11:45am PST

Millennium Biltmore Hotel

Los Angeles, California

[Conference Website](#)

MRC's Managing Director Mike O'Donnell and Southern California Program Coordinator Mark Patti will discuss the impacts to the existing solid waste infrastructure, current challenges, and how the program plan will work with stakeholders in the months prior to implementation. MRC will share implementation timelines along with information on how solid waste facilities, municipalities, and recyclers will be impacted by these new programs.

Save the Date: Information Session at Las Vegas Market

Tuesday, August 4

1:00-2:00pm PST

World Market Center B-16

Las Vegas, Nevada

[Event Website](#)

Attendees will learn about the Bye Bye Mattress program, the proposed fee and plans for California and Rhode Island, and the progress of Connecticut's implementation. Speakers include MRC's President Ryan Trainer, MRC's Managing Director Mike O'Donnell and MRC's Vice President of Industry & External Affairs Chris Hudgins.

Rhode Island Mattress Producers & Importers Must Join MRC by July 1

Rhode Island Code.23-90, which established the statewide mattress recycling program, requires that mattress producers and importers that sell, or offer mattresses for sale, to Rhode Island end users must join the Mattress Recycling Council (MRC) by July 1, 2015. [Read the full announcement here.](#)

To join MRC, register at www.mrcreporting.org. Contact support@mattressrecycling.org or call 1-888-646-6815 with any questions.

Registration & Customer Communication Resources Available

Producers (manufacturers, renovators, importers) and retailers of mattresses and box springs must register with MRC. There is no cost for registering with MRC. [Click here to register with MRC.](#)

REGISTRATION ASSISTANCE



How to Register on MRCReporting.org

This video accompanies the written registration guidelines. Walk through the registration process step-by-step.

[View the video](#)

[Read the guidelines](#)

[Program FAQs](#)

Follow @MattRecyCouncil for #FAQFriday!

CUSTOMER COMMUNICATION

These resource are available to all our registered retailers at no cost. You are not required to use them. Contact Amanda Wall, MRC Marketing & Communications Coordinator, at awall@mattressrecyclingcouncil.org with any questions.



Receipt Attachment

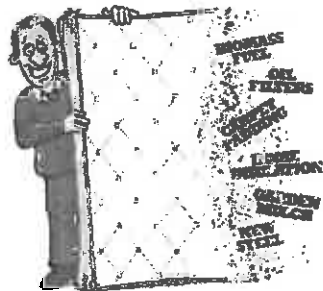
Receipt Attachment

Include this with your customer's receipt or invoice to direct them to byebyemattress.com for assistance with their fee and program related questions. We also have a recycling locator to help them find their nearest collection site or recycling facility.

The final piece is about the size of a smartphone or index card and is diecut with rounded corners. Actual size is 3.75 inches x 5 inches.

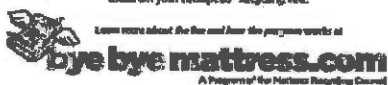
To place your **FREE** order, [register here](#) or contact awall@mattressrecyclingcouncil.org.

There are no limits to the amount of pieces or requests. This is a free resource available to every registered retailer.



Rest easy and know that your old mattress is going to a better place.

As of May 1, 2015, the state of Connecticut has implemented a mattress recycling program. A \$9 recycling fee will be collected on every mattress and box spring you purchase. It will be listed on your receipt as "recycling fee."



In-Store Poster available in three sizes!

In-Store Posters

You are able to download and print this informational poster in three sizes.

- 8.5x11 inches (letter size)
- 11x17 inches (legal size)
- 24x36 inches (standard poster size)

Download the Customer Q&A

This document can be used by your store management and staff to answer questions a customer might ask about the fee or the recycling program. It's meant to be a resource that you can put behind the counter or use in staff training/manuals. [Download it here.](#)

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 launches on May 1, with California and Rhode Island expected to begin in 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.

Forward this email

 SafeUnsubscribe™

This email was sent to mpitto@rcrcnet.org by awall@mattressrecyclingcouncil.org | [Update Profile/Email Address](#) | Rapid removal with [SafeUnsubscribe™](#) | [Privacy Policy](#).



Mattress Recycling Council | 501 Wythe Street | Alexandria | VA | 22314

Mary Pitto

From: Mattress Recycling Council [jspa@sleepproducts.ccsend.com] on behalf of Mattress Recycling Council [awall@mattressrecyclingcouncil.org]
Sent: Thursday, July 02, 2015 9:34 AM
To: Mary Pitto
Subject: MRC Submits CA & RI Plans

Having trouble viewing this email? [Click here](#)

You are receiving this email because you signed up to receive MRC Program Updates, are a registered participant on mrcreporting.org or have expressed interest in becoming a collection site.

You may [unsubscribe](#) if you no longer wish to receive our emails.

MRC Program Update



July 2, 2015

[[HOME](#)] [[ABOUT](#)] [[CONTACT](#)]



In This Issue

- [MRC Submits California Mattress Recycling Plan to CalRecycle](#)
- [MRC Submits Rhode Island Mattress Recycling Plan to RIRRC](#)
- [6,000 Mattresses Recycled in Connecticut's First Month](#)
- [Save the Date for Las Vegas Market & CRRA Information Sessions](#)
- [Resources for Mattress Retailers: Registration & Customer Education](#)

MRC Submits California Mattress Recycling Plan to CalRecycle

On July 1, MRC submitted its California Mattress Recycling Plan to the California Department of Resources Recycling and Recovery (CalRecycle) for review. The plan reflects two years of planning, stakeholder outreach and discussions to develop a collection, transportation and recycling program for used mattresses in California. The program, created by a 2013 mattress recycling law, will be called Bye Bye Mattress. If approved by CalRecycle within the 90-day review period, the recycling program would begin in January 2016.

MRC also submitted to CalRecycle a three-year budget for the program which, if approved, will be funded through an \$11.00 recycling fee that is collected on the sale of each new or renovated mattress and box spring sold to California consumers and then remitted to MRC.

For more information: Read the [full announcement](#) or view the [program plan](#).

MRC Submits Rhode Island Plan to RIRRC

On July 1, MRC submitted its Rhode Island Mattress Recycling Plan to the Rhode Island Resource Recovery Corporation (RIRRC) for review. The plan reflects two years of planning, stakeholder outreach and discussions to develop a collection, transportation and recycling program for used mattresses in Rhode Island. The program, created by a 2013 mattress recycling law, will be called Bye Bye Mattress. If approved by RIRRC within the 90-day review period, the recycling program would begin in early 2016.

The proposed program will be funded through a \$10.00 recycling fee that is collected on the sale of each new or renovated mattress or box spring sold to Rhode Island consumers and then remitted to MRC.

For more information: Read the [full announcement](#) or view the [program plan](#).

Connecticut's Bye Bye Mattress Recycling Program Processes 6,000 Mattresses in May

MRC is proud to announce that in the first month of Connecticut's Bye Bye Mattress recycling program, it recycled more than 6,000 mattresses and foundations. MRC has partnered with over 60 cities, towns and other large volume mattress users to divert discarded mattresses from landfills.

Please note: If you sell mattresses in Connecticut, but have not registered with MRC, you may be prohibited from doing business in the state. You may register at mrcreporting.org.

Save the Date: Upcoming Information Sessions

Las Vegas Market

Tuesday, August 4

1:00-2:00pm PST

World Market Center, Building B - Worldview on 16

Las Vegas, Nevada

[Event Website](#)

Attendees will learn about the Bye Bye Mattress program, the proposed fee and plans for California and Rhode Island, and the progress of Connecticut's implementation. Speakers include MRC's President Ryan Trainer, MRC's Managing Director Mike O'Donnell and ISPA's Vice President of Government Affairs & Policy Chris Hudgins.

CRRA Conference & Tradeshow

Thursday, August 6

Session 19: "Implementing California's Used Mattress and Recovery Act"

10:15- 11:45am PST

Millennium Biltmore Hotel

Los Angeles, California

[Conference Website](#)

MRC's Managing Director Mike O'Donnell and Southern California Program Coordinator Mark Patti will discuss the impacts to the existing solid waste infrastructure, current challenges, and how the program plan will work with stakeholders in the months prior to implementation. MRC

will share implementation timelines along with information on how solid waste facilities, municipalities, and recyclers will be impacted by these new programs.

For Mattress Retailers: Registration & Customer Education Resources

REGISTRATION ASSISTANCE



How to Register on MRCReporting.org

This video accompanies the written registration guidelines. Walk through the registration process step-by-step.

[View the video](#)

[Read the guidelines](#)

[Program FAQs](#)

Toll-Free Support: 1-888-646-6815

Email: support@mattressrecyclingcouncil.org

Follow @MattRecyCouncil for #FAQFriday!

CUSTOMER EDUCATION

These resource are available to all our registered retailers at no cost. You are not required to use them. Contact Amanda Wall, MRC Marketing & Communications Coordinator, at awall@mattressrecyclingcouncil.org with any questions.



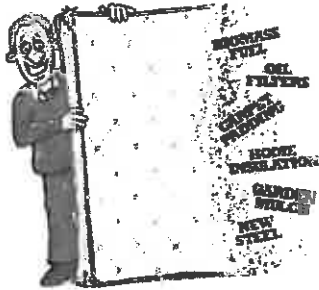
Information Card

Include this with your customer's receipt or invoice to direct them to byebyemattress.com for assistance with their fee and program related questions. We also have a recycling locator to help them find their nearest collection site or recycling facility.

The final piece is about the size of a smartphone or index card and is diecut with rounded corners. Actual size is 3.75 inches x 5 inches.

To place your **FREE** order, [register here](#) or contact awall@mattressrecyclingcouncil.org.

There are no limits to the amount of pieces or requests. This is a free resource available to every registered retailer.



**Rest easy and know
that your old mattress
is going to a better place.**

As of May 1, 2015, the state of Connecticut has implemented a mattress recycling program. A \$9 recycling fee will be collected on every mattress and box spring you purchase. It will be listed on your receipt as "recycling fee."



In-Store Posters Now Available

You are able to download and print this informational poster in three sizes.

8.5x11 inches (letter size)

11x17 inches (legal size)

24x36 inches (standard poster size)

Download the Customer Q&A

This document can be used by your store management and staff to answer questions a customer might ask about the fee or the recycling program. It's meant to be a resource that you can put behind the counter or use in staff training/manuals. [Download it here.](#)

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 launches on May 1, with California and Rhode Island expected to begin in 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.

[About MRC](#) | [Registration](#) | [MRC in Your State](#) | [Program Updates](#) | [Contact Us](#)

© 2015 Mattress Recycling Council. All Rights Reserved.

Forward this email

SafeUnsubscribe

This email was sent to mpitto@rcrcnet.org by awall@mattressrecyclingcouncil.org | [Update Profile/Email Address](#) | Rapid removal with [SafeUnsubscribe™](#) | [Privacy Policy](#).



Mattress Recycling Council | 501 Wythe Street | Alexandria | VA | 22314

ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA
DEL NORTE, EL DORADO, GLENN, IMPERIAL, INYO, LASSEN



MADERA, MARIPOSA, MODOC, MONO, NEVADA, PLUMAS,
SIERRA, SISKIYOU, TEHAMA, TRINITY, TUOLUMNE

CHAIR – MICHAEL KOBSEFF, SISKIYOU COUNTY
VICE CHAIR – MARY RAWSON, ALPINE COUNTY
EXECUTIVE DIRECTOR – GREG NORTON

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

MEMORANDUM

To: ESJPA Board of Directors

From: Larry Sweetser, ESJPA Consultant

Date: August 12, 2015

RE: ESJPA Grant Update

Used Oil Grant

The ESJPA provided assistance with the Amador County Fair which had 2,004 visitors to the County Used Oil booth. ESJPA Staff has completed work under the 4th cycle oil payment program and was awarded funding under the 6th cycle. Preparation is beginning for assistance with the Siskiyou and Mariposa County Fairs. A site visit was conducted for the Alpine County used oil center and recommendations for additional services are under development.

Tire Amnesty Grant

Amnesty events were completed under the 1st cycle grant and the ESJPA is beginning planning for the next Amnesty event cycle serving Colusa, Inyo, Mariposa, Sierra, and Tuolumne counties. The grant will cover tire amnesty events through June 30, 2017.

USDA Training Assistance Grant

The ESJPA conducted trainings in Alpine and Lassen with the remaining trainings being scheduled. Other training to be conducted include: the SWANA Manager of Landfill Operations training, and training on conducting environmental sampling for solid waste facilities. The grant term was extended through September 2015.

Monthly Public Meeting

CalRecycle

10:00 A.M., June 16, 2015
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. 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

No actions at this time

Information Items

1. Recycler Training Opportunity Schedule
Department Staff Contact: George.Donkor@CalRecycle.ca.gov
[Public Notice](#)
[Public Notice](#)

D. 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

1. Consideration of Covered Electronic Waste Program Regulations Relative to CRT Glass Disposition
Department Staff Contact: Jeff.Hunts@CalRecycle.Ca.Gov
[Public Notice](#)

Information Items

Nothing to report at this time

E. 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

No actions at this time

Information Items

Nothing to report at this time

F. GRANT AND LOAN PROGRAMS

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

Action Items

1. Eligibility and Evaluation Process for the Farm and Ranch Solid Waste Cleanup and Abatement Grant Program (Farm and Ranch Cleanup Account, Fiscal Years 2015–16 and 2016–17)

Department Staff Contact: Carla.Repucci@CalRecycle.Ca.Gov

[Public Notice](#)

Information Items

1. Awards for the Local Government Waste Tire Amnesty Grant Program (Tire Recycling Management Fund, FY 2015–16)

Department Staff Contact: Carla.Repucci@CalRecycle.Ca.Gov

[Public Notice](#)

2. Awards for the Household Hazardous Waste Grant Program (Integrated Waste Management Account, FY 2015-16)

Department Staff Contact: Matt.Fong@CalRecycle.Ca.Gov

[Public Notice](#)

3. Awards for the Local Conservation Corps Grant Program (California Beverage Container Recycling Fund, Electronic Waste Recovery and Recycling Account, California Tire Recycling Management Fund, and California Used Oil Recycling Fund, FY 2015-16)

Department Staff Contact: Derek.Link@CalRecycle.Ca.Gov

[Public Notice](#)

G. 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, Revised Solid Waste Facilities Permit, Action Needed July 3, 2015

Department Staff Contact: Virginia.Rosales@CalRecycle.ca.gov

[Public Notice](#)

2. Badlands Sanitary Landfill – Riverside County, Revised Solid Waste Facilities Permit, Action Needed July 3, 2015
Department Staff Contact: Megan.Emslander@Calrecycle.ca.gov
[Public Notice](#)
3. Lamb Canyon Sanitary Landfill - Riverside County, Revised Solid Waste Facilities Permit, Action Needed July 4, 2015
Department Staff Contact: Megan.Emslander@Calrecycle.ca.gov
[Public Notice](#)
4. Tehama County/City of Red Bluff Landfill Materials Recovery Facility - Tehama County, Revised Solid Waste Facility Permit, Action Needed July 7, 2015
Department Staff Contact: Reinhard.Hohlwein@CalRecycle.ca.gov
[Public Notice](#)
5. McKittrick Waste Treatment Site - Kern County, Revised Solid Waste Facility Permit, Action Needed July 19, 2015
Department Staff Contact: Christine.Karl@CalRecycle.ca.gov
[Public Notice](#)
6. Tehachapi Landfill – Kern County, Revised Solid Waste Facilities Permit, Action Needed July 20, 2015
Department Staff Contact: Christine.Karl@CalRecycle.ca.gov
[Public Notice](#)
7. Pena's Disposal, Inc. Transfer Station and Recovery Facility – Tulare County, Revised Solid Waste Facility Permit, Action Needed July 20, 2015
Department Staff Contact: Joy.Isaacson@CalRecycle.ca.gov
[Public Notice](#)
8. South Valley Organics Composting Facility- Santa Clara County, Revised Solid Waste Facility Permit, Action Needed July 20, 2015
Department Staff Contact: Eric.Kiruja@CalRecycle.ca.gov
[Public Notice](#)
9. Pomona Valley Transfer Station - Los Angeles County, New Solid Waste Facility Permit, Action Needed July 25, 2015
Department Staff Contact: Shannon.Hill@CalRecycle.ca.gov
[Public Notice](#)
10. Golden By-Products – Merced County, Major Waste Tire Facility Permit, Action Needed September 20, 2015
Department Staff Contact: Margaret.Comotto@CalRecycle.ca.gov
[Public Notice](#)
11. Waste Recovery West, Inc. – San Joaquin County, Major Waste Tire Facility Permit, Action Needed November 4, 2015
Department Staff Contact: Christine.Karl@CalRecycle.ca.gov
[Public Notice](#)

Information Items

Nothing to report at this time

H. 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 Items

No actions at this time

Information Items

1. CalRecycle Packaging Workshop: Manufacturers' Challenge

Please Note: New Time and Date

September 16, 2015 9:00AM – 4:00PM

Department Staff Contact: Cynthia.Dunn@CalRecycle.Ca.Gov

[Public Notice](#)

Information Items

Nothing to report at this time

I. 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

No actions at this time

Information Items

12. California Statewide Per Capita Disposal, Diversion, and Recycling Rates for Calendar Year 2014

Department Staff Contact: Mark.Umfress@CalRecycle.ca.gov

J. 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

No actions 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 departmental 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/>.

Monthly Public Meeting

CalRecycle

10:00 A.M., July 21, 2015
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. DATA REPORTS AND PRESENTATIONS

Presentations by department staff on studies, research, or reports of program and policy interest.

Action Items

No actions at this time

Information Items

1. Status of Quarterly Disposal Report Submittals for the First Quarter of 2015 and the status of submittals for the 2014 Annual Facility Methods Summary Reports.
Department Staff Contact: Peter.Staklis@Calrecycle.ca.gov
2. Recovered Materials Exported from California Ports in 2014
Department Staff Contact: Larry.Stephens@CalRecycle.ca.gov

D. 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

No actions at this time

Information Items

1. Recycling Program Certification & Registration Report
Quarterly Report on Branch workload metrics and key data.
Department Staff Contact: George.Donkor@CalRecycle.ca.gov
2. Recycling Program Enforcement Report
Quarterly Report on the Branch activities, including Probationary Reviews, Inspections, Investigations completed, and accusations filed. Updates will also be provided on Department of Justice/Office of the Attorney General interagency activities.
Department Staff Contact: John.Halligan@CalRecycle.ca.gov

3. Recycling Program Operations Report
Quarterly Report on the Branch activities will include a summary of Rate Determination Studies statistics, Market Information and Statistics and Update on Plastic Market Development Program for 2014.
Department Staff Contact: Mike.Miller@CalRecycle.ca.gov

E. 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

No actions at this time

Information Items

Nothing to report at this time

F. 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

1. Revision of CalRecycle's Policy Document "Countywide Integrated Waste Management Plan (CIWMP) Enforcement Policy Part II
Department Staff Contact: Cara.Morgan@Calrecycle.ca.gov
[Public Notice](#)

Information Items

1. Applications to Renew the Recycling Market Development Zone (RMDZ) Designation for the Following: Chico/Northern Butte RMDZ; Fresno County RMDZ; High Desert RMDZ; and Madera County RMDZ
Department Staff Contact: Mitch.Delmage@Calrecycle.ca.gov
[Public Notice](#)
2. Five-Year Review Report For The Countywide Integrated Waste Management Plan For The County Of Madera
Department Staff Contact: Paul.Brainin@Calrecycle.ca.gov
[Public Notice](#)

G. GRANT AND LOAN PROGRAMS

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

Action Items

1. Criteria and Evaluation Process for the Tire-Derived Product Grant Program (Tire Recycling Management Fund, FY 2015-16 and 2016-17)
Department Staff Contact: Noel.Davis@Calrecycle.ca.gov
[Public Notice](#)
2. Criteria and Evaluation Process for the Local Government Waste Tire Enforcement Grant Program (Tire Recycling Management Fund, FY 2015-16 and 2016-17)
Department Staff Contact: Phanessa.Fong@Calrecycle.ca.gov
[Public Notice](#)

Information Items

1. Awards for the Tire Incentive Program (California Tire Recycling Management Fund, FY 2014–15)
Department Staff Contact: Melissa.Sanford@Calrecycle.ca.gov
[Public Notice](#)
2. Awards for the Used Oil Competitive Grant Program (Used Oil Recycling Fund, FY 2015–16)
Department Staff Contact: Ashraf.Batavia@Calrecycle.ca.gov
[Public Notice](#)
3. Awards for the Local Enforcement Agency Grant Program (Integrated Waste Management Account, FY 2015–16)
Department Staff Contact: MaryKay.Shafer@CalRecycle.ca.gov
[Public Notice](#)

H. 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. Pomona Valley Transfer Station - Los Angeles County, New Solid Waste Facility Permit, Action Needed July 25, 2015
Department Staff Contact: Shannon.Hill@CalRecycle.ca.gov
[Public Notice](#)
2. Sycamore Landfill – City of San Diego, Revised Solid Waste Facilities Permit, Action Needed August 3, 2015
Department Staff Contact: Virginia.Rosales@CalRecycle.ca.gov
[Public Notice](#)
3. South Valley Organics Composting Facility- Santa Clara County, Revised Solid Waste Facility Permit, Action Needed August 21, 2015
Department Staff Contact: Eric.Kiruja@CalRecycle.ca.gov
[Public Notice](#)
4. McKittrick Waste Treatment Site - Kern County, Revised Solid Waste Facility Permit, Action Needed September 4, 2015
Department Staff Contact: Christine.Karl@CalRecycle.ca.gov
[Public Notice](#)
5. Golden By-Products – Merced County, Major Waste Tire Facility Permit, Action Needed September 20, 2015
Department Staff Contact: Margaret.Comotto@CalRecycle.ca.gov
[Public Notice](#)
6. Waste Recovery West, Inc. - San Joaquin County, Major Waste Tire Facility Permit, Action Needed November 4, 2015
Department Staff Contact: Christine.Karl@CalRecycle.ca.gov
[Public Notice](#)

Information Items

1. Waste Tire Enforcement Report
Department Staff Contact: Bill.Albert@CalRecycle.ca.gov
2. Approval of the Pottery Canyon Park Disposal Site Remediation Under the Solid Waste Disposal and Codisposal Site Cleanup Program (Solid Waste Disposal Trust Fund, FY 2014/2015)
Department Staff Contact: Mustafe.Botan@CalRecycle.ca.gov
[Public Notice](#)
3. Approval of Scope of Work and Authority to Solicit for SOQ for Cleanup Program Engineering Services Contract and Two Remediation Services Contracts
Department Staff Contact: Robert.Healy@CalRecycle.ca.gov
[Public Notice](#)
4. Approval of the Point Mugu State Park Ranch Center Disposal Site Cleanup, Solid Waste Disposal and Codisposal Site Cleanup Program (Solid Waste Disposal Trust Fund, FY 2014/2015)
Department Staff Contact: Mustafa.Botan@CalRecycle.ca.gov
[Public Notice](#)
5. Awards for the Solid Waste Disposal and Codisposal Site Cleanup Program Grants (Solid Waste Trust Fund, FY 2014/2015)
Department Staff Contact: Alan.Zamboanga@CalRecycle.ca.gov
[Public Notice](#)

I. 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 Items

No actions at this time

Information Items

1. CalRecycle Packaging Workshop: Manufacturers' Challenge
Please Note: New Time and Date
November 18, 2015 9:00AM – 4:00PM
Department Staff Contact: Cynthia.Dunn@CalRecycle.ca.gov
[Public Notice](#)

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

No actions 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

No actions at this time

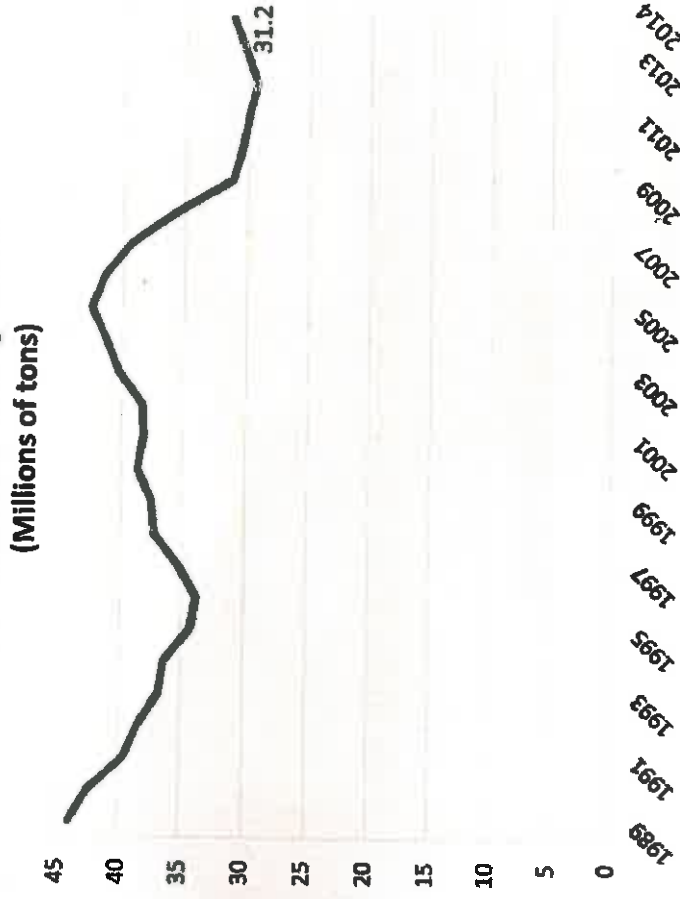
Information Items

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/>.



Statewide Disposal



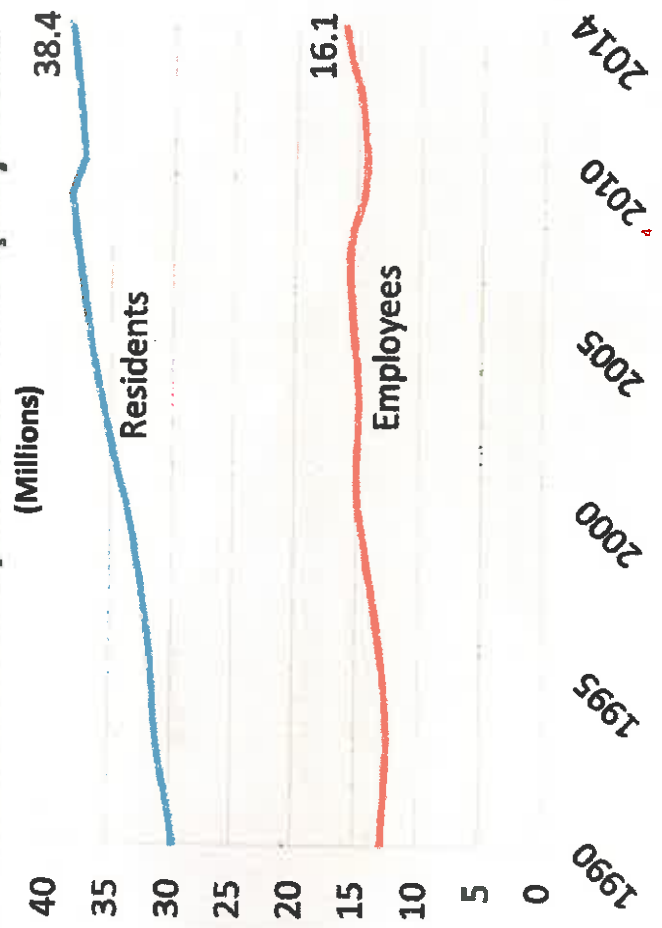
Per Capita Disposal

The official metric for jurisdiction numerical compliance with the 50% mandate.

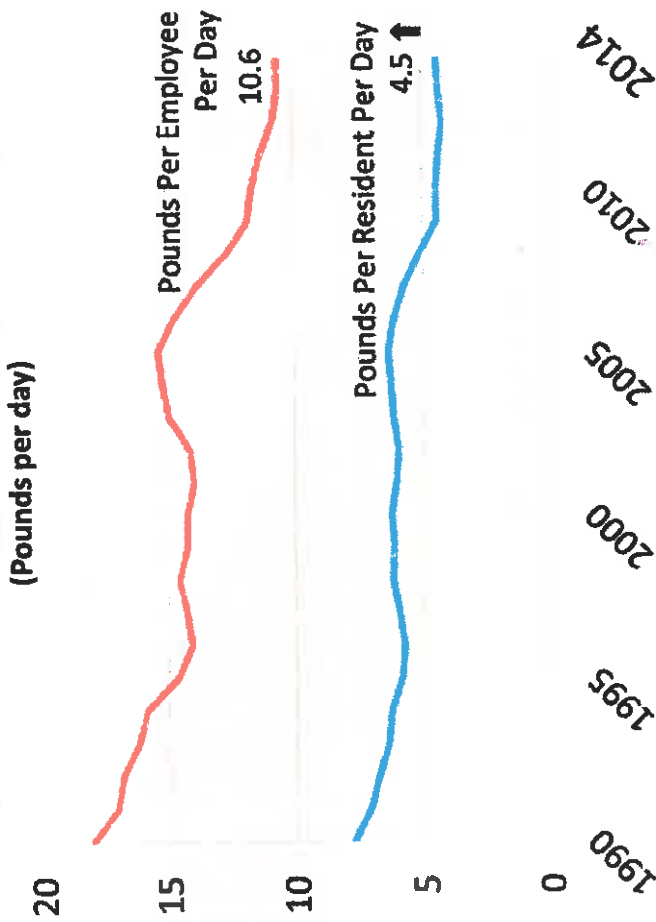
Mandate: Assembly Bill 939 (1989)

Method: Senate Bill 1016 (2008)

Statewide Population & Employment



Statewide Average Per Capita Disposal

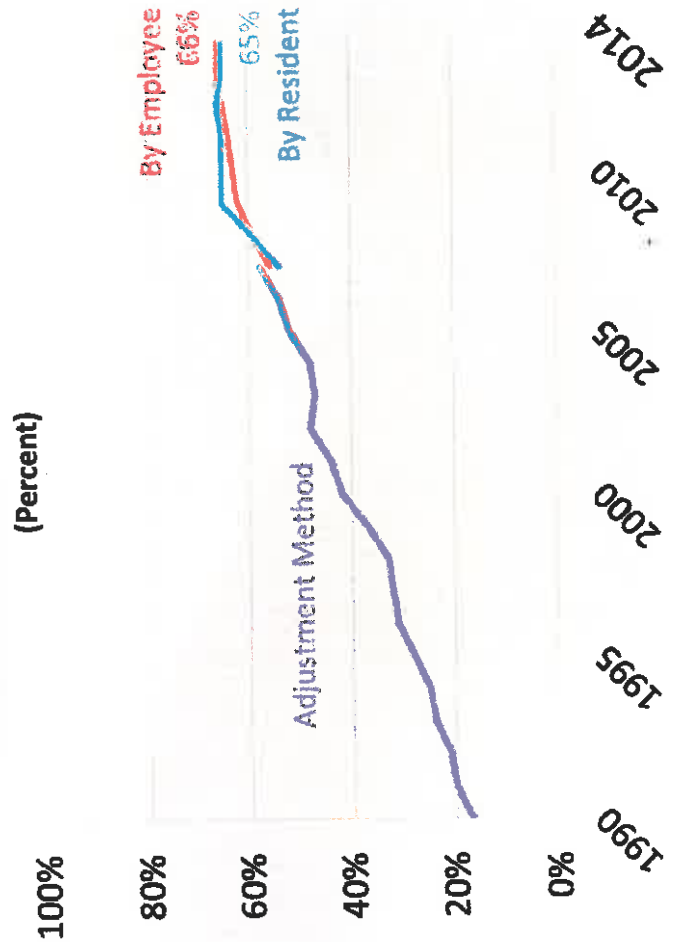


Diversion Rate

The original metric for jurisdiction numerical compliance with the 50% mandate.

Mandate: Assembly Bill 939 (1989)
Method: Assembly Bill 2494 (1992)

Statewide Diversion Rates

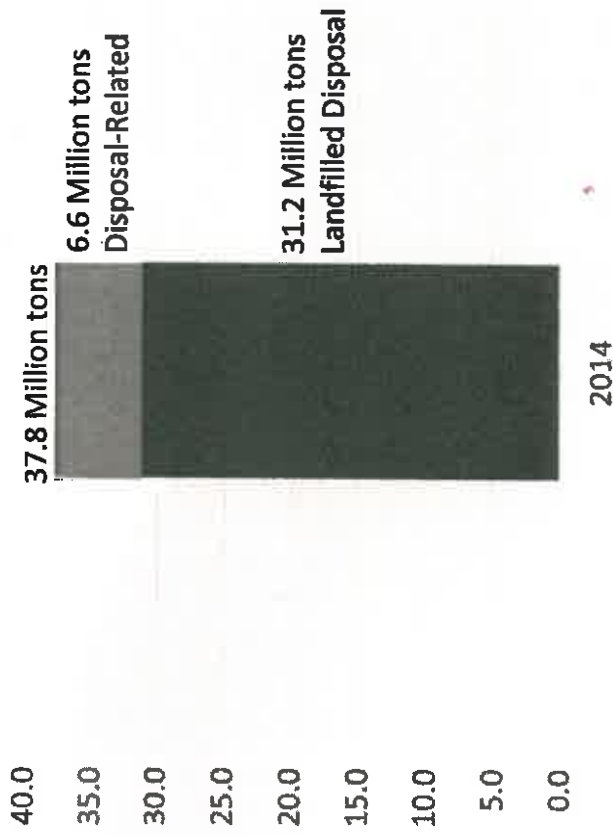


Recycling Rate

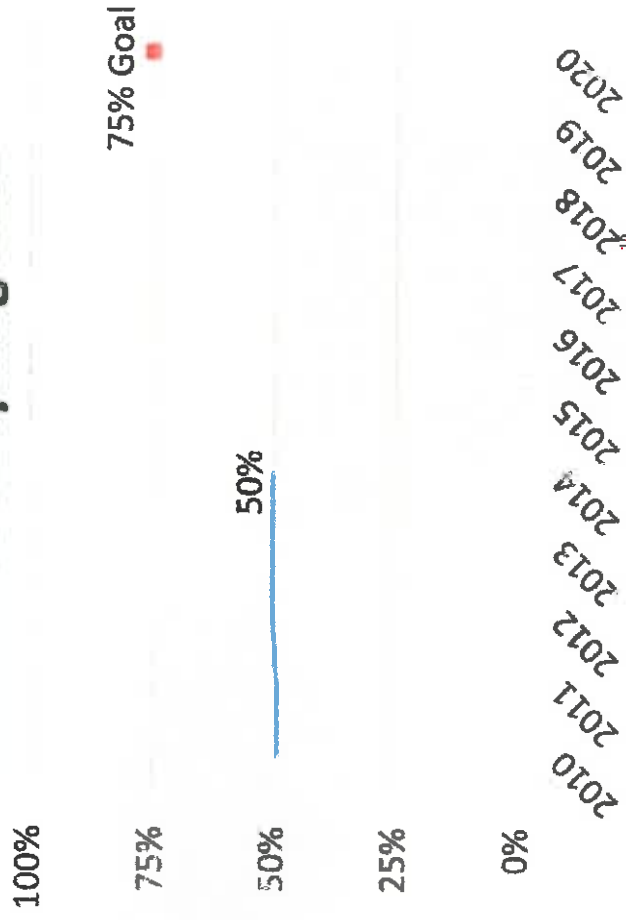
75% Statewide Recycling Goal by 2020.

Assembly Bill 341 (2011)

Statewide Disposal (Millions of tons)



Statewide Recycling Rate



2014 Statewide Progress

Per Capita Disposal

- 4.5 lbs/resident/day
- 10.6 lbs/employee/day

Diversion Rate Equivalent

- 65% (Resident)
- 66% (Employee)

Recycling Rate

- 50%

2014 Statewide Progress

More information is available at:

<http://www.calrecycle.ca.gov/lgcentral/goalmeasures/disposalrate/MostRecent/default.htm>

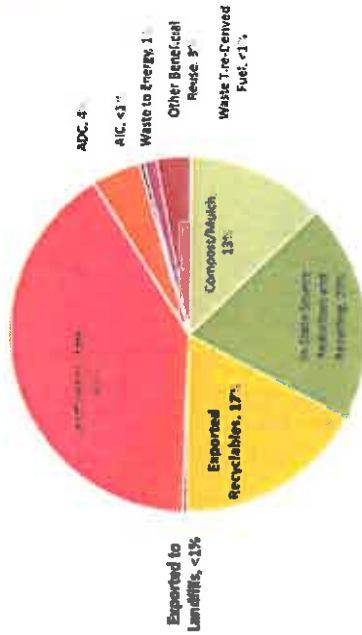
2014 California Exports of Recyclable Materials

California Recyclable Exports

- All Seaborne exports of recyclable materials from California ports
- Amounts, values, destinations, and trends
- Data from Wisser LLC and their WISERTrade database

CalRecycle Public Meeting
 July 21, 2015
 Sher Auditorium
 10:00-1:00

Exported Waste and Recyclables 2013 State of Recycling and Disposal in California



Presentation Summary

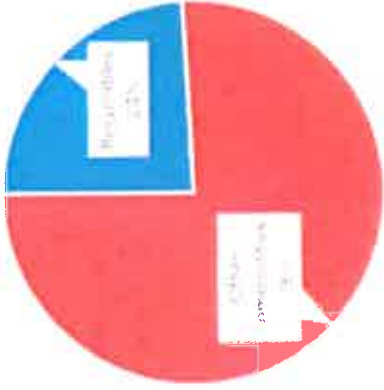
- 2014 overview
- National comparison
- Individual materials
- 1st four months of 2015
- Conclusions

74 million tons of generated waste – AB 341

2014 Overview

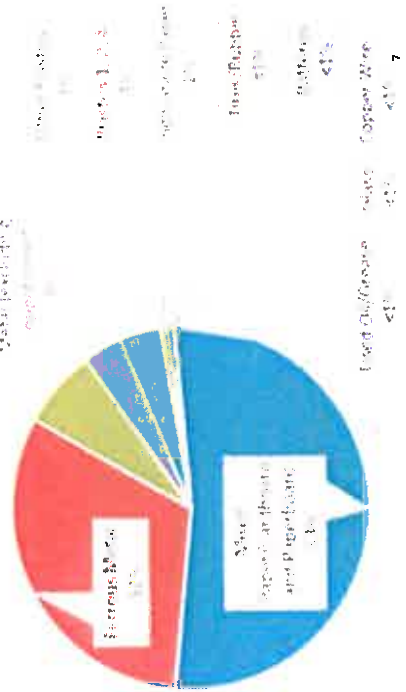


2014 CA Seaborne Exports ~74.6 Million Tons



5

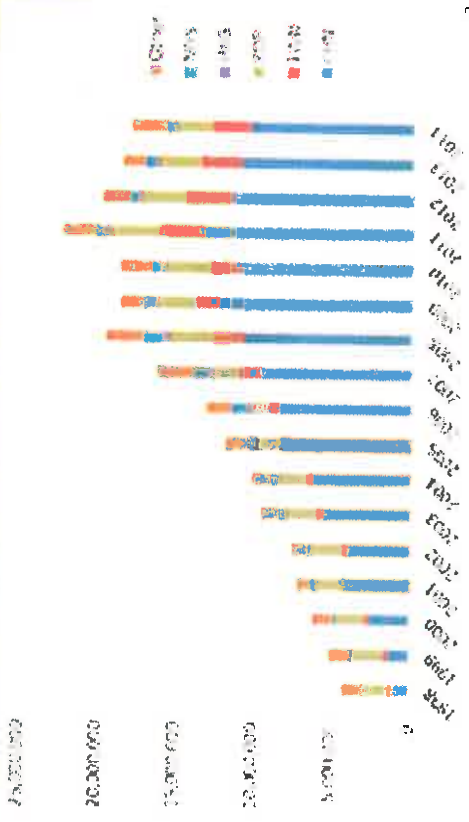
CA Recyclable Exports ~18 Million Tons



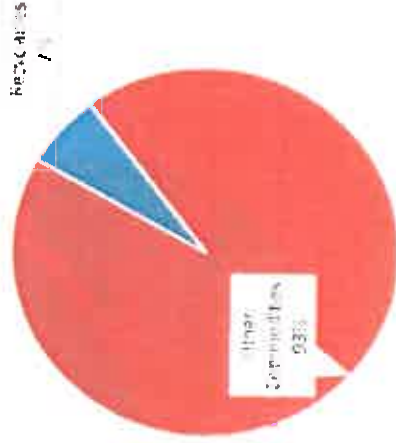
CA Recyclable Exports by Destination ~18 Million Tons



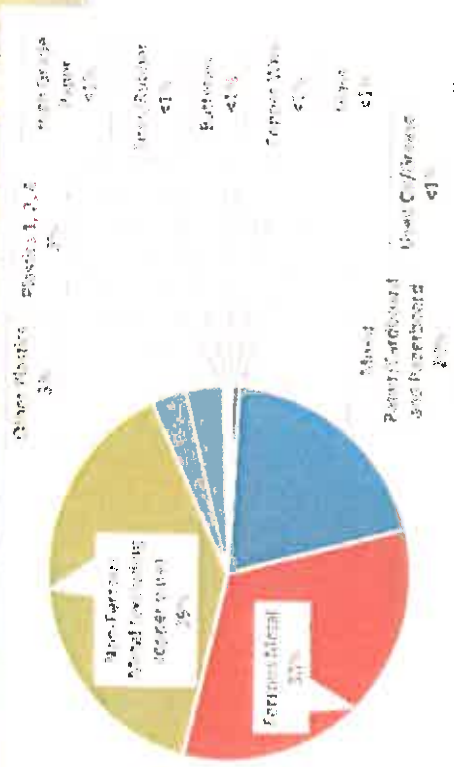
2014 CA Recyclable Exports by Destination in Tons



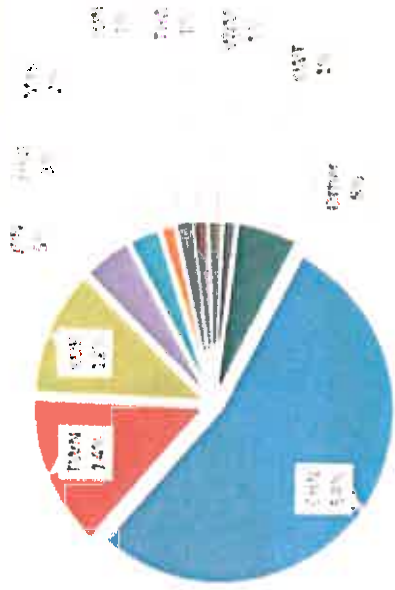
CA Seaborne Exports ~\$105 Billion Vessel Value



CA Recyclable Exports ~\$6.9 Billion Vessel Value



2014 CA Recyclable Exports by Destination ~\$6.9 Billion



2014 CA Recyclable Exports by Destination in Vessel Value



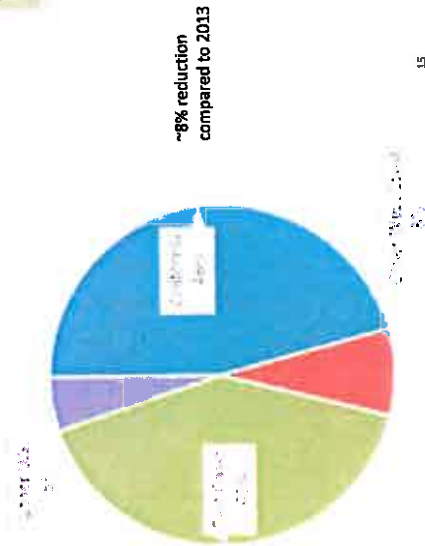
13

National Comparison



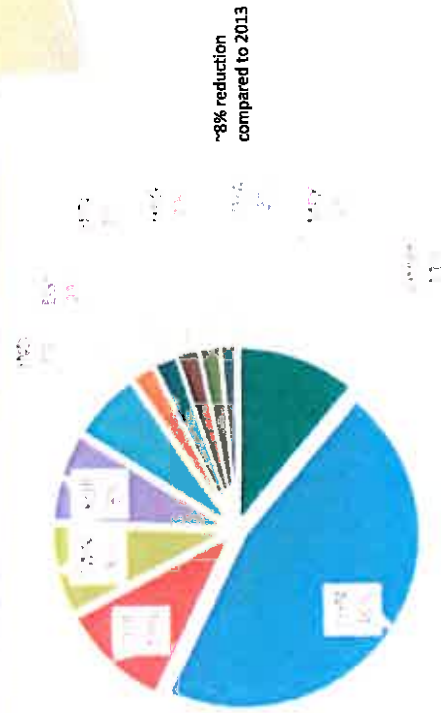
14

National Comparison U.S. Seaborne Recyclable Exports 39.4 Million Tons



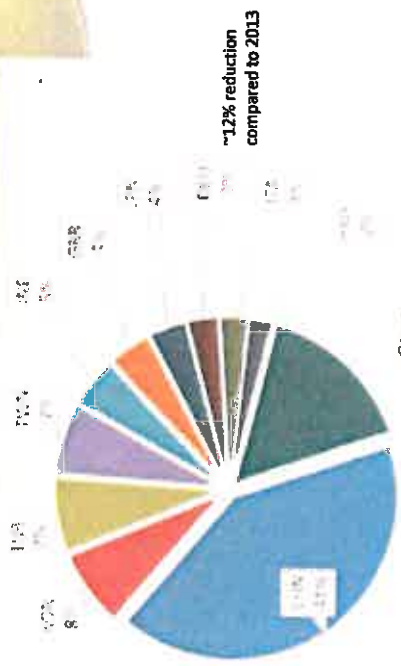
15

U.S. Seaborne Recyclable Exports 39.4 Million Tons



16

U.S. Seaborne Recyclable Exports \$17.2 Billion

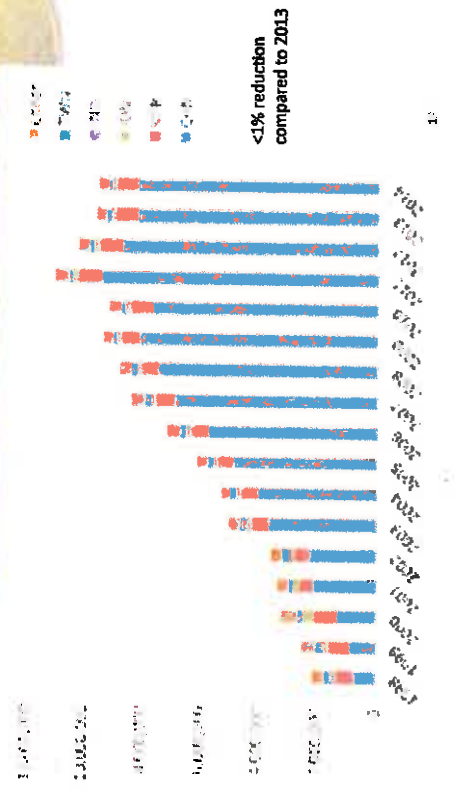


~12% reduction compared to 2013

Individual Recyclable Commodities from California Ports

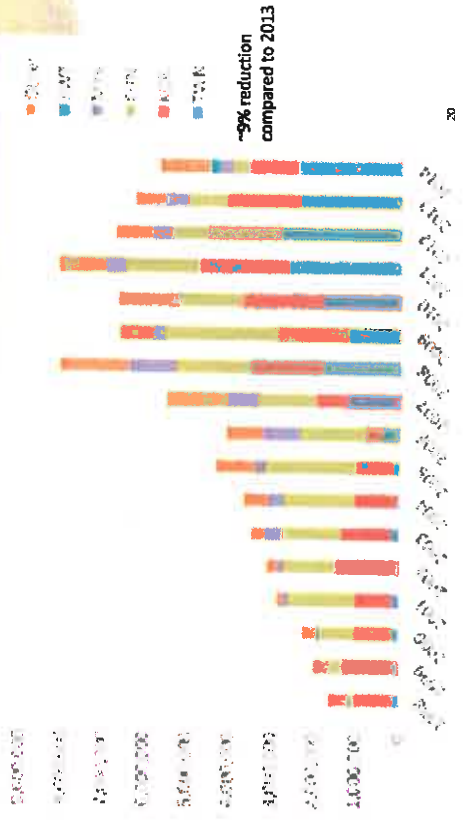


CA Mixed Paper Exports by Country ~ 9.5 Million Tons



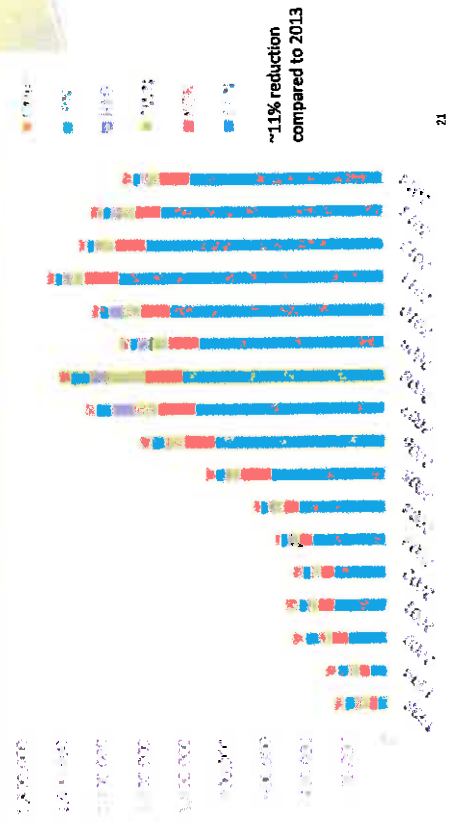
<1% reduction compared to 2013

California Ferrous Metal Exports ~ 5.7 Million Tons



~9% reduction compared to 2013

California Non-Ferrous Metal Exports ~1.3 Million Tons



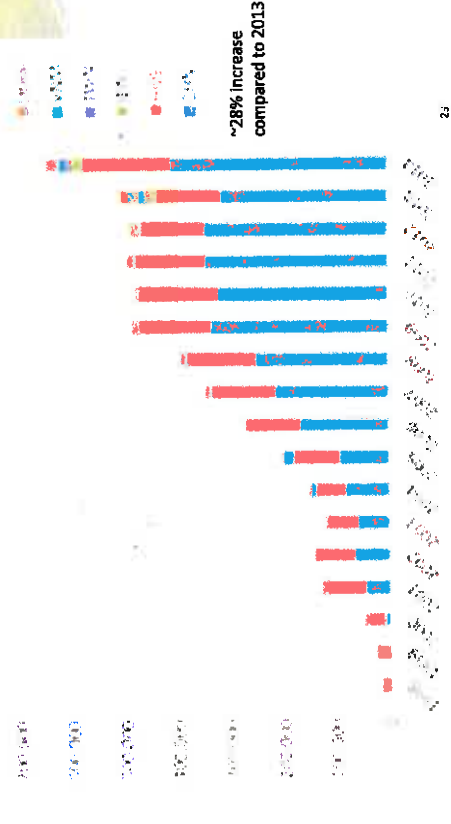
21

California Aluminum Can Exports ~850 Tons



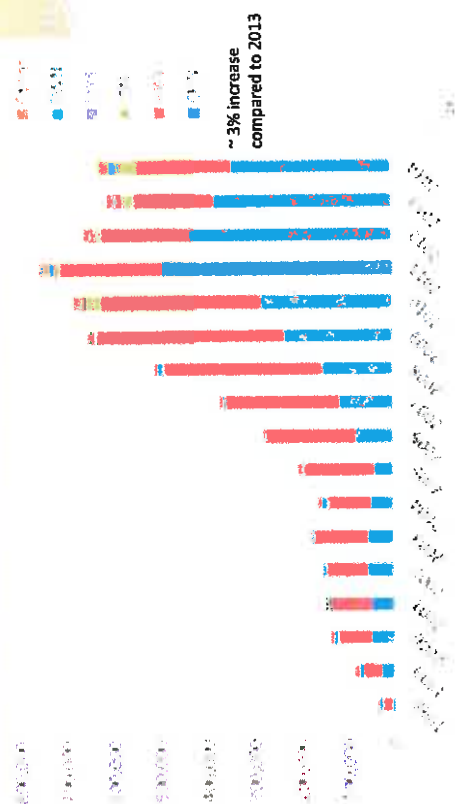
22

California Plastics 1,2,4 Exports ~645,000 Tons



23

California Other Plastics Exports ~624,000 Tons



24

Truck, Rail, and Air Shipments

- Limited information on recyclables shipped by truck and rail are available. We have access only to \$ values .
- Truck, Rail, and Air recyclable exports from California was at least \$72 million.
- Mexico, Japan, and Germany were largest partner countries.
- \$70 million were exported to these three countries.
- \$2 million was shipped to other countries around world.

25

First four months of 2015 California Recyclable Exports (compared to the first four months of 2014)

- Exports down over 6%
- Plastics exports down about 5 %
- Metal exports down approximately 16%

26

Summary

- Recyclables made up 24% of all seaborne exports from CA ports
- 18 million tons of recyclables exported
- Vessel value of recyclable materials nearly \$7 billion
- CA recyclable exports by weight down over 3% in 2014
- China is still the largest recipient of recyclables from CA ports.
- Truck, Rail, and Air recyclable exports from California was at least \$72 million. This amount is not included in the \$7 billion vessel value.

27

Conclusions

- Since the peak of 2011, California exports by sea saw a decrease of 4 million tons and a decrease of \$3 billion
- Decline of exports may cause more material to stockpile improperly or be disposed in our landfills.
- How will we reach the 75 percent recycling goal if markets continue to decline for recyclables?

28

Conclusions

- Infrastructure
 - if export markets crash, would the amount of in-state processing be adequate.
- Data quality
 - We have good vessel weight and value information, but we
- - ansshipped from other states.
- Overall, exports are down, and need to monitor to see impact on markets.

20

Future Reports

- California's contribution
- Rail and truck exports
- End uses of exported materials

30

Questions?

Larry Stephens
Policy Office-Knowledge Integration section
(916) 341-6241

31

Country Codes

Acronym	Country	Acronym	Country
CHN	China	PER	Peru
TWN	Taiwan	SLV	El Salvador
KOR	Korea, Republic of	MEX	Mexico
MYS	Malaysia	SGP	Singapore
VNM	Vietnam	PHL	Philippines
HKG	Hong Kong	GBR	United Kingdom
IDN	Indonesia	TUR	Turkey
THA	Thailand	EGY	Egypt
JPN	Japan	ITA	Italy
IND	India	DEU	Germany
PAK	Pakistan		

32

Monthly Public Meeting

CalRecycle

10:00 A.M., August 18, 2015
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. 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

No actions at this time

Information Items

D. 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

1. Regulations for Assessing Civil Liabilities Under the Electronic Waste Recycling Act
Department Staff Contact: Ana-Maria.Stoian-Chu@CalRecycle.Ca.Gov
[Public Notice](#)

Information Items

Nothing to report at this time

E. 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

No actions at this time

Information Items

1. Five-Year Review Report For The Countywide Integrated Waste Management Plan For The County Of Alameda
Department Staff Contact: Erica.Jue@Calrecycle.Ca.Gov
[Public Notice](#)

F. GRANT AND LOAN PROGRAMS

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

Action Items

No actions at this time

Information Items

Nothing to report at this time

G. 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. Cold Canyon Landfill, Inc. – San Luis Obispo County, Revised Solid Waste Facility Permit, Action Needed September 14, 2015
Department Staff Contact: Patrick.Snider@CalRecycle.ca.gov
[Public Notice](#)
2. L&D Landfill – Sacramento County, Revised Solid Waste Facility Permit, Action Needed September 14, 2015
Department Staff Contact: Nicholas.Oliver@CalRecycle.ca.gov
[Public Notice](#)
3. Walker Landfill – Mono County, Modified Solid Waste Facility Permit, Action Needed September 15, 2015
Department Staff Contact: Christine.Karl@CalRecycle.ca.gov
[Public Notice](#)
4. Golden By-Products – Merced County, Major Waste Tire Facility Permit, Action Needed September 20, 2015
Department Staff Contact: Margaret.Comotto@CalRecycle.ca.gov
[Public Notice](#)
5. Waste Recovery West, Inc. - San Joaquin County, Major Waste Tire Facility Permit, Action Needed November 4, 2015
Department Staff Contact: Christine.Karl@CalRecycle.ca.gov
[Public Notice](#)
6. Southeast Resource Recovery Facility – Los Angeles County, Modified Solid Waste Facilities Permit, Action Needed September 29, 2015
Department Staff Contact: Shannon.Hill@CalRecycle.ca.gov
[Public Notice](#)

Information Items

1. Award of a Solid Waste Disposal and Codisposal Site Cleanup Program Grant (Solid Waste Disposal Trust Fund, FY 2014-2015)
Department Staff Contact: Mustafe.Botan@CalRecycle.ca.gov
2. Approval of Tijuana River Action Month Volunteer Cleanup Projects Support (Tire Fund, FY 2014-2015)
Department Staff Contact: Robert.Healy@CalRecycle.ca.gov

H. 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 Items

1. Adoption of a Negative Declaration (SCH# 2015062080) for the Compostable Materials, Transfer/Processing Regulations
Department Staff Contact: Ken.Decio@CalRecycle.ca.gov
Public Notice
2. Adoption of the Proposed Compostable Materials, Transfer/Processing Regulations
Department Staff Contact: Ken.Decio@CalRecycle.ca.gov
Public Notice

Information Items

1. CalRecycle Packaging Workshop: Manufacturers' Challenge
Please Note: New Time and Date
November 18, 2015 9:00AM – 4:00PM
Department Staff Contact: Cynthia.Dunn@CalRecycle.Ca.Gov
[Public Notice](#)

I. 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 agendaized specific to program area unless otherwise noted here.

Action Items

No actions at this time

Information Items

Nothing to report at this time

J. 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) 015-001 for the City of Maywood
Department Staff Contact: Trevor.O'Shaughnessy@CalRecycle.ca.gov
Public Notice to Follow

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/>.



Recycling Resource Center

As California residents and businesses recycle more, local governments are looking to build additional recycling infrastructure projects and expand existing programs. This resource center includes resources, webinars and case examples to help local governments do just that – finance and site recycling projects and programs in their communities. The commercial recycling section includes resources to help local officials increase commercial recycling in their communities.

Funding & Financing

As California residents and businesses are recycling more, due to a combination of customer education, environmental awareness, local and state mandates and pricing incentives, local governments face challenges in identifying ways to finance and fund recycling projects and programs. The resources and case stories included here outline some of the innovative ways that local governments are financing recycling infrastructure and funding recycling programs across the state.

[More](#)

Planning & Siting

Understanding how to site recycling, processing and manufacturing facilities can help cities and counties get the full benefit of the economic development and greenhouse gas reductions they produce. In order to plan for and site recycling facilities, local governments must obtain the proper permits and comply with the California Environmental Quality Act among other requirements. This section provides resources and case stories to help local governments navigate this complex process.

[More](#)

Commercial Recycling

This section includes a sample commercial recycling ordinance, a sample outreach and education flyer, examples of local commercial recycling programs, links to past webinars and other resources to help local officials increase commercial recycling in their communities.

[More](#)

Program News

1st Edition 2015

Upcoming HHWIEs

Northern California
Tehama County – Red Bluff
Wednesday, June 17th

Contact:
Paul Freund
pfreund@co.tehama.ca.us

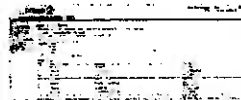
Southern California
City of Thousand Oaks
Thursday, June 25th

Contact:
Leigh Walker
walker@toaks.org



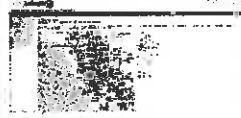
Did You Know...

Revised Certified Collection Center Site Visit Checklist (CalRecycle 644) is now available. Recipients can use this checklist for site visits at single and/or multiple sites.



Did You Know...

There is an interactive GIS used oil map that details both active and inactive Used Oil Certified Collection Centers throughout California.



Did You Know...

There is a Check Your Number app available for Apple products. Go to the App Store and search for Check Your Number.



Farm and Ranch Grant Program (FY 2015/16)

Application materials for FY 2015/16 grant will be available June 2015. Applications for the first cycle are due July 28, 2015.

For more information contact Carla Repucci.

Used Oil/HHW Conference Awardees



Back Row, Left to Right: Josh Simpson (Kamps Propane), Israel Schochet (Flame King), Paul Freund (Tehama County), David Wyatt (Central Contra Costa Sanitary District), Ben Lucha (Palmdale)

Front Row, Left to Right: Traci Goularte (Elk Grove), Cedar Kehoe (Elk Grove), Vickie Yoshikawa (Norwalk), Lyn Beurmann (Kern County)

Used Oil/HHW Conference 2015

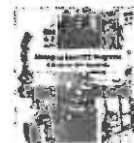


On behalf of CalRecycle and the conference sponsors, we would like to thank all the conference attendees. This year's conference was a great success with over 250 attendees participating. The next Used Oil/HHW Conference will be in Northern California, Summer/Fall 2016. Stay tuned!

Certified Collection Centers (CCC) Service Contract



The CCC Service contractor, C2 Alternative Services (C2) has developed two new training guides: "Managing Local CCC Programs" and "Certified Collection Center Operators Guide." Both are available at CalRecycle's Publications webpage. C2 Alternative Services is now training jurisdictions on CCC management locally on site. If you are interested in participating in the free training, or would like hard copies (in a binder) of the free training guides, contact Barbara Baker.



Household Hazardous Waste (HHW) Grant

HHW Cycle 24 (FY 2015/16) grant agreements will be distributed for signature as soon as the FY 2015/16 State Budget is signed. Since Cycle 24 was undersubscribed, the remaining eligible Cycle 23 applicants will be awarded.

Used Oil Competitive (UOC)

UOC Cycle 2 received 19 applications requesting \$2.61 million. The grant awards will be announced at CalRecycle's July 21, 2015 public meeting.

Used Oil Certified Collection Center Program

The phone line for the Used Oil CCC Unit, (916) 341-6690, has been upgraded. Press 1 for Certifications staff, Press 2 for Incentive Claims and Payments, and/or Press 3 for assistance in Spanish.



Current Funding Opportunities

Oil Payment Program (OPP) Cycle 6 (FY 2015/16)

The Local Government Oil Payment Program (LoGOPP) application system for Cycle 6 is now open to accept applications. The deadline is **June 30, 2015** and secondary documents are due July 30, 2015. For more information, see the NOFA page or contact your Program Advisor.

**Unified Program Newsletter
June 2015**

IN THIS ISSUE:

- CalEPA** Recently Posted FAQs and Help Guidance on CERS Central
REMINDER: Annual Single Fee Summary Report (Report 2) must be submitted to CalEPA by September 30, 2015
REMINDER: Compliance Monitoring and Enforcement (CME) Data must be entered into CERS
- DTSC** After-Hour Temporary ID Numbers Issued By DTSC Emergency Response Duty Officers
- SWRCB** None
- Cal OES** None
- CAL- FIRE** Farms and the Federal Water Resources Reform and Development Act
OSFM How to File a Complaint Against an Engineer
-

CalEPA

Recently Posted FAQs and Help Guidance on CERS Central

Listed below are the most recent FAQs and Help Guidance documents that have been posted to the CERS Regulator Portal (<https://cersregulator.calepa.ca.gov/Help>):

General Information

- How to Report Multi-Day Inspections (5/12/15)
(How should inspections that take more than one day to complete be reported in CERS?)
- Citations for Failure to Report UP Required Information (5/18/15)
(What code citations should use to site for failure to electronically report required Unified Program information?)

Submittals

- Can a Submittal Relate to Construction Permitting (3/2/15)
(Can a CERS submittal be required as part of the new construction or tenant improvement project permitting process?)

Underground Storage Tanks (USTs)

- When to Issue a UST Operating Permit (Updated 4/13/15)
(Can a UPA issue UST operating permit if the facility has not submitting electronically to CERS or a local portal? What if the facility has submitted but the UPA does not accept the submittal?)

REMINDER: Annual Single Fee Summary Report (Report 2) must be submitted to CalEPA by September 30, 2015

Per California Code of Regulations, Title 27, Division 1, Subdivision 4, §15290(a), the Annual Single Fee Summary Report (Report 2) for the previous fiscal year must be submitted to CalEPA no later than September 30, 2015. Report 2 includes: the amount of the single fee billed and collected; the

amount of any funds due to Participating Agencies and the amount transmitted; the amount of surcharge billed, waived and collected for each program (including the surcharge for the Aboveground Petroleum Storage Act Tank Program); and a count of total regulated businesses, Underground Storage Tank (UST) facilities, USTs, onsite hazardous waste treatment facilities (including Permit By Rule, Conditionally Authorized and Exempt), California Accidental Release Prevention (CalARP) Program stationary sources and waivers granted, businesses subject to the CalARP Program and the total Aboveground Storage Tank regulated facilities.

Information contained within Report 2 is essential to adequately assess the implementation and fee accountability of the Unified Program for each Certified Unified Program Agency as well as to convey the statewide success and accomplishments of California's Unified Program to the United States Environmental Protection Agency, California legislature and other interested persons.

A MS Word template for Report 2 is available on the CalEPA website at: <http://www.calepa.ca.gov/CUPA/Publications> under the heading "Required Summary Reporting Forms and Instructions for 'CUPA-to-State' Reporting."

Please remit Report 2 for Fiscal Year 2014-2015 to CalEPA by September 30, 2014 via:

Mail:
The Unified Program
California Environmental Protection Agency
P.O. Box 2815
Sacramento, CA 95812

OR

Email:
cupa@calepa.ca.gov
Subject: Report 2- Fiscal Year 14-15

REMINDER: Compliance Monitoring and Enforcement (CME) Data must be entered into CERS
Starting fiscal year 2014/2015, CME data must be submitted electronically within 30 days of each completed quarter [CCR Title 27, Division 1, Subdivision 4, Section 15290(b)]. Submittal deadlines are listed below:

Fiscal Year Quarterly CME Action Occurs (including updates)	Deadline for Electronic Submittal Of Quarterly CME Data
July 1 – September 30	October 30
October 1 – December 31	January 30
January 1 – March 31	April 30
April 1 – June 30	July 30

As of August 1, 2014, CUPAs are evaluated on quarterly CME electronic reporting requirements for inspection and enforcement activities occurring on or after July 1, 2013.

All CME data must include the complete detail record fields identified in the CERS Regulator Portal (<http://cers.calepa.ca.gov/>) and defined in the Unified Program Data Dictionary (www.calepa.ca.gov/LawsRegs/Regulations/T27/DataDict.pdf).

For more information, please refer to Unified Program Guidance Letter 14-02 (<http://www.calepa.ca.gov/CUPA/Bulletins/2014/Jan17.pdf>).

Department of Toxic Substances Control

After-Hour Temporary ID Numbers Issued By DTSC Emergency Response Duty Officers
DTSC Emergency Response Duty Officers (ERDOs) take telephone calls for temporary ID numbers after hours in response to hazardous waste emergencies or spills, etc. U.S. EPA has the same procedures. Sometimes the call goes to U.S. EPA (Washington DC or San Francisco) or California

Office of Emergency Services and based on the waste and scenario the caller is instructed to call California's after-hours number. California's (OES) number is (800) 852-7550 and will be routed to DTSC. U.S. EPA's after-hours number is (415) 947-4400.
<http://www.dtsc.ca.gov/IDManifest/EMERHWID.cfm>

DTSC ERDOs issue the temporary ID numbers from a list of ID numbers provided by the DTSC Generator Information Services Section (GISS). The temporary ID number is then entered into Hazardous Waste Tracking System (HWTS).

Additional Hazardous Waste ID Frequently Asked Questions can be found at:
<http://www.dtsc.ca.gov/IDManifest/IDNUMFAQ.cfm>

CAL FIRE - Office of State Fire Marshal

Farms and the Federal Water Resources Reform and Development Act

The United States Environmental Protection Agency (U.S. EPA) has published a fact sheet explaining the impacts of the Water Resources Reform and Development Act (WRRDA) on the Spill Prevention, Control, and Countermeasure (SPCC) rule and farms. WRRDA was signed into law by the President on June 10, 2014 and changes certain applicability provisions of the SPCC rule for farms as well as modifying the criteria under which a farmer may self-certify an SPCC Plan.

WRRDA also requires that U.S. EPA conduct a study, in conjunction with the United States Department of Agriculture, to determine the appropriate applicability threshold for farms based on the risk of discharge. The study is scheduled to be completed by June 2015, after which U.S. EPA will anticipate future amendments to the SPCC requirements with regard to the findings of the study. The fact sheet can be found on U.S. EPA's website at http://www.epa.gov/emergencies/docs/oil/spcc/spcc_wrrda.pdf. Questions or comments regarding the WRRDA fact sheet should be referred to the "For More Information" section of the fact sheet.

Please note that WRRDA does not change the Aboveground Petroleum Storage Act (APSA).

How to File a Complaint Against an Engineer

The California Board for Professional Engineers, Land Surveyors, and Geologists (BPELSG) has the authority to investigate complaints of violations of the Professional Engineers Act, such as fraud, deceit, misrepresentation, negligence, incompetence, breach of contract, failure to use a written contract, violating the Codes of Professional Conduct, and practicing without a license. Enforcement actions include, but are not limited to, suspending licenses, revoking licenses, placing licenses on probation, issuing administrative citations, and referring the matter to the district attorney for criminal prosecution.

Unified Program Agencies and tank facility owners/operators are encouraged to utilize and follow the BPELSG complaint process when encountering professional engineer certified SPCC plans that contain gross errors or if no site visits have been made by the engineer or his/her agent. The BPELSG complaint process may be found on their website at http://www.bpelsg.ca.gov/consumers/complaint_licensee.shtml or on their consumer guide which may be found at http://www.bpelsg.ca.gov/pubs/consumer_guide.pdf.



Edmund G. Brown Jr.
Governor

Matthew Rodriguez
Secretary for Environmental Protection

Unified Program Newsletter July 2015

IN THIS ISSUE:

- CalEPA** **CHMIA Sponsored Training Announcement**
“Smart Negotiator” Training - San Jose, August 10 – 11, 8:00 a.m. – 5:00 p.m.
Surcharge Transmittal Report (Report 1) and Annual Single Fee Summary Report
(Report 2) DRAFT templates available on CalEPA website
CERS 3.0- Workshop Held to Determine Supported Enhancements
Two Frequently Asked Questions (FAQ) added to CERS
- DTSC** **None**
- SWRCB** **Remanufactured Underground Storage Tank Leak Detection Equipment**
June 2015 CERS UST Status Report
Reporting Violations per UST
Report 6
- Cal OES** **None**
- CAL- FIRE** **Aboveground Petroleum Storage Act (APSA) Program Meetings**
OSFM **Farms and the Federal Water Resources Reform and Development Act**
How to File a Complaint Against an Engineer
-

California Environmental Protection Agency

CHMIA Sponsored Training Announcement

The California Hazardous Materials Investigators Association (CHMIA) has sponsored a free training to CHMIA and non-CHMIA members who are employed by a government agency. For further information, please see attached CHMIA announcement.

“Smart Negotiator” Training - San Jose, August 10 – 11, 8:00 a.m. – 5:00 p.m.

The Western States Project is hosting a *free* two day interactive workshop for employees of CalEPA Boards and Departments and local partner agencies to benefit environmental regulatory personnel and attorneys involved in enforcement and/or drafting of compliance schedules to produce more effective outcomes in negotiations. **Class space is limited to 48 students. Applications must be received by 4:00 p.m., Wednesday, July 8.** To apply, please send an email to Jessica Diedesch (Jessica.Diedesch@calepa.ca.gov) and include the following information:

- Your Name, Title, Agency/Department, Program you work in
- Your Email address, mailing address, phone number
- Your Supervisor's name, email address, phone number
- Your enforcement duties

Please see the attached flyer for additional information.

Surcharge Transmittal Report (Report 1) and Annual Single Fee Summary Report (Report 2) DRAFT templates available on CalEPA website

The existing Report 1 and Report 2 templates adopted in Title 27, §15680, Appendix B, do not allow for the allocation of the applicable \$26.00 facility surcharge for the Aboveground Petroleum Storage Act (APSA), which became effective fiscal year 2014-2015. An official rulemaking will be required to remove or revise the templates adopted in Title 27. CalEPA will initiate the rulemaking process later this year to either remove or revise these Reports from Title 27. Therefore, until the Title 27 regulations are amended, CalEPA has developed and is providing CUPAs with draft templates for Report 1 and Report 2, which include provisions for reporting the APSA surcharge. These draft report templates will be distributed to all CUPAs and are available at <http://www.calepa.ca.gov/CUPA/Publications>. CUPAs are encouraged, but will not be required, to use these draft Report templates. If a CUPA does not wish to use these draft Report templates then the CUPA will need to somehow document the APSA surcharge amounts assessed, collected and remitted on the existing Report 1 and Report 2 templates currently in Title 27.

CERS 3.0- Workshop Held to Determine Supported Enhancements

Approximately 150 suggested CERS enhancements from state and local regulators, business users (including environmental and public interests), technical advisory groups, and data services vendors, were reviewed by the Data Steering Committee (DSC) at a 3-day workshop held on June 23 – 25 in Sacramento. Over the next few weeks, CalEPA will be tabulating the results of the workshop and will share those results with all Unified Program stakeholders. The DSC supported CERS 3.0 enhancements will be presented to the Unified Program Administrative and Advisory Group (UPAAG) in August 2015 and then, to Matthew Rodriguez, the Secretary for Environmental Protection, for final determination as to which CERS 3.0 enhancements will be approved for development and implementation. CERS 3.0 is expected to be deployed and available for use sometime in 2018.

On behalf of the statewide Unified Program, CalEPA would like to thank all participants in this process for your time, dedication and efforts you've put forth in the development and review of suggestions for enhancing the usability and electronic reporting capabilities of CERS.

Two Frequently Asked Questions (FAQ) added to CERS

Two FAQs regarding unstaffed, remote, exempt facilities have been posted at <https://cersregulator.calepa.ca.gov/Help> in the Business Section: "Are Remote Unstaffed Facilities Exempt from Reporting?" and in the Regulator Section: "Exempt Remote Unstaffed Facility Information in CERS," revised 6/22/15 in response to suggestions regarding the need for local agency tracking and for these facilities to be viewable in the Emergency Responder section of CERS.

State Water Resources Control Board

Remanufactured Underground Storage Tank Leak Detection Equipment

It has come to the State Water Resources Control Board's (State Water Board) attention that remanufactured underground storage tank (UST) leak detection equipment is being offered to California UST owners/operators, service technicians, and equipment suppliers. However, remanufactured leak detection equipment does not meet California UST regulatory requirements for the following reasons:

1. Performance certifications for leak detection equipment only can be obtained by the original equipment manufacturer. [California Code of Regulations (CCR), title 23, chapter 16, section 2643(f).] Remanufacturers are not the original equipment manufacturer of the leak detection equipment, and therefore are unable to comply with this requirement.
2. California compliant leak detection equipment must be evaluated by an independent third party testing laboratory. [California Code of Regulations, title 23, chapter 16, section 2643(f).] Modifications or changes to the equipment may produce parameters and data values that are significantly different than the original parameters and data values. Remanufactured leak detection equipment is therefore not covered by the original equipment manufacturer's evaluation and listing.

Leak detection equipment that has been remanufactured, rebuilt, or refurbished by an entity other than the original equipment manufacturer is not acceptable for use in California. Moreover, selling remanufactured leak detection equipment for use in California is an unfair business practice. [Business and Professions Code, section 17203.] The State Water Board has advised remanufacturers that by June 8, 2015, all remanufactured leak detection equipment sold in California must be labeled or otherwise marked as "not compliant for use in California with USTs." When remanufactured leak detection equipment is discovered on an UST (for example by a service technician during inspection and maintenance activities), the owners/operators of the UST must replace the remanufactured leak detection equipment with appropriate leak detection equipment that is listed in the Local Guidance Letter 113 (LG-113). Below is a link to the LG-113 document.
http://www.waterboards.ca.gov/water_issues/programs/ust/leak_prevention/lq113/index.shtml

A State Water Board letter regarding this issue was published on May 29, 2015 and is posted at the website below.
http://waterboards.ca.gov/water_issues/programs/ust/tech_notices/remanufacturedld.pdf

June 2015 CERS UST Status Report

The State Water Board has recently published the latest quarterly status reports intended for tracking progress towards entering all UST related business and compliance, monitoring and enforcement (CME) data into the California Environmental Reporting System (CERS). The "June 2015 CERS UST Status Report" can be found at the website below.
http://waterboards.ca.gov/water_issues/programs/ust/adm_notices/qtrly_cersrpt_2015jun.pdf

The report shows 93% of UST sites are now in CERS. Since the first report in May 2014, there has been an increase from 33% to 56% of UST facilities that now have an accepted UST submittal and an increase from 9% to 64% that now have CME data. The report includes a breakdown by Unified Program Agency (UPA). The next quarterly status report will be in September 2015.

Reporting Violations per UST

The State Water Board's Office of Chief Counsel (OCC) recently created a legal analysis that determined all UST violations must be linked to specific USTs or UST systems, and not simply the facility. This determination was partially based on statutory requirements to ensure each tank system complies with applicable statute and regulations (section 25288) and penalties that are based on each tank for each day of violation (section 25299). Violations noted on inspection reports should clearly reference the UST system where the violation occurs. Violations are not required to be linked to a UST system in CERS since CERS is a reporting tool and is not intended to be used for enforcement purposes. The State Water Board issued a letter to the UPAs regarding this matter and it can be found at the website below.
http://waterboards.ca.gov/water_issues/programs/ust/adm_notices/reporting_violations.pdf

Report 6

June 30 marks the end of the first 2015 UST reporting cycle. Report 6 submittals are due by September 1, 2015. It has become clear that deficiencies in CERS will not allow full electronic reporting of Report 6 data, and fixes won't be available until CERS v3 (est. 2017). Please use the "paper" version of Report 6 until instructed otherwise.

CAL FIRE - Office of State Fire Marshal

Aboveground Petroleum Storage Act (APSA) Program Meetings

Group	Next Meeting Date
APSA Advisory Committee	July 20, 2015

Farms and the Federal Water Resources Reform and Development Act

The United States Environmental Protection Agency (U.S. EPA) has published a fact sheet explaining the impacts of the Water Resources Reform and Development Act (WRRDA) on the Spill Prevention,

Control, and Countermeasure (SPCC) rule and farms. WRRDA was signed into law by the President on June 10, 2014 and changes certain applicability provisions of the SPCC rule for farms as well as modifying the criteria under which a farmer may self-certify an SPCC Plan.

WRRDA also requires that U.S. EPA conduct a study, in conjunction with the United States Department of Agriculture, to determine the appropriate applicability threshold for farms based on the risk of discharge. The study is scheduled to be completed by June 2015, after which U.S. EPA will anticipate future amendments to the SPCC requirements with regard to the findings of the study. The fact sheet can be found on U.S. EPA's website at http://www.epa.gov/emergencies/docs/oil/spcc/spcc_wrrda.pdf. Questions or comments regarding the WRRDA fact sheet should be referred to the "For More Information" section of the fact sheet.

Please note that WRRDA does not change the Aboveground Petroleum Storage Act (APSA).

How to File a Complaint Against an Engineer

The California Board for Professional Engineers, Land Surveyors, and Geologists (BPELSG) has the authority to investigate complaints of violations of the Professional Engineers Act, such as fraud, deceit, misrepresentation, negligence, incompetence, breach of contract, failure to use a written contract, violating the Codes of Professional Conduct, and practicing without a license. Enforcement actions include, but are not limited to, suspending licenses, revoking licenses, placing licenses on probation, issuing administrative citations, and referring the matter to the district attorney for criminal prosecution.

Unified Program Agencies and tank facility owners/operators are encouraged to utilize and follow the BPELSG complaint process when encountering professional engineer certified SPCC plans that contain gross errors or if no site visits have been made by the engineer or his/her agent. The BPELSG complaint process may be found on their website at http://www.bpelsg.ca.gov/consumers/complaint_licensee.shtml or on their consumer guide which may be found at http://www.bpelsg.ca.gov/pubs/consumer_guide.pdf.



**Unified Program Newsletter
August 2015**

IN THIS ISSUE:

- CalEPA** California Air Resources Board (CARB) Stationary Source Refrigerant Management Program Project
Annual Single Fee Summary Report (Report 2) for Fiscal Year 2014-2015 due September 30, 2015
REMINDER: Compliance Monitoring and Enforcement (CME) Data must be entered into CERS
- DTSC** None
- SWRCB** UST Violations Result in \$1.35M Judgment Against San Francisco Municipal Transportation Agency
Single-Walled UST Correspondence
Compatibility of USTs Storing Gasoline with Ethanol
Local Guidance 171
Abandoned UST Initiative
- Cal OES** None
- CAL- FIRE OSFM** Farms and the Federal Water Resources Reform and Development Act

California Environmental Protection Agency

California Air Resources Board (CARB) Stationary Source Refrigerant Management Program Project

The State of California's Assembly Bill 32 (Global Warming Solutions Act, 2006), affects facilities with refrigeration systems using more than 50 pounds of high global warming potential refrigerants, such as Freon, R-22, or other replacements. Common affected industries include cold storage warehouses, agriculture (cooled packing houses), industrial processing and manufacturing, food manufacturing, food distribution and supermarkets. **Facilities with refrigeration systems that use ammonia or CO² as their only form of refrigerant are not affected by this regulation.** In an effort to identify facilities with applicable refrigeration systems, the CARB has sent letters and postcards and has made phone calls to potentially affected businesses.

Many facilities that are currently reporting to Certified Unified Program Agencies (CUPAs) are potentially affected by the CARB Stationary Source Refrigerant Management Program regulation, aiming to reduce greenhouse gas emissions from large, commercial and industrial refrigeration systems. As part of this project and in the near future, the CARB will be requesting assistance from the CUPAs to reach out to these potentially affected facilities with the distribution of flyers and FAQs, or by informing CARB staff of potentially affected facilities. CARB will follow up with the potentially

affected facilities and assist with compliance. For more information, please contact the CARB Refrigerant Management Program at: (916) 324-2517, www.arb.ca.gov/cc/rmp/rmp.htm, or email: rmp@arb.ca.gov.

REMINDER: Annual Single Fee Summary Report (Report 2) for Fiscal Year 2014-2015 due September 30, 2015

Per California Code of Regulations, Title 27, Division 1, Subdivision 4, §15290(a), CUPAs must prepare the Annual Single Fee Summary Report (Report 2) for the previous fiscal year and submit it to CalEPA *no later than September 30, 2015*. Report 2 includes: the amount of the single fee billed and collected; the amount of any funds due to Participating Agencies and the amount transmitted; the amount of surcharge billed, waived and collected for each program (including the surcharge for the Aboveground Petroleum Storage Act Program); and a count of total regulated businesses, Underground Storage Tank (UST) facilities, USTs, onsite hazardous waste treatment facilities (including Permit by Rule, Conditionally Authorized and Exempt), California Accidental Release Prevention (CalARP) Program stationary sources and waivers granted, businesses subject to the CalARP Program and the total Aboveground Storage Tank regulated facilities.

Information contained within Report 2 is essential to adequately assess the implementation and fee accountability of the Unified Program for each CUPA as well as to convey the statewide success and accomplishments of California's Unified Program to the United States Environmental Protection Agency, California legislature and other interested persons.

The existing template adopted in Title 27, §15680, Appendix B, does not allow for the allocation of the applicable \$26.00 facility surcharge for the Aboveground Petroleum Storage Act (APSA), which became effective fiscal year 2014-2015. CalEPA will initiate the required rulemaking process later this year to remove the template from regulation. Until the template is removed from regulation, CalEPA has developed and is providing CUPAs with a draft template, available at: <http://www.calepa.ca.gov/CUPA/Publications> under the heading "Required Summary Reporting Forms and Instructions for 'CUPA-to-State' Reporting." CUPAs are encouraged, but not required, to use the draft template provided. If a CUPA does not wish to use the draft template, the APSA surcharge amounts assessed, collected and remitted must be documented.

Please remit Report 2 for Fiscal Year 2014-2015 to CalEPA by September 30, 2015 via:

Mail:
The Unified Program
California Environmental Protection Agency
P.O. Box 2815
Sacramento, California 95812

OR **Email:**
cupa@calepa.ca.gov
Subject: Report 2- Fiscal Year 14-15

REMINDER: Compliance Monitoring and Enforcement (CME) Data must be entered into CERS
Starting fiscal year 2014/2015, CME data must be submitted electronically within 30 days of each completed quarter [CCR Title 27, Division 1, Subdivision 4, §15290(b)]. Submittal deadlines are listed below:

Fiscal Year Quarterly CME Action Occurs (including updates)	Deadline for Electronic Submittal Of Quarterly CME Data
July 1 – September 30	October 30
October 1 – December 31	January 30
January 1 – March 31	April 30
April 1 – June 30	July 30

As of August 1, 2014, CUPAs are evaluated on quarterly CME electronic reporting requirements for inspection and enforcement activities occurring on or after July 1, 2013.

All CME data must include the complete detail record fields identified in the CERS Regulator Portal (<http://cers.calepa.ca.gov/>) and defined in the Unified Program Data Dictionary (www.calepa.ca.gov/LawsRegs/Regulations/T27/DataDict.pdf).

For more information, please refer to Unified Program Guidance Letter 14-02 (<http://www.calepa.ca.gov/CUPA/Bulletins/2014/Jan17.pdf>).

State Water Resources Control Board

Underground Storage Tank Violations Result in \$1.35M Judgment Against San Francisco Municipal Transportation Agency

The State Water Resources Control Board (State Water Board) has reached a \$1.35 million settlement with the San Francisco Municipal Transportation Agency (SFMTA) for violating leak prevention requirements for hazardous substances at four underground storage tank (UST) facilities in San Francisco. These alleged violations included failure to monitor tank systems, failure to maintain adequate spill containment, failure to perform monthly designated operator inspections and falsifying monthly designated operator reports.

Under the terms of the settlement, the SFMTA will pay \$425,000 in civil penalties to the State Water Board; \$100,000 for the reimbursement of enforcement costs and \$375,000 will be suspended on the condition SFMTA completes several enhanced compliance actions. An additional \$450,000 is suspended on the condition SFMTA maintains compliance with underground storage tank laws and injunctive provisions for a period of five years.

For more information, view a copy of the complaint and settlement agreement at the website below. http://www.waterboards.ca.gov/water_issues/programs/enforcement/orders_actions.shtml

A copy of the full press release can be found at: http://www.waterboards.ca.gov/press_room/press_releases/2015/pr072715_muni_enforcement.pdf.

Single-Walled UST Correspondence

On July 7, 2015, the State Water Board issued a notice regarding the new single-walled UST closure requirements. The notice was distributed to all owners and/or operators of single-walled USTs, as identified by the Unified Program Agencies (UPAs). The letter provided information on how to comply with the new requirements, what funding sources are available to assist with compliance, and who to contact for questions or concerns. A copy of this letter can be found at: http://www.waterboards.ca.gov/ust/single_walled/docs/sw_ust_owner_operator_ltr.pdf.

For more information on the single-walled UST closure requirements, visit the website below. http://www.waterboards.ca.gov/ust/single_walled/

Compatibility of USTs Storing Gasoline with Ethanol

On June 24, 2015, the State Water Board issued a technical notice outlining the types of documentation that can be used to demonstrate compliance with the compatibility requirements of California's Health and Safety Code. For fiber reinforced plastic (FRP) tanks that store gasoline with ethanol, the technical notice states that a UL 1316 listing/approval which includes "alcohol" or "alcohol mixtures" may satisfy the requirement that the primary containment be compatible with the stored substance. Tanks installed before January 1, 1991 may also, in lieu of a UL approval/listing, use a manufacturer's affirmative statement of compatibility for the specific substance stored to demonstrate compliance. A table is attached to the technical notice to assist in determining what documentation is necessary and available to demonstrate that an FRP tank is in compliance with the primary containment compatibility requirement of California's Health and Safety Code, chapter 6.7,

sections 25292.05, 25291, 25290.2, and 25290.1. The table consists of the most common FRP tank manufacturers and what documentation can be used to satisfy the compatibility requirement. The technical document is posted at:

http://www.waterboards.ca.gov/ust/tech_notices/docs/ethanol_tank_compatibility_letter.pdf.

Local Guidance 171

On July 24, 2015, the State Water Board released Local Guidance (LG) 171 - Permanent Closure of Underground Storage Tanks That Do Not Meet Health and Safety Code, Chapter 6.7, Section 25291, Subdivisions (a)(1)-(6). LG 171 summarizes the main provisions of Senate Bill 445 (Stats. 2014, Ch. 547) that apply to UST design and construction. These changes are reflected in Health and Safety Code, section 25292.05. The guidance was drafted in an attempt to make it easier for owners and operators of underground storage tanks (USTs), Unified Program Agency staff, and other interested parties to identify USTs subject to SB445. In addition, LG 171 specifies what actions are necessary if the UST does not comply with Health and Safety Code, chapter 6.7, section 25291(a)(1)-(6). LG 171 is posted at:

http://www.waterboards.ca.gov/water_issues/programs/ust/leak_prevention/lgs/docs/lg171.pdf.

Abandoned UST Initiative

Sullivan International, the United States Environmental Protection Agency, and the State Water Board continue to investigate non-compliant sites with abandoned USTs throughout the state of California. Information regarding the Abandoned UST Initiative can be found at:

http://waterboards.ca.gov/ust/abandoned_storage.shtml.

The latest information regarding the Abandoned UST Initiative can be found in the July 2015 Abandoned Underground Storage Tank Initiative Progress Report below.

http://waterboards.ca.gov/ust/docs/abandoned_storage/ab_ust_initprogprt_072015.pdf

Also, a list of current abandoned USTs, as well as previously abandoned USTs that are now in compliance can be found in the July 2015 Abandoned UST Inventory below.

http://waterboards.ca.gov/ust/docs/abandoned_storage/ab_ustandprev_comp.pdf

CAL FIRE - Office of State Fire Marshal

Farms and the Federal Water Resources Reform and Development Act

The United States Environmental Protection Agency (US EPA) has completed and published the study required under the Water Resources Reform and Development Act (WRRDA) to determine the aggregate aboveground oil storage capacity threshold for farms subject to the federal Spill Prevention, Control, and Countermeasure (SPCC) rule. The study determined the threshold for minimum oil storage at a farm subject to the federal SPCC rule to be 2,500 gallons. However, until the federal SPCC rule is amended to incorporate the findings of the study, the threshold provided in WRRDA remains effective.

A factsheet on WRRDA can be found on US EPA's website at

http://www.epa.gov/emergencies/docs/oil/spcc/spcc_wrrda.pdf. Questions regarding the WRRDA fact sheet should be referred to the "For More Information" section of the fact sheet.

The US EPA study on farms may be found on US EPA's website at <http://www2.epa.gov/oil-spills-prevention-and-preparedness-regulations/oil-storage-us-farms-risks-and-opportunities>. Questions or comments regarding the study should be referred to [US EPA](#).

Please note that WRRDA does not change the Aboveground Petroleum Storage Act (APSA).

Mary Pitto

From: CalRecycle Electronic Product Management ListServ [EWaste@calrecycle.ca.gov]
Sent: Friday, June 05, 2015 6:36 PM
To: Mary Pitto
Subject: California E-Waste Updates: Implementing the Electronic Waste Recycling Act

June 5, 2015

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:

**REVISED CEW/CRT REGULATIONS TO BE HEARD AT CALRECYCLE MONTHLY
JULY 14 STAKEHOLDER WORKSHOP: IMPOSING CIVIL LIABILITIES**

Revised CEW/CRT Regulations to Be Heard At CalRecycle Monthly

Proposed revised regulations governing aspects of California's covered electronic waste (CEW) program will be presented as an item at the Department of Resources Recycling and Recovery (CalRecycle) public monthly meeting on June 16 at the Cal/EPA Headquarters Building in Sacramento. A Public Notice for this monthly meeting along with an agenda can be found here:

<http://www.calrecycle.ca.gov/Actions/PublicNoticeDetail.aspx?id=1513&aiid=1374>

The subject item will present a staff proposal along with a request for approval to move forward with the proposed revised regulations. The regulations focus on the allowable disposition of treatments residuals, CRTs, and CRT glass derived from CEW that is claimed for recycling payment.

The request for approval, the proposed revised regulations, and supporting documents can be found through this Public Notice:

<http://www.calrecycle.ca.gov/Actions/PublicNoticeDetail.aspx?id=1515&aiid=1376>

July 14 Stakeholder Workshop: Imposing Civil Liabilities

CalRecycle will host a stakeholder workshop on the afternoon of Tuesday, July 14, from 1PM until approximately 4PM on the subject of civil liabilities. The Public Notice for the workshop can be found at:

<http://www.calrecycle.ca.gov/Actions/PublicNoticeDetail.aspx?id=1523&aiid=1386>

This workshop will present and discuss proposed regulations to implement a civil liability component to the covered electronic waste (CEW) recycling payment system. As authorized by Public Resources Code (PRC) section 42474(d), CalRecycle may administratively impose civil liabilities (penalties) on a person "... *that makes a false statement or representation in any document filed, submitted, maintained or used for purposes of*

compliance..." with the Electronic Waste Recycling Act and associated regulations, including those related to the CEW program. It is anticipated that the proposed regulations will be adopted under emergency authority (see PRC 42475.2).

Interested parties should closely monitor the Public Notice site for developing details. There will be no cost or registration necessary to attend and participate in the workshop. Interested parties who cannot attend in person can monitor the proceedings via a webcast and will be able to submit questions or concerns via email before and during the event.

Other Resources

Covered Electronic Waste (CEW) Recycling Program Information:
<http://www.calrecycle.ca.gov/Electronics/CEW/>

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/>

Public Resources Code (PRC), Health and Safety Code (HSC), and other statutes:
<http://www.leginfo.ca.gov/calaw.html>

USEPA Information on the Management and Regulation of CRTs:
<http://www.epa.gov/epawaste/hazard/recycling/electron/index.htm>



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:
<http://www.calrecycle.ca.gov/Electronics/NewsEvents.htm>

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 Product Management ListServ [EWaste@calrecycle.ca.gov]
Sent: Tuesday, July 07, 2015 4:11 PM
To: Mary Pitto
Subject: California E-Waste Updates: Implementing the Electronic Waste Recycling Act

July 7, 2015

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: JULY 14 STAKEHOLDER WORKSHOP ON CIVIL LIABILITIES

REVISED CEW/CRT REGULATIONS READIED FOR TRANSMITTAL TO OAL

Reminder: July 14 Stakeholder Workshop on Civil Liabilities

Department of Resources Recycling and Recovery (CalRecycle) will host a stakeholder workshop on the afternoon of Tuesday, July 14, from 1PM until approximately 4PM on the subject of civil liabilities. The Public Notice for the workshop, along with an agenda and draft documents, can be found at:
<http://www.calrecycle.ca.gov/Actions/PublicNoticeDetail.aspx?id=1523&aiid=1386>

This workshop will present and discuss proposed regulations to implement a civil liability component to the covered electronic waste (CEW) recycling payment system. As authorized by Public Resources Code (PRC) section 42474(d), CalRecycle may administratively impose civil liabilities (penalties) on a person "... that makes a false statement or representation in any document filed, submitted, maintained or used for purposes of compliance..." with the Electronic Waste Recycling Act and associated regulations, including those related to the CEW program. It is anticipated that the proposed regulations will be adopted under emergency authority (see PRC 42475.2).

There will be no cost to attend and participate in the workshop, however for the purposes of planning the courtesy of an RSVP is requested. Please send those to ewaste@calrecycle.ca.gov

Interested parties who cannot attend in person can monitor the proceedings via a webcast and will be able to submit questions or concerns via email before and during the event.

Revised CEW/CRT Regulations Readied for Transmittal to OAL

Proposed revised regulations governing aspects of California's CEW program administered by CalRecycle have been approved internally and are being readied for transmittal to the Office of Administrative Law (OAL) for

review. The regulations focus on the allowable disposition of treatments residuals, CRTs, and CRT glass derived from CEW that is claimed for recycling payment, as well as associated documentation. Existing program regulations have prohibited the disposal of residual CRT glass derived from CEW claimed for payment. The revisions would now allow all otherwise legal dispositions, including regulated disposal if recycling options are not economically feasible to pursue.

There will be a ten day review period once the proposed regulations are submitted to OAL, after which the rules take effect. Further notices will be announced through this listserv as necessary.

The signed internal request for approval, the proposed revised regulations, and supporting documents can be found through this CalRecycle Public Notice:

<http://www.calrecycle.ca.gov/Actions/PublicNoticeDetail.aspx?id=1515&aiid=1376>

Other Resources

Covered Electronic Waste (CEW) Recycling Program Information:

<http://www.calrecycle.ca.gov/Electronics/CEW/>

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/>

Public Resources Code (PRC), Health and Safety Code (HSC), and other statutes:

<http://www.leginfo.ca.gov/calaw.html>

USEPA Information on the Management and Regulation of CRTs:

<http://www.epa.gov/epawaste/hazard/recycling/electron/index.htm>

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:

<http://www.calrecycle.ca.gov/Electronics/NewsEvents.htm>

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 Product Management ListServ [EWaste@calrecycle.ca.gov]
Sent: Thursday, July 23, 2015 4:07 PM
To: Mary Pitto
Subject: California E-Waste Updates: Implementing the Electronic Waste Recycling Act

July 23, 2015

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:

COMMENTS SOUGHT BY JULY 31 ON PROPOSED CIVIL LIABILITY RULES

Comments Sought by July 31 on Proposed Civil Liability Rules

Department of Resources Recycling and Recovery (CalRecycle) is seeking comments on proposed regulations related to the administration of the civil liabilities under the Electronic Waste Recycling Act in general and the covered electronic waste (CEW) recycling payment system in particular. Comments are requested by Friday, July 31, 2015.

Please send any comments to ewaste@calrecycle.ca.gov

CalRecycle hosted a stakeholder workshop on July 14 to present and discuss the proposed rules. The Public Notice for that workshop, along with draft documents and a recording of the proceedings, can be found at: <http://www.calrecycle.ca.gov/Actions/PublicNoticeDetail.aspx?id=1523&aiid=1386>

As authorized by Public Resources Code (PRC) section 42474(d), CalRecycle may administratively impose civil liabilities (penalties) on a person "... that makes a false statement or representation in any document filed, submitted, maintained or used for purposes of compliance..." with the Electronic Waste Recycling Act and associated regulations, including those related to the CEW program. It is anticipated that the proposed regulations will be adopted under emergency authority (see PRC 42475.2).

Other Resources

Covered Electronic Waste (CEW) Recycling Program Information:
<http://www.calrecycle.ca.gov/Electronics/CEW/>

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/>

Public Resources Code (PRC), Health and Safety Code (HSC), and other statutes:
<http://www.leginfo.ca.gov/calaw.html>

USEPA Information on the Management and Regulation of CRTs:
<http://www.epa.gov/epawaste/hazard/recycling/electron/index.htm>

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:
<http://www.calrecycle.ca.gov/Electronics/NewsEvents.htm>

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/>.

Agenda Item X

ARTICLES OF INTEREST

County waste department to provide free composting workshop in Banning on Saturday

Posted: Wednesday, July 15, 2015 12:44 pm

The Riverside County Department of Waste Resources will host a free backyard composting workshop in Banning on Saturday (July 18).

Attend this “how-to” workshop to learn how to recycle organic resources such as yard trimmings, fruit and vegetable waste into a dark, crumbly, sweet-smelling soil conditioner. Compost can be used to enrich the soil in gardens, lawns and house plants. Instead of putting organic waste in the garbage to be hauled to the landfill, learn to compost!

The free “how-to” backyard composting workshop begins at 10 a.m. at the City of Banning Senior Center, 769 North San Geronio Ave.

Composting is nature’s way of recycling. It’s a great way to divert waste from the landfill and turn it into a beneficial soil amendment. In composting, organic material is mixed together in a pile or bin, where literally millions of tiny microbes digest the material and turn it into a nutrient-rich soil amendment.

The Riverside County Department of Waste Resources provides this free workshop in an effort to divert waste and help preserve valuable landfill space in the county sanitary landfill. For years, the department has trained volunteer master composters who explain how to create compost easily and efficiently from organic wastes. Low-cost compost bins, subsidized by the department, will also be available for purchase by Riverside County residents (limit three per household). County residents can purchase compost bins by personal check only. Cash and credit cards will not be accepted.

For more information, contact Riverside County Department of Waste Resources at (951) 486-3200 or visit: <http://www.rcwaste.org/opencms/recycling/pdf/flyers/Banning.pdf>

Waste-to-Energy: The Lost Decades

It's now 2015, two decades since a new waste-to-energy (WTE) facility was built and commissioned in the United States. (The last one was in Montgomery County, MD, in 1995.) This long period without new facility construction will come to an end in a few months when the West Palm Beach County Solid Waste Authority (in Florida) opens a new 3000 TPD facility—their second, in fact. What should we, as an industry, think of these two lost decades without any new development (yes, we had expansions) of this proven technology? When only three general options exist (recycle/compost, combustion, and landfill) to manage our MSW stream, how could a country as large as the US not build a WTE facility in 20 years?

Other regions of the developed world have embraced WTE during the same time period, including almost all of Western Europe (driven by landfill organics bans and \$100+/ton landfill taxes), Pacific Rim Countries (now 40% of the global market), as well as other select emerging regions around the globe (i.e., the Arabian Peninsula). According to the latest EPA numbers, the US was utilizing WTE for processing only 12% of MSW in 2013. Twenty years ago, the US was recycling 27% of MSW.

We are now recycling about 35% as a nation: a gain of 8%. Landfilling has declined from 57% to 53% in the last 20 years, while combustion has also fallen from 16% to a reduced level of 12% as noted previously. Both landfilling and combustion have decreased an equal percentage to account for the rise in recycling. So, after we recycle 35%, we are landfilling about four of every five remaining tons. This can hardly be seen as “progress” in a country where landfilling is at the bottom of EPA’s own waste hierarchy. I struggle to accept that we are choosing to landfill our MSW because citizens, local government units, and waste practitioners believe it is generally better for the environment. What is the root problem then? And, we if continue on this path, what can we expect in the next 20 years?

WTE had a promising growth spurt from 1985 through 1995. Many of the plants built during that period (including LCSWMA’s

in Lancaster County, PA) exceeded performance expectations of their owners and became widely accepted in their local communities. In LCSWMA’s experience, our landfill life was extended from 10 years to 30 years. Our county recycling rate grew significantly from single digits to 43.7% just last year. It is worth noting the recycling rate would only be 40% if not for the recovery of ferrous and non-ferrous metal after combustion. We have generated enough renewable energy to power the equivalent of every home



in Lancaster County for four years. We have lowered our waste disposal CO₂e (carbon dioxide equivalent) output by more than 10 million tons, versus had we landfilled that post-recycled waste. Our MSW disposal fee is \$62.80 per ton, which is lower than the rate at the time our WTE facility opened in 1991. The last debt payment on the facility will be made this year so all future benefits will come without project debt. I now present readers the same question I am asked by residents and visitors after a tour of our WTE facility: “Why aren’t there more of facilities like this in the US?” Good question, but one with a difficult answer. **msw**

James D. Warner is CEO for the Solid Waste Management Authority, Lancaster County, PA, and a member of MSW Management’s Editorial Advisory Board.

COUNTY NEWS

LANDFILL BRINGS SOLAR WINDFALL FOR WASHINGTON COUNTY, MARYLAND

By **CHARLIE BAN** Aug. 3, 2015

Tags: Energy



Leasing county land to solar energy companies will make Washington County, Md. an entirely-solar-powered government, give its budget an almost-half million dollar boost, and in the process make it a leader in the Old Line State.

Public-private partnerships with three solar energy producers have led to construction of 130 acres of solar panels which, when completed, will yield 25 megawatts of electricity, 14 megawatts of which will be purchased by the county and the school district at a reduced rate. That adds up to a savings of \$100,000 a year over the previous energy contract, just for the county government.

"And it's all sustainable," said Julie Pippel, director of the county's division of environmental management. "Plus, it's all privately built and maintained."

Montgomery County, Md.- based EPG Solar approached Washington County more than three years ago with an interest in using some of its land. Spear Point Energy and Northern Energy have followed suit. The solar field construction should be complete and online by the end of 2015.

"When you own a landfill with landfill space, and people are looking for solar (projects), you get people knocking on your door," she said. "We had all of this land, we're owning it and maintaining it. It wasn't drawing in a tax base and we weren't getting anything from it."

Now those otherwise-empty acres are yielding \$375,000 annually in rent revenue (one penny per kilowatt-hour generated) from the three energy companies. It's net savings and revenue of \$475,000.

"They're getting their power and we're getting our rent," she said.

Local contractors are building the solar fields and will maintain them. This was precipitated in large part by a recent reorganization of the Department of Environmental Management, which grouped environmental, solid waste, water and recycling functions together, separate from public works.

"Those functions are now managed in a direct way that relate to each other," Pippel said. "It put us in a position to enhance environmental initiatives in the county, bring some sustainability to the county, reduce county budget, so solar is something that could do that for us."

The deal was held up by a question of whether counties could enter into a purchase power agreement.

"The regulations guiding utilities referred to 'municipalities' as viable parties in a contract, which we read as 'local governments,'" Pippel said. "The power company read that as 'towns and cities.'"

The Public Service Commission ruled in favor of Washington County, paving the way for other counties. Pippel said Harford and Queen Anne's counties have called with interest.

Robert Babcock, owner of EPG Solar, said the choice of Washington County for a major project was an easy one.

"What wasn't attractive?" he said. "I love working with municipal governments. They look for local solutions, and in this case it's to generate their own power."

The volume of open space was also appealing because of the scale on which EMPG could work,

"Using landfill space is one of the greatest uses of county resources," he said. "What else will you do with it? It was all the land I needed."

ABOUT CHARLIE BAN [\(Full Bio\)](#)

SENIOR WRITER & WEB EDITOR

Charlie Ban writes for County News and helps manage NACo website content.





Subscribe Today (/sections/subscribe) Customer Service (/help/) eRegister (http://epaper.ocregister.com/Olive/ODE/OrangeCountyRegister/) Today's Paper (/sections/headlines/)

Knowledge Cafe (http://www.ocregister.com/sections/knowledge-cafe/) Magazines (http://www.ocregister.com/go/magazines) Unidos (http://www.unidoss.com/) Weather (http://weather.ocregister.com/)

News (/sections/news/) Sports (/sections/sports/) Business (/sections/business/) Entertainment (/sections/entertainment/) Life (/sections/life/) Opinion (/sections/opinion/) Obits (http://obits.ocregister.com/obituaries/orangecounty/)

Register Connect (http://connect.ocregister.com/)

(/)

CARS (/GO/CARS/) (HTTP://WWW.OCJOBFINDER.CO (/GO/OCJOBPLACE/) CLASSES (HTTP://OC.KAANGO.COM/) (http://www.OCJOBPLACE.com/)

Political Cartoons (/sections/galleries/gallery/?nosubs=1&category_id_list=18964) Columns (/sections/opinion/columns/)

Freeze-dried mice holding champagne? The wacky decorations at the OC Fair

From waffle shop to white tablecloths, Orange County students spend summer serving

Restaurants' openings at ARTIC rolling forward, slowly (/articles/open-675583-city-

As people hear the Republican hopefuls debate tonight, will Donald Trump's stance also

TOP NEWS

OPINION (/COMMON/ARCHIVES/?CATID=18963)

Recycling snoops trash residents' privacy rights

Aug. 5, 2015 | Updated Aug. 4, 2015 4:49 p.m.



Scrap metal cans are processed for recycling.

DAVID DUPREY, ASSOCIATED PRESS

By ADAM B. SUMMERS / STAFF COLUMNIST

It was horrifying enough when I read five years ago that 68 local governments in Britain and Northern Ireland had installed microchips in household garbage bins to monitor how much garbage some 2.6 million households were throwing away (and potentially levy fines on those the government thinks throw away too much or recycle too little). Now, as the U.S. seeks to emulate the British surveillance state, the governmental trash snoops have made their way across the pond.

FACEBOOK

TWITTER

EMAIL (mailto:?)

subject=OCREGISTER%20Recycling%20snoops%20trash%20residents%27%

20snoops%20trash%20residents%27%

20privacy%20rights&body=http://www.ocregister.com/2010/10/27/calling-all-pundits-join-the-flip-cam-sensation/

2Articles%20trash-675908-recycling-government.html

COMMENTS

PRINT (/common/printers?id=675908)

SEND PDF (/templates/savepdf?id=675908&headline=recycling

20snoops%20trash%20residents%27%

20privacy%20rights

Increasingly, public and private waste and recycling collectors are utilizing radio-frequency identification tags, which are installed on or in collection bins and contain unique identifying information which can be transmitted to readers on collection trucks.

"A growing number of cities in the United States are installing RFID chips in trash cans and recycling bins in order to bring computer technology to bear on the problem of ensuring compliance with recycling regulations," the American Civil Liberties Union warned in a recent post.

The purposes of this technology may be benign. Dayton, Ohio, for example, offers financial incentives for recycling and uses RFID tags to track who has earned the cash prizes. Charlotte, N.C., uses the tags to better manage its bin inventories, improve the efficiency of its collection routes and more accurately target recycling educational materials.

But such technology can also be put to much more intrusive uses. In Cleveland, residents face \$100 fines if their trash bins contain more than 10 percent recyclable materials. And Seattle residents are suing the city over a new law that penalizes them for not "properly" sorting their recycling and food waste. Residential trash containers with more than 10 percent recyclables or food waste, as determined by trash collection workers, will generate a \$1 fine on the next monthly bill, and businesses and multiple family property owners with too much food waste face \$50 fines.

La Crosse and Onalaska, Wis., even use video cameras to monitor and capture their waste bins' contents and go after those disposing of unrecyclable items."

To illustrate just how violating and revealing this trash snooping can be, under the backdrop of a 2002 court case that called into question (and eventually struck down) the Portland Police Department's practice of collecting evidence by snatching and rifling through people's trash without a warrant, journalists at the Willamette Week newspaper put city officials' support for the practice to the test by rummaging through the trash of the mayor, the police chief and the district attorney.

Police Chief Mark Kroeker was not pleased when the journalists later spread out on a table before him "a receipt with his credit card number, a summary of his wife's investments, an email prepping the mayor about his job application to be police chief of Los Angeles, a well-chewed cigar stub and a handwritten note scribbled in pencil on a napkin, so personal it made us cringe." And Mayor Vera Katz "went nuclear" when she found out others had looked through her recycling.

"Your garbage can is like a trap door that opens onto your most intimate secrets; what you toss away is, in many ways, just as revealing as what you keep," the Willamette Week observed.

Reason.com blogger Anthony L. Fisher made an apt analogy between local government garbage snooping and the federal government's dragnet collection of U.S. citizens' phone metadata. Both provide indirect or piecemeal evidence of one's life, but when aggregated may paint a frighteningly detailed account of one's thoughts and actions. And neither should be conducted without a proper and individualized warrant.

Government was supposedly established to protect people's lives and property, not rummage through their trash and compel them, under threat of fines, to sort it just the way government officials want it so they can maximize their recycling revenue or meet arbitrary recycling and composting goals. It is time to recycle the value of privacy, and trash overbearing government regulations and snooping.

WRITE A LETTER TO THE EDITOR Letters to the Editor: E-mail to letters@ocregister.com (mailto:letters@ocregister.com). Please provide your name, city and telephone number (telephone numbers will not be published). Letters of about 200 words or videos of 30-seconds (http://letters.ocregister.com/2010/10/27/calling-all-pundits-join-the-flip-cam-sensation/) each will be given preference. Letters will be edited for length, grammar and clarity.



MOST POPULAR

Woman arrested after slow-speed car chase in Santa Ana
(http://www.ocregister.com/articles/woman-676234-officers-street.html)

Three arrested in string of CVS robberies, including five in Orange County stores
(http://www.ocregister.com/articles/beach-676233-stores-cvs.html)

As people hear the Republican hopefuls debate tonight, will Donald Trump's stance also mo
(http://www.ocregister.com/articles/trump-676235-latinos-county.html)

Car hacking is the next carjacking, and automakers are fighting back
(http://www.ocregister.com/articles/security-676229-cars-vehicles.html)

Where did Naugles go? Swamped by fans, the reborn fast-food brand plans limited hours, we
(http://www.ocregister.com/articles/naugles-676182-week-restaurant.html)



WHAT DO YOU THINK?

Should Joe Biden make a run for the Democratic nomination?

- Yes
- No
- I'm not sure

SUBMIT

NOT NOW ✕

Get the Local Headlines Newsletter

Free daily updates delivered just for you.

D.C. Politics

American recycling is stalling, and the big blue bin is one reason why

By Aaron C. Davis June 20

Tucked in the woods 30 miles north of Washington is a plant packed with energy-guzzling machines that can make even an environmentalist’s heart sing — giant conveyor belts, sorters and crushers saving a thousand tons of paper, plastic and other recyclables from reaching landfills each day.

The 24-hour operation is a sign that after three decades of trying, a culture of curbside recycling has become ingrained in cities and counties across the country. Happy Valley, however, it is not.

Once a profitable business for cities and private employers alike, recycling in recent years has become a money-sucking enterprise. The District, Baltimore and many counties in between are contributing millions annually to prop up one of the nation’s busiest facilities here in Elkridge, Md. — but it is still losing money. In fact, almost every facility like it in the country is running in the red. And Waste Management and other recyclers say that more than 2,000 municipalities are paying to dispose of their recyclables instead of the other way around.

ADVERTISING



In short, the business of American recycling has stalled. And industry leaders warn that the situation is worse than it appears.

“If people feel that recycling is important — and I think they do, increasingly — then we are talking about a nationwide crisis,” said David Steiner, chief executive of Waste Management, the nation’s largest recycler that owns the Elkridge plant and 50 others.

[Five ways Americans should — and shouldn’t — recycle]

The Houston-based company’s recycling division posted a loss of nearly \$16 million in the first quarter of the year. In recent months, it has shut nearly one in 10 of its biggest recycling facilities. An even larger percentage of its plants may go dark in the next 12 months, Steiner said.

The problems of recycling in America are both global and local. A storm of falling oil prices, a strong dollar and a weakened economy in China have sent prices for American recyclables plummeting worldwide.

Environmentalists and other die-hard conservation advocates question if the industry is overstating a cyclical slump.

“If you look at the long-term trends, there is no doubt that the markets for most recyclables have matured and that the economics of recycling, although it varies, has generally been moving in the right direction,” said Eric A. Goldstein, a lawyer with the Natural Resources Defense Council who tracks solid waste and recycling in New York.

“And that’s without factoring in the external impact of landfilling or anything else,” he added. “There aren’t a lot of people saying, ‘Send more material to landfills.’”

Still, the numbers speak for themselves: a three-year trend of shrinking profits and rising costs for U.S. municipalities — and little evidence that they are a blip.

Trying to encourage conservation, progressive lawmakers and environmentalists have made matters worse. By pushing to increase recycling rates with bigger and bigger bins — while demanding almost no sorting by consumers — the recycling stream has become increasingly polluted and less valuable, imperiling the economics of the whole system.

“We kind of got everyone thinking that recycling was free,” said Bill Moore, a leading industry consultant on paper recycling who is based in Atlanta. “It’s never really been free, and in fact, it’s getting more expensive.”

The problem with blue bins

Many of the problems facing the industry can be traced to the curbside blue bin — and the old saying that if it sounds too good to be true, it just might be. Anyone who has ever tossed a can into a bin knows what’s supposed to happen: Anything recyclable can go in, and then somehow, magically, it’s all separated and reused.

The idea originated in California in the 1990s. Environmental advocates believed that the only way to increase participation in recycling programs was to make it easier. Sorting took time and was messy. No one liked it. So-called Material Recovery Facilities, or MRFs, were created to do what consumers wouldn’t.

With conveyers, spinning flywheels, magnets and contraptions that look like giant Erector Sets, companies found that they could recycle almost everything at once. Lightweight newspaper and cardboard were sent tumbling upward, as if in a clothes dryer. Glass, plastic and metal fell into a series of belts and screens. Automation was adopted to sort, bale and send to manufacturers all those tons of paper, bottles and cans.

From the start, it was hard to argue that glass should have been allowed in the curbside mix. It’s the heaviest of recyclables but has always been of marginal value as a commodity. In the rough-and-tumble sorting facilities, a large share of it breaks and contaminates valuable bales of paper, plastic and other materials.

Today, more than a third of all glass sent to recycling facilities ends up crushed. It is trucked to landfills as daily cover to bury the smell and trap gases. The rest has almost no value to recyclers and can often cost them to haul away.

In recent years, the problem of contamination has spread beyond glass. The problem was exacerbated when municipalities began increasing the size of bins, believing that bigger was better to keep more material from landfills.

Consumers have indeed been filling the bigger bins, but often with as much garbage as recyclable material.

With the extra room, residents stopped breaking down cardboard boxes. Because a full shipping box sometimes fits inside, even with foam and plastic wrap attached, all of it more frequently shows up at sorting facilities.

Residents have also begun experimenting, perhaps with good intentions, tossing into recycling bins almost anything rubber, metal or plastic: garden hoses, clothes hangers, shopping bags, shoes, Christmas lights.

That was exactly the case last year, when the District replaced residents' 32-gallon bins with ones that are 50 percent larger.

[D.C. said it was recycling — it wasn't.]

“Residue jumped a ton,” said Hallie Clemm, deputy administrator for the city’s solid waste management division. In fact, so much nonrecyclable material was being stuffed into the bins that after an audit by Waste Management last fall, the share of the city’s profit for selling recyclables plummeted by more than 50 percent.

That has driven up the city’s processing price for recyclables to almost \$63 a ton — 24 percent higher than if it trucked all of its recycling material, along with its trash, to a Virginia incinerator.

The D.C. Council recently approved a payment of \$1.2 million to Waste Management for the contract year that ended in May. In 2011, the city made a profit of \$389,000.

Little demand for newsprint

A large part of the problem for recyclers is falling global commodity prices — a phenomenon largely out of recyclers’ hands. But the negative impact of that trend is amplified by the contents of most recycling bins, because the composite of what Americans try to reuse has changed dramatically over the past decade.

Dwindling have been the once-profitable old newspapers, thick plastic bottles and aluminum cans that could be

easily baled and reused.

With oil prices driving up transportation costs, manufacturers have engaged in a race to make packaging more lightweight. Coffee cans disappeared in favor of vacuum-packed aluminum bags; some tuna cans went the same way. Tin cans and plastic water bottles became thinner, too: The amount of plastic that once came from 22 bottles now requires 36.

There was an even more pronounced drop in newsprint. Long a lucrative recycling commodity, it's not a key commodity market. In its place is something known as mixed residential paper: the junk mail, flattened cereal boxes and other paper items that these days can outweigh newspaper in a one-ton bale.

One bright spot has been an increase in cardboard. Analysts say that with more people buying items through online merchants, cardboard can account for up to 15 percent of cities' recyclable loads — more than double that of a decade ago.

The demand for that paper and cardboard, however, remains at a near-decade low. In China, containerboard, a common packaging product from recycled American paper, is trading at just over \$400 a metric ton, down from nearly \$1,000 in 2010. China also needs less recycled newsprint; the last paper mill in Shanghai closed this year.

[China doesn't even want to buy our garbage anymore]

With less demand, Chinese companies have become pickier about the quality.

Last week in Elkridge, an inspector from a Chinese company studied bales of paper being loaded into shipping containers bound for the port of Baltimore and, eventually, Asia.

If the inspector found more than five nonpaper items protruding from any one side of the bale, it was rejected, forcing workers to break down the material and send it all back through the processing facility.

The lightweight vacuum packs for food and paper-thin plastic bottles are increasingly part of the problem. They are so light that they get blown upward with the paper.

“We've seen economic downturns in the value of material in the past, but what's different now is that the material mix has changed,” said Patty Moore, head of California-based Moore Recycling Associates, which specializes in

plastic recycling. “The problem is, to get the same value out of your scrap, you have to shove a whole lot more material through the facility. That was fine when scrap values were high, but when they dropped, we realized it’s expensive to push all of this lightweight stuff through, and we’re in trouble.”

Brent Bell, Waste Management’s vice president for recycling, said the company has yet to see municipalities abandon recycling, and the company is maintaining its ability to recycle whatever cities send their way. But it is downsizing its operation and expecting little increase in recycling rates nationwide.

Last week, the Environmental Protection Agency announced a nationwide tally for recycling in 2013 that showed overall recycling had contracted for a second straight year, to 34.3 percent of the waste stream.

With those trends, Bell said the company is beginning tough discussions with cities about what it sees as a long-term economic reality: Cities must bear more of the financial impact of falling commodity prices. That’s the only way, Bell said, for recyclers like his company to invest in the business.

Steiner, Waste Management’s chief executive, went further. “We want to help our customers, but we are a for-profit business. We won’t stay in the industry if we can’t make a profit,” he said.

Clemm, the District’s recycling chief, said small efforts can begin to turn the tide. The District must begin by getting more garbage out of its recycling stream.

“Residents have a way to influence this by making sure they are recycling right,” she said.

Another possibility is to follow the urgings of the environmental community by expanding recycling programs to include composting — the banana peels and grass clippings degrading in landfills that by some estimates have become the nation’s third-biggest source of methane gas contributing to global warming. Composting is partly credited with the success of such cities as San Francisco, Portland and Seattle in increasing the share of the waste stream that is recycled each year.

There are also a few encouraging signs downstream in the recycling market. A recycled-plastics company in Troy, Ala., processes more than 500 million pounds of recycled material annually from plastic bottles — and with 450 employees, the company is growing. In the Midwest, another company opened two additional facilities this month to feed an Indiana paper mill that churns out 100 percent recycled cardboard.

Turning a profit on the initial, dirty task of sorting and processing the nation's recyclables, however, may take a larger overhaul, said Patty Moore. Governments may need to set standards or even consider taking over part of the process to better encourage investment and ensure that profits remain a public benefit.

"If we're going to be serious about secondary-materials management, we're really going to have to address it as a state or preferably national level," she said. "We need to harmonize what we're doing and make it work in a way that we're not spending all this money and spinning our wheels."

Aaron Davis covers D.C. government and politics for The Post and wants to hear your story about how D.C. works — or how it doesn't.



Peterson Industries

Meeting the Bulky and Special Wastes Challenge

These present a conundrum for solid waste managers throughout the United States.

BY CAROL BRZOZOWSKI

On one hand, waste management operations are doing what they can to ensure that bulky items are disposed of properly and not ditched on the side of the road, and that other special wastes receive proper disposal. Still, most waste managers would prefer to see fewer bulky items headed for the landfill and more put to good use for someone else.

Suki Janssen, interim solid waste director for Athens-Clarke County, GA, says the term “bulky waste” makes her uncomfortable. “It’s not waste,” she says. “It’s just items that have been misplaced or not in the reuse stream.”

Stephen Gillette, solid waste director for Colorado’s Larimer County, concurs: “I think people keep forgetting the three Rs: it’s reduce, reuse, and then recycle—and if all else fails, landfill. I think sometimes we just jump to number four.”

Waste management directors such as Debbie Krogwold, recycling coordinator for Waupaca County, WI, are educating the pub-

lic on sustainable practices that reduce waste.

“I believe user fees are important—not only for garbage, but the special wastes like hazardous waste, so they don’t feel like: ‘I’m going to have this; I’ll just get rid of it, and it’s not going to cost me anything,’” she says. “If it does cost a little bit, it will make them think that they’ll just buy what they need.”

Many municipal waste operations are partnering with non-profits to reuse and recycle unwanted waste that still has some useful life. Some areas are ramping up efforts to recycle.

In response to its residents’ passion for recycling, Athens’ solid waste department is opening up a center for hard-to-recycle materials this year.

“It will be taking items that we know there are outlets for in Atlanta, but we historically haven’t had the space to save it in a dry area where it can be sold or picked up for cost neutral to go to a recycler,” explains Janssen.

Colorado’s paint stewardship bill goes into effect July 1. The state will become the eighth in the US to implement PaintCare, a paint recycling program.

PaintCare is a non-profit organization created in 2009 by the American Coatings Association to represent paint manufacturers in states that pass paint stewardship laws. The Colorado Paint Stewardship Law implements an industry-operated and financed postconsumer paint management system that decreases cost and responsibility for local and state governments and makes paint recycling more convenient.

Half of products received through municipal household hazardous waste programs are paints. Some 10% of paint is leftover and unused. Some 65 million gallons of paint are leftover annually in the United States, including 1.2 million gallons in Colorado.

While normal waste collection is conducted through fairly predictable routes on

specified days in most communities, when it comes to special wastes, operations should always be prepared for the unusual, Gillette points out. "You never know when someone is going to call and say, 'I've got this,' and you say, 'You've got what?' Have your regulators on speed dial so you can help your customer in tight situations," he says.

One of the most unusual special wastes with which Gillette has had to deal came at the request of a veterinarian school. "They had an elephant to bring out that had passed away from TB," he says. "They called the state, and they thought the best thing to do was to bury this animal, because who has a regulation about do you accept an elephant? Be prepared, and think outside of the box."

Bulky waste items can present a challenge for many waste operations. In Athens, Janssen faces a particular challenge, though she adds it's not insurmountable.

Athens is home to the University of Georgia. And like at any campus anywhere in the US, once students leave at the end of the school year, they leave behind a trail of waste.

"During move-out time, which is typically in the spring and into early June as well, there is an exceptional amount of use-

able bulky waste," says Janssen. "People who don't live in college towns would be mortified at what students regard as waste. A lot of the students' parents have a lot of wealth or gave them money to buy mini-fridges, couches, chairs, end tables, coffee tables—you name it. Some of the kids I've talked to once they graduate college don't want that stuff anymore. They feel like they've become an adult, and they want to get new stuff."

In so doing, many don't try to seek out reuse options, she says. "A lot of good stuff still gets trashed in our community, and I'm sure we're not the only one," says Janssen.

The university, which operates its own recycling and trash crews, is trying to combat that, and Athens' solid waste department tries to assist, she adds.

Athens has a high poverty rate, "so getting that useful material that they would throw out into the hands of our impoverished citizens is something that we need to do a better job with at move-out time," says Janssen.

The challenge is that the move-out time occurs in a brief time period. "It's hard for all of us to get enough equipment, or equipment that doesn't tear up the material," she says. "We have a lot of rolloff containers, but

those aren't necessarily the best equipment to be hauling mini-refrigerators because it moves around, so having proper equipment, such as box trucks, would be a better way."

Additionally, it requires a lot of staff, or a group of volunteers, to handle the large load of useful material.

Goodwill has tried to make it easier by putting a tractor-trailer on campus to take some of the usable material.

The campus' program, "Dawgs Ditch the Dumpster," encourages students to donate unwanted material at the end of the year at dropoff sites in each residential community.

One particular challenge is dealing with unwanted items from off-campus housing. "That's a project that our staff has talked about that we really need to work on, to get apartment complexes to get on board with move-out programs," says Janssen. "That is another level of complexity, because you're dealing with private entities, apartment complexes, that often don't want to pay to get rid of that stuff. They take the easy way out. They hire private companies and slap a 20- to 40-cubic open-top container and tell the kids to have at it."

Since there is no legislation on the books

EMERYTOP 400™

is the World's
Toughest Floor.
Guaranteed.



Visit Us
at Waste Expo
Booth #3716

Your tipping floor takes daily abuse from impact, abrasion, and chemicals. Without a proper topping, your floor gives away until there's nothing left.

EMERYTOP 400™ solves your flooring problem by offering:

- Exceptional floor protection
- Fast installation
- Less cost over the life of your floor



Scan the video



A product brand of LATICRETE International, Inc.



www.emerytop400.com | 800.362.3331

that says the apartment complexes can't do otherwise, Athens-Clarke County's solid waste department does not have an option for them, Janssen says. "It's hard to compete with some of the low prices trash haulers offer. A lot of them don't have a place to store it, even if we asked them to, so we could get around with a box truck to pick it up."

Athens-Clarke County's solid waste department tries to encourage the apartment complexes to work with places such as Goodwill and Habitat ReStore, "but that is a work in progress," notes Janssen. "A lot of them don't want to store the material—they just want the fastest way to get rid of the material, and, unfortunately, that's a Dumpster."

There also are students who are "impatient and don't want to work within the confines of their apartment complex, so we have 11 dropoff sites in our community just for recycling material, so during move-out time we get hit pretty hard at our dropoff sites with bulky waste," notes Janssen.

The solid waste trucks try to get it picked up and to a reuse option if possible, but sometimes it's sitting out in the weather, and in even 24 hours it could be ruined, Janssen says.

On a day-to-day basis, the Athens-Clarke County Solid Waste Department owns and operates a landfill, collects residential waste in a defined area and commercial waste throughout the county, has a recycling division, and operates "Keep Athens-Clarke County Beautiful."

Janssen says that if one of the customers in the service area of 10,000 residential accounts wants to get rid of bulky waste, the solid waste department picks it up for an additional cost.

While 115,000 people live in Athens, fewer than half live in single-family homes. The others live in low-income housing or multifamily dwellings, which are considered commercial entities and are serviced

by the city's solid waste operation or private haulers.

"We operate our landfill and our collections division as Enterprise Funds, so we have to collect all of the money like a private entity would," says Janssen. "We charge a pickup fee and a disposal fee if it has to be disposed of in a landfill. If it can be recycled, then potentially there would be no disposal fee. But first and foremost, we do encourage all of our residents through education."

Athens has a number of nonprofit community reuse options for useable bulky waste, and the solid waste department encourages residents to first consider those options before landfilling. Those who want to landfill, but avoid the pickup fee, can self-haul to the landfill and are charged \$42 a ton.

In Temple, TX, bulky waste is collected twice a month from residential customers using a boom truck: a regular truck chassis with a 20- to 30-cubic yard bed and a large grapple claw/boom to pick up items curbside. The city also picks up brush, which is taken to the local wastewater plant where it is chipped and mixed to make compost.

The city has handled bulk and brush waste in this manner for more than 25 years, notes Lisa A. Sebek, director of solid waste services. "We believe this type of operation meets the needs of our department and our city. It is a safe and efficient operation," she says.

To those looking to create an effective program with such lasting power, Sebek advises other waste managers to do research. "Research what other cities are doing, research the needs of your own city, and then see what operation will work best in your city to meet the needs of your city operations and those of your citizens."

In Bunnell, FL, the solid waste department offers grapple service to the city's residents and businesses. Residents are allowed to put bulk waste, such as non-construction debris, out on the second pickup day of the week, 52 weeks a year. The items must have replacement value, such as rugs, mattresses, and furniture.

Bunnell offers twice-weekly waste collection services; the fee for bulky waste pickup is included in the monthly charge. An extra charge is assessed for businesses and residential households requiring service for items too small for a rolloff container. In that case, the customer may hire for grapple service, which is generally construction and demolition (C&D). Fees are based on the composition of the debris—C&D heavy class or industrial medium/light, says Perry Mitrano, director of solid waste.

Heavy mixed C&D materials that are not segregated from debris and cannot be recycled cost more to dispose. Lighter materials that cannot be recycled and must be landfilled are calculated as less, based on cubic yards. "Our experience in our market shows us the average cost is \$11 per yard, for both heavy or light," adds Mitrano.

The driving factor behind the program is "cutting costs out of the higher disposal wastestream," he says. "We are continuing to reduce our front-end commercial Dumpsters' weights by identifying debris that is really not Class one garbage, but Class three, which is less expensive to dispose of versus Class one."

Additionally, the practice keeps debris out of the waste hauling truck that may cause damage to the truck body, he adds. "Steel and wood debris, often, finds its way behind the blade or through the side of the body, thereby damaging the truck," says Mitrano.

For its operations, Bunnell uses two grapple trucks—one newer, and the older one Mitrano describes as "likely the most reliable truck we own. Department employees find the lower longer body is better operationally. We often have to work under wires and low branches. We recommend an 18- to 22-yard body."

In ensuring that the current program fits the community's needs,

SNI SNYDER INDUSTRIES, INC.

REFUSE CONTAINERS
POLY SIDE LOAD DUMPSTERS,
200-300-450 GAL. ROUND CONTAINERS

The superior design and construction, combined with the innovative features, makes these products stand alone in the marketplace. Containers are rotationally molded in a Snyder manufacturing facility located in the USA. Available in crosslink or high density polyethylene plastic resins and multiple color choices.

Visit us at Waste Expo Booth #1454




info@snyderplasticsolutions.com
 www.snyderrefuse.com
 Toll Free: (U.S. & Canada) 1-888-422-8683
 Ph: 402-467-5221 • Fax: 402-465-1220





STOP BACKING ACCIDENTS

Know the **DIFFERENCE** between **PASSIVE** (Camera, Radar, Ultrasonic Systems), and a **TRULY ACTIVE (GLOBAL SENSOR SYSTEM)**, with **AUTOMATIC BRAKING**.
Protect yourself and your community and prevent backing accidents with **GLOBAL'S INFRA-RED TECHNOLOGY** and **38 years experience**.

Upcoming Trade Shows:

WASTEEXPO
June 2-4, 2015
Las Vegas, NV
Booth #1830

CANADIAN WASTE & RECYCLING EXPO
November 4-5, 2015
Montreal, QC
Booth #2411

38 years
Oldest in the business

Global Sensor Systems, Inc.
400 Brunel Road
Mississauga, Ontario
Canada L4Z 2C2
Tel: (905) 507-0007
Fax: (905) 507-4177
www.globalsensorsystems.com
raygienn@globalsensorsystems.com

WASTE COLLECTION

Mitrano says that Bunnell's solid waste department strives for efficiency, capacity, and quality of service, and that the program is highly successful with no need to make changes. "Efficiency—we do pick it up fast. Capacity—we need to get it on one load, or have a transfer station or landfill nearby if we can't; this consideration helps decide the type of truck to purchase. Quality of service—Bunnell requires the service to pick up everything by close of business Friday," lists Mitrano. "The trashy country road pile in the city is not the look the department wants people to see, so we are self-inspecting and self-managing the trucks constantly, and communicating pickups during the day to ensure proper pickup."

In Midland, TX, the solid waste department has a call-in program for special and bulky wastes. "We have designated employees who are devoted to large-item pickup, and we also utilize inmate labor," notes Morris Williams, director of solid waste. "The city does not charge any additional fees for large-item pickup. The items are collected in the order that they were called in."

The original program was set up as a way to occasionally collect large items and "keep our alleys clear of large debris and our three-cubic yard alley containers from being filled with the items," notes Williams, adding that the city has substantially expanded the program over the years.

Midland utilizes two rear-load trucks and three pickup trucks that haul 16-foot enclosed trailers to handle the collection.

Williams says the program is falling short of meeting the community's needs. "The growth of our community has increased faster than our labor force," he points out. "This, in turn, keeps us running behind. Our program could improve with specified collection times and areas for citizens and education as to what is considered a large item that can be collected."

The city of Charlotte, NC, has been collecting bulky items as early as 1989, using the scheduling system, notes Brandi Williams, public affairs manager for Charlotte. Prior to that, bulky items were collected as garbage through the twice-a-week backyard garbage collection program.

The city began using an automated routing system in 2000. The service is provided weekly and at no extra charge to the city's 750,000 residents, who call in to schedule the items for collection.

"When they call in to schedule, we route each day for the most efficient collection," says

Williams. "This system allowed us to schedule bulky using three categories: bulky garbage, recyclable bulky white goods, and tires."

Three different trucks are dispatched for the separate wastestreams, which are then disposed in three different places in Mecklenburg County to county-owned landfills and MRFs. The white goods and tires are treated as recyclable material and sold on the recyclable market.

Prior to the current system, the requests were phoned in, and the trucks' routes were manually mapped the day prior to collection, says Williams. "Around the same time in 2000, we began to route the requests using a GIS-based solution that saved hours in map creation," she says. "The routing system improved over the years and in 2010, we began automated routing of the stops that further improved productivity by making the routes more efficient."

In addition to helping to decrease illegal dumping, the program also has helped keep white goods, tires, and electronics out of the landfill, Williams points out.

There is no extra charge for the service, but the waste hauling operation faces a challenge shared by many others. "We find that we have a large percentage of white goods and non-recyclable items such as couches, chairs, and tables that are not at the curb when we come to collect them," says Williams. "We believe this is because of scavenging. We would like to resolve this issue, because routing for and going to the location to pick up something when it is not there is an investment of time, fuel, and resources that is wasted when a considerable number of stops have already been collected. We're still in the brainstorming phase and exploring options for how to deal with this."

Berkeley County, SC, provides sanitation services to about 81,000 residential and commercial customers. Special waste must go through a screening process that includes a Toxicity Characteristic Leaching Procedure (TCLP) and a verification process to ensure that it is non-hazardous and able to go into a Subtitle D landfill, notes Mark Schlievert, director of solid waste for Berkeley County Water and Sanitation.

In South Carolina, sludge is considered a special waste, he says. "Periodically, have to run a fingerprint test on material as it comes in, and then every so often you have to do a TCLP," says Schlievert.

In general, the sludge is directed to the landfill and mixed in with the regular waste. "Asbestos in South Carolina has to have a

license and manifest coming from our regulator, which is the South Carolina Department of Health and Environmental Control," says Schlievert. "It has to be immediately buried three feet and covered. You also have to take the GIS location and elevation, and that's got to be documented to go along with the manifest."

As for bulky waste, depending on what it is, it may go into a Class 2 landfill, says Schlievert. "Otherwise, if it's MSW bulky waste, we just put it up on the landfill and mix it in with the rest of the waste," he adds. "We try to keep stuff like that as far away from side slope as possible. It can wick and cause leakage."

The Augusta County Service Authority in Virginia landfills bulky couches and mattresses that are placed into a rolloff box. All white goods are recycled. The program has been in place since the landfill was constructed in 1971.

Some of the bulky waste is placed into a Goodwill pod located at the site. That program has been in place for six years.

"They will take gently used furniture, and things of that nature, that they can put into their store or recycle," notes Greg Thomas-

son, director of solid waste management for the 125,000-resident service area. "They take electronics, books—it's amazing how many things they will take."

The Authority also does an annual collection for paints, solvents, batteries, and other special wastes. Thomasson says the program works well, as it gives residents two options for their waste: to bring for no charges items that can't be otherwise recycled or to donate them to Goodwill.

In the past couple of years, the Fort Collins, CO, area has had what Gillette describes as FEMA-type events that generated a great deal of debris: a fire in 2012, and a flood in September 2013. The latter event created mostly woody debris in the service area of 315,000 people.

"A county next to us chose to attempt to grind it and compost it, and then the people weren't too happy because they weren't sure this wasn't contaminated from a flood," says Gillette.

"We looked into grinding the material, but because of the double handling, we chose to bury it," he adds. "We asked people to cut the trees to six-foot sections, and we buried it. It worked for us. It saved our citi-

zens money to be able to bring this material in because they were able to handle it more readily, and the debris company we hired was able to get it cleaned up quicker than had we done other things with it."

In general, Larimer County's landfill compactor takes to large furniture and other bulky items brought in, while appliances are segregated and recycled.

Waupaca County in Wisconsin has had a transfer station, since 1994, at which bulky waste that can go to a landfill is brought in by residents and businesses, and is weighed on a certified truck scale with fees charged by the pound. "We have compactor boxes, and we contract with a private hauler who takes them to the Outagamie County landfill," says Krogwold. The department's service area includes 52,000 residents.

Some people will contract to have a private hauler transport the bulky waste either to the transfer station, or landfill.

Krogwold believes the program fits the community's needs. "At our transfer station we not only have the bulky waste that would be destined for a landfill, but we also collect fluorescents, oil filters, waste oil, recyclables, appliances, and electronics," she

BEFORE

AFTER

Knock boxes down to size with a Marathon vertical baler.

Marathon's vertical baler, your most reliable employee, makes recycling easier than ever. For more information, call 1-800-633-8974 or visit marathonequipment.com.

Visit us at WasteExpo in booth 2437.

MARATHON
Equipment

Environmental Solutions Group

© 2013 Environmental Solutions Group. All rights reserved. All trademarks are the property of their respective owners.

says. "There are user fees for that. But there is a program available for pretty much any waste residents have."

But, she sees room for improvement. "I wish we could handle it better and have more time to do that," she says. "In the hazardous waste program, we do accept hazardous waste from households, and there is a user fee on that program. That imparts the knowledge to people that they will have to pay for the waste—it's not free."

And it may get people thinking that they should buy just what they need as to not have to deal with getting rid of it later on, Krogwold says.

Outagamie County's solid waste collection service area covers 550,000 people. The county also partners with neighboring Brown and Winnebago counties. Most of the material that comes into Outagamie County is trucked in, notes landfill superintendent Bill Long.

"We do have private vehicles that come in with bulky material, and we help them unload—either with one of our landfill dozers, or with our excavator," says Long.

Special waste must meet one of three protocols and be approved for the landfill,

Long says. The protocols are labeled A, B, and C, and correspond with chemical concentration limits regulated by the Wisconsin Department of Natural Resources.

The program enables Outagamie County residents to get rid of their special waste products without a significant expense, says Long. It is the owner's responsibility to have the waste tested before bringing it to the landfill.

"It gives them an opportunity to have their material tested to see exactly what the content of that material is for both the landfill, and their own knowledge," adds Long.

In Lincoln County, WI, the small county-owned landfill handles MSW from five of the surrounding counties, as well as its own. There are some 50,000 people in the service area, notes Dan Miller, solid waste manager.

Bulky items are segregated. A tire pile is picked up by a tire recycler. Appliances such as stoves, refrigerators, and water heaters are sent to a salvage yard. The program has been in place since 1989; two years ago, an e-waste program was added to handle such items as televisions, computers, and VCRs are put into Gaylord boxes on pellets and stored in a cold storage building until there is enough

for a recycler to pick up the load.

Ease of use is the driving factor behind the program's success, Miller says. "We charge a very nominal fee—just enough to recoup our costs," he adds. "We don't want to see our county forests or the roadsides fill up with televisions or tires. We still have folks bring us some of those items that they've cleaned up out of the county forests. The county foresters will bring a load once in a while. Some of the townships clean them up out of the roadside ditches. You're always going to have scofflaws out there."

Lincoln County also takes lead acid batteries for no charge. Recently, the county added antifreeze and peanut oil from deep fryers to its list of accepted items.

The county plans to do a "clean sweep" operation in August for hazardous waste; the last was done in 2008. "We try to get the more obnoxious type items out of the residences and the farms," says Miller. "If that goes well, we may look at setting up a more permanent household hazardous waste collection site here as well."

The collection will include fluorescent light fixtures, bulbs, and thermostats, he says. Miller points out that Wisconsin

GREASELESS

Model D6620-27K

**SAVE TIME AND MONEY
WITH THIS LOW MAINTENANCE
CART LIFTER FROM PERKINS**

1.800.882.5292
www.perkinsmfg.com

April Environmental Ad
Built to your specifications
© 2015 Perkins Manufacturing Company



Perkins

See us on **YouTube**

708.482.9500
www.perkinsmfg.com

Wireless Collision Warning

www.PreViewRadar.com



www.PreViewRadar.com | 866.977.7326

Introducing

PreView® Wireless



What's Missing?
The 75' cable running through the truck body, cutting installation and asset downtime in half

What's Not Missing?
Collision Prevention
Injury Reduction
Saved Lives

Visit us at Waste Expo Booth 1859

PreView®
RADAR SYSTEMS
We've got your blind spot covered™
www.PreViewRadar.com

WASTE COLLECTION

exempts households from hazardous waste laws. "Small quantities can come into the landfill in trash, but some folks separate them out," he says, adding that Lincoln County subsidizes the fees its residents pay to take their hazardous waste to the permanent household hazardous waste collection site in two neighboring counties."

Meanwhile, Lincoln County is looking to make improvements in its program by expanding its universal waste collection to include some small electronics.

Pharmaceuticals are part of the special wastestream with which municipal waste management operations must address differently.

Many operations are partnering with local law enforcement offices to help collection efforts. Such is the case in Waupaca County, which offers year-round dropoff locations at three police stations and the sheriff's department at no charge. The county works with the state through a grant program to help with the cost of the disposal of the medication.

Larimer County's local police departments also act as a collection site for pharmaceuticals. Those that find their way into the county's household hazardous waste program are added to the flammables, "so that when they're taken away to be combusted, they're not available for someone to abuse or reuse," says Gillette.

Athens' solid waste department collects pharmaceuticals at two separate police department locations. Still, there are some who don't want to deliver the pharmaceuticals for incineration.

In its educational outreach, the solid waste department promotes those dropoff points as a first consideration, but for those who will not do so for whatever reason, they are instructed to not flush medications down the toilet, but rather put them in the garbage.

A local hospital near the Augusta County Service Authority hosts an annual collection for unwanted pharmaceuticals.

Solid waste operations have several equipment options for handling bulky and special wastes. "Petersen Lightning Loader is the original bulky and special waste collection loader," says Sam Petersen, vice president of sales and marketing. "Petersen Industries uses a hydraulically actuated knuckleboom with a special trash grapple built specifically for bulky items."

All equipment produced by Petersen is intended to automate this type of collection, he says. "This allows for an increase in effi-

ciency, along with greatly reducing employee injuries associated with the labor-intensive job of handling the loading of these items. With seven mounting variations of our Lightning Loader, Petersen Industries can produce equipment capable of adapting to all bulky waste collection scenarios."

Steve Barnhardt, national sales manager for Pac-Mac, says the company's knuckleboom loaders are suited to handle bulky waste. "They are offered in the knuckleboom or shuttle style, such as the KB20 medium-duty loader, the KB220 heavy-duty loader, the SKB20 standard shuttle loader, the SKB220 heavy-duty shuttle loader, and a self-contained rolloff unit," he says.

Stellar Industries' hydraulic hooklift hoists are suited for handling bulky waste, notes Donna R. Popp-Bruesewitz, company spokesperson. The company offers articulating tilt and sliding jib hooklifts in 50 models encompassing a wide range of capacities and body sizes. One truck supports numerous bodies. The design offers the operator the opportunity to load, unload, or change bodies without leaving the truck cab to increase efficiency and productivity, while cutting down on operational costs and maintenance.

The hooklift features permanently lubricated bushings, a dump/load interlock system, a low-flow/high-pressure hydraulic system, a full-length dump frame with front saddles to support the body during dumping, and rear body tie-downs and oversized rear hinge pins designed to ensure stability.

The Stellar Flex36 series hooklift was designed to replace 10 current Stellar hooklift models with four. The four Flex36 Series hooklifts, accommodating cab to axle measurements of 60, 84, 108, and 120, are designed to be pressure adjusted for lifting capacities ranging from 9,000 to 16,000 pounds, depending on the GVWR (gross vehicle weight rating) of the chassis.

The Stellar Slider Series Hooklift is a body handling system mounted on a truck chassis capable of loading, unloading, and dumping various bodies with a wider range of lengths using a hexagonal sliding jib. With hydraulic adjustable hook heights, the Stellar Slider Series will handle 36.63- to 61.75-inch hook height bodies, and will accommodate capacities up to 65,000 pounds.

Municipal solid waste managers offer the following advice to those starting programs for special and bulky waste:

- Set an initial goal and monitor its progress as your city's needs grow, notes Williams.

- Set the stage with the equipment necessary to do the tasks. "You have to get it in and out of your site as fast as you can, because the waste does take up a lot of area," explains Long.
- Hire a consultant if necessary. "The special waste program is a very concentrated program, and it takes a lot of management," says Long.
- Start small. "Think things through," instructs Miller. "Electronic items need to be protected from the elements, so you'll have to have adequate storage space for them, whether it's an enclosed rolloff container or a shed. Appliances, as long as you have them on a hard surface, can be stored in the open. Tires are bulky and take up room."
- Make the program easy and convenient for both the people dropping off the waste, and companies that will be picking it up for other uses. "People will take advantage of a program and won't improperly dispose of materials if it is convenient for them and doesn't cost that much," says Krogwold.
- Make education a critical program component. "It's important for programs

to not only look at the proper disposal of various items, but also at the waste reduction," says Krogwold. "Are there things that can be addressed to facilitate not producing it in the first place? Waste reduction is an important component of a waste management system."

- Analyze the wastestream, and know your population's habits, advises Janssen. "There are peak times you're going to have to deal with this because you may have to get additional assistance or equipment," she says. Gillette adds that examining the expected volume helps with planning: "If you're going to get 400 couches or 2,000 mattresses, how are you going to handle it? Are there other places where one can use it or recycle it? Are there other uses?"
- Team up with non-profit organizations to help divert some items from the landfill. Compile a list of community resources

that inform residents about non-profit entities that will take in unwanted items, Janssen says.

Mitrano points out that government entities must have ordinances—laws, rules, and regulations—"to manage and explain why you may do the things government does. Along with that, you must have resolutions of fees to regulate prices and keep them fair."

Governments under contract with a private hauler within a franchised closed or open market must help the private hauler by using ordinances to promote the type of services used within the franchise, he adds.

"If you are a government agency, like an Enterprise Fund as we are here in the City of Bunnell, where the department operates like a business and funds itself via fees for service or part of the general fund which is taxed-based, I highly recommend leasing the trucks and turning them back in for a new one before the warranty expires," advises Mitrano. "That reduces the maintenance cost, other than general wear-and-tear like tires, oil changes, and hoses." **MSW**

For related articles:

www.mswmanagement.com/collection

Carol Brzozowski specializes in topics related to waste management and technology.

Discover The Difference! Tougher, Stronger, Lasts Longer.

Visit Us at
Waste Expo
Booth #3431

Diamondback Products' cart tippers have fewer moving parts, which means less inventory to stock and fewer repairs for your fleet.

Simple Is Better.

MODEL 100

MODEL 200

MODEL 450
Side Load

MODEL 600

MODEL 500



888-313-1424

P.O. Box 2235 • Welcome, NC 27374

www.diamondbackproducts.com

MSW and the Promise of Biotechnology

When it comes to its progress in achieving zero waste to landfills, the United States is on a par with Slovenia and the Czech Republic. BY JAMES L. STEWART

On average, the top eight countries in Europe for landfill diversion (Germany, Austria, Belgium, the Netherlands, Switzerland, Sweden, Denmark, and Norway) are putting just 2% of their solid wastes into landfills. Each is recycling and composting at least 50% of its wastes, and collectively they employ 228 thermal waste-to-energy (WTE) plants—exactly half of all such plants in Europe—to treat their residuals for energy recovery. Germany and Switzerland now report that they have achieved zero waste to landfills.

The German Federal Environment Agency estimates that the energy generated by its 80 thermal plants saves some 9.75 million tonnes of carbon dioxide emissions (CO₂) annually by replacing fossil fuels like coal or oil.

In the US, MSW generation has hovered around 250 million tons per year for the past decade. In recent years, about 35% has been recycled or composted and another 12% has been incinerated for energy recovery. As a nation, we are still landfilling more than half of the solid waste we create.

When it comes to its progress in achieving zero waste to landfills, the US is on a par with Slovenia and the Czech Republic.

In all due respect, despite all best intentions, these facts confirm that the goal of zero waste to landfills cannot be achieved through the recycling of finished products and composting alone.

Admittedly, by tonnage, the primary waste conversion technology in use in Europe and in Asia is now state-of-the-art incineration. Japan, however, is the world's largest user of MSW gasification. It has more than 120 plants that employ gasification-related equipment from companies like JFE, Nippon Steel, Ebara, Mitsui, Kobelco, and Westinghouse Plasma. Only 2% of Japan's MSW is being disposed of in landfills, a goal that was established out of necessity decades ago, due

to their lack of available landfill space and the fact that the transport of MSW from one municipality to another is not allowed.

In less than 20 years, China has become a major player in waste-to-energy, constructing more than 100 WTE plants that process 17% of its MSW. The European and Asian experience compels regulators in North America to modify their definitions of recycling to include not only finished products, but the recovery and reuse of carbon at the molecular level. At a minimum, public jurisdictions should be allowed to obtain landfill diversion credit whenever MSW residuals are converted to syngas (composed primarily of hydrogen and carbon monoxide) and reconstituted into

the nation's dependence upon landfills and contribute to national security, energy independence, and a better environment.

Today, the promise of biotechnology has taken wing. The production of biofuels now extends beyond corn-based ethanol. Last year, POET-DSM, Quad County Corn Processors, Abengoa, and DuPont joined INEOS Bio (whose technology is capable of processing MSW) in commissioning commercial plants that produce cellulosic biofuels from agricultural residues, forest resources, and energy crops. Also, during the year, US biodiesel production reached 1.75 billion gallons, and technologies for the production of biobased chemicals moved forward rapidly.

Despite all best intentions, the goal of zero waste to landfills cannot be achieved through the recycling of finished products and composting alone.

electricity, liquid energy, or biobased chemicals, from which a wide array of biobased products can be produced.

Such a policy would be consistent with California law, which defines recycling as "the process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products, which meet the quality standards necessary to be used in the marketplace," words which the state's bureaucracy has steadfastly refused to put into effect.

A decade ago when the BioEnergy Producers Association was founded, it was widely anticipated that conversion technologies (CTs) would soon meaningfully reduce

However, the success stories in MSW were few. Only Canada's Enerkem commissioned a commercial scale biorefinery that uses MSW residuals as a feedstock for the production of biofuels and chemicals. It will annually gasify 100,000 dry tonnes of post-recycled solid waste, initially to produce 10 million gallons of biomethanol, a chemical intermediate, and later cellulosic ethanol. It is part of an integrated waste management system for the City of Edmonton where 20% of the city's waste is recycled, 40% is composted, and 30% is used to produce biofuels. The project has increased the city's landfill diversion rate from 60% to 90%.

After a decade-long effort and billions of dollars of expenditure, CTs have yet to fulfill their promise in addressing one of North

America's primary environmental goals—reducing the 125 million tons of post-recycled MSW that come to rest in our nation's landfills each year.

Why? The reasons are clear:

1. Nothing discourages capital investment more than *federal regulatory uncertainty*. The Renewable Fuel Standard (RFS), the platform that motivated billions of dollars of private sector investment and enabled the development of the first-generation biofuels industry (ethanol and biodiesel), has been under continuous attack in Congress, as have the federal grant and loan guarantee programs that have supported its development. The \$1-per-gallon biodiesel tax incentive, vital to the industry, lapsed at the beginning of 2014, was not retroactively reinstated until December, and several weeks later, was again allowed to expire. In mid-April, in settling litigation filed by the petroleum industry, EPA agreed that it would propose biofuels volume requirements for 2015 by June 1, and finalize its Renewable Volume Obligations for both 2014 and 2015 by November 30. These numbers, which establish the volume of biofuels that must be blended into the nation's transportation fuels under the RFS, are intended to enable producers to plan their production levels so as to comply with these federally mandated targets. Although EPA has now agreed that the 2014 volume requirements will reflect the amount of fuel that was actually used during that year, the announcement came almost two years too late to be of any value. The 2015 numbers are coming almost one year too late. EPA has now committed to announce its RPS (Renewable Portfolio Standard) obligations for 2016 on schedule.
2. *Commodity price instability*: The past year's collapse of petroleum prices, mirrored in the price of natural gas, has impacted conversion technology developers as well as first-generation ethanol producers. Vast swings in the price of petroleum, corn, and ethanol, and the value of RINs that track compliance with the RPS have eroded operating margins and discouraged capital investment, and in the past, have caused some first generation biofuels producers to shut down for periods of time. This year's OPEC-orchestrated petroleum price war has not only been an attempt to slow western oil and gas development, it has been a direct attack on the economic vitality of alternative fuels.

3. *Entrenched opposition*: Aided and abetted by the nation's livestock, poultry, and food production interests, the oil and gas industry has spent at least \$140 million on lobbying in each of the past six years, protecting deep federal subsidies for petroleum, while blaming biofuels for everything from global warming, to increasing food prices. Attempts to break through the E10 blend wall have led to an infrastructure standoff, with the major oil companies resisting the installation of E15 and higher ethanol blender pumps and

advocating the repeal of the RFS.

4. *Price Competition*: Natural gas prices, which are expected to remain depressed over the next decade, have made low-priced fuel and electric power accessible in much of the nation. Further, as opposed to Europe and Japan, landfill capacity and acreage for expansion remains plentiful, keeping tipping fees within reason throughout much of the country.

Last February, Plasco Energy, after investing almost \$400 million in its process over 10 years, filed for bankruptcy. According

Fleet of One. Doing More With Less.



One Truck. One Operator. Unlimited Earning Potential. When it comes to maximizing your day to day operations, consider the Stellar[®] Hooklift system. The simplicity of design and operation are key features that will allow a single truck and a single operator the ability to load, unload or change bodies without leaving the truck cab. This drastically increases efficiency and productivity while cutting down on operational costs and maintenance.



Visit us online
www.stellarindustries.com/one

STELLAR Our People. Our Products.
 800.321.3741

Waste Expo
 Let's Hook Up!
 Booth #2259

to court documents, Plasco Group engineers “concluded that certain aspects of the conversion system needed to be redesigned in order to sustain commercial operating performance on an economically viable basis. . . .” Concern about “its ability to operate at commercial levels and to convert both wet and dry waste continuously,” and an economic model that relied upon high tipping fees and electric power prices, had long hampered the company’s ability to take the technology beyond the demonstration stage.

5. *Consistent, homogenous feedstock* is critical to the MSW conversion process. Conquering this single complexity has slowed commercialization and even defeated some of the industry’s most promising technologies. The production of uniform refuse derived fuel is often a necessary intermediary step between recycling and gasification.

In mid-2014, INEOS Bio reported that, since completing construction of its \$130 million Vero Beach facility two years earlier, “very little fermentation or production of

ethanol from the production fermenter had occurred, due in large part to the sensitivity of the bio-organisms in the fermentation process to high levels of hydrogen cyanide in the syngas.” Design modifications, including the installation of HCN scrubbers, resulting from challenges encountered during commissioning have delayed nameplate level

and waste management contracts in the nation’s major markets, MSW feedstock agreements for more than 400 tons per day can be difficult to achieve. The opportunity for CT projects appears to rest in smaller to mid-sized communities, where projects can be developed with individual waste management companies or through public-private partnerships.

In years past, to stimulate the introduction of recycling, local governments and the waste management industry integrated the cost of separating and recovering selected commodities from the MSW stream into the fees they charged to their customers.

However, no provision has ever been made for the further recovery and pre-processing of MSW residuals (i.e., RDF units on the back of MRFs) prior to final disposal. The production of uniform feedstocks for biorefineries, established as part of and financed by local IWM systems would go a long way to lifting one of the major technical and economic burdens being experienced by emerging bioindustries. For this to happen, the environmental benefits of such a program

Worldwide, there is enough MSW available to produce 42 billion gallons of cellulosic biofuels.

operations for almost three years. And, this has occurred with cellulosic wastes. Mixed MSW has yet to be introduced.

As early as 2012, Coskata, which was founded on the premise of MSW conversion, switched its feedstock strategy to natural gas.

6. *Feedstock aggregation:* Firm feedstock and offtake agreements, contracts for 10 years of more, are normally required for debt financing. Due to the diversity of haulers

SAFER, SIMPLER AND SMARTER –

MATERIAL RECOVERY SOLUTIONS

Municipal Solid Waste | Single Stream | Construction & Demolition | Green Waste | Waste to Energy

SINCE ITS FOUNDING IN 1835,
McLanahan Has Been Helping Companies Be
More Efficient, More Productive And More Profitable.

CONTACT US TODAY
To See How We Can Help You Do More
With A Custom Engineered Recovery Facility

McLanahan

+1 (615) 451-4440 | sales@mcclanahan.com | mcclanahan.com

BUILTRITE™
HANDLERS & ATTACHMENTS

Whether Loading, Tamping or
Sorting, We Can Handle It.



Builtrite Manufacturing
530 Recycle Center Drive
Two Harbors, MN 55616
218-834-5555

builtritehandlers.com



Visit Us at
Waste Expo
Booth #1339

would need to be universally recognized by both policy makers and environmentalists, as was the case for traditional recycling. To date, vested interests have effectively prevented this from happening.

7. *State regulatory uncertainty.* A number of state governments, most notably California, have been unwilling to provide developers with a feedstock-driven, technology neutral waste conversion playing field. Although energy recovery or the production of biofuels and biobased chemicals may be a higher and more profitable use of MSW than can be achieved in traditional recycling, this alternative does not appear in many waste hierarchies, nor is this given credit for landfill diversion.

During the past 10 years, California has landfilled approximately 340 million tons of municipal solid waste, much of which has not even been segregated for standard cans-and-bottles recycling, but instead is collected and sent directly to landfilling. Yet, California's legislature and administration have not taken a single productive step to enable its use as a sustainable feedstock.

Throughout that time, California's own BioEnergy Action Plan has included language directing CalRecycle, its waste management agency, "to work to promulgate changes to existing law to develop a regulatory framework for biomass waste conversion facilities, meeting environmental standards, that clearly distinguishes them from disposal, and provides clear permitting pathways for their development, as well as provides diversion credits to local jurisdictions for solid waste processed by these technologies."

Further, the state's Air Resources Board has acknowledged that organic waste is one of the only feedstocks that, on a life-cycle basis, will meet the emissions reduction objectives of California's Low Carbon Fuel Standard. Its staff once declared that 24 waste-to-biofuels facilities would be required in the state by 2020 to assist in meeting the goals of this program. Its Economic & Technology Advancement Advisory Committee has said that, "By conservative estimates, CTs have the potential to reduce annual greenhouse gas emissions by approximately five million tons of CO₂ equivalent in California alone."

And yet, the state's legislative and administrative bureaucracy has blocked all efforts to remove from statute a definition of gasification that is universally acknowledged to be scientifically inaccurate. Among its provisions, it requires zero emissions from the entire biorefining process, a physical impossibility

and a standard that would shut down every power plant and petroleum refinery in the state. The uncertainty caused by this definition, which governs the regulation of CTs, opens the door to spurious legal challenges by extreme environmentalists, and thus, has caused this emerging industry to turn its back on the state.

Contrast this with Iowa, where, with unanimous support, a bill is moving through its legislature to add conversion technologies to the state's waste hierarchy. Its solid waste management policy will soon read, in order of most-preferred to least-preferred, "volume reduction at the source, recycling and reuse, waste conversion technologies, combustion with energy recovery, and other approved techniques of solid waste management including but not limited to combustion for waste disposal and disposal in sanitary landfills."

In 2011, California established a policy goal of 75% landfill diversion by 2020, which means that, by that date, it will have to reduce by approximately 10 million tons the amount of material it landfills each year. It believes that it can achieve this by requiring universal commercial recycling and further reducing the volume of organics in the residual waste stream. Even if it could possibly achieve this goal, why not reduce the amount of inorganic waste being landfilled, as well, when plasma gasification technologies can turn inorganics into useful products?

The plasma vitrification process offers immense potential for MSW disposal, because it is capable of achieving 100% landfill diversion. Plasma processes run at temperatures well over 5,000°F, and at these high temperatures, they are able to break down any terrestrial material with an ultra-clean emissions profile. Plasma Power of Ft. Lauderdale, Florida, a leader in plasma technology, has achieved thousands of hours of commercial operation, processing a wide range of waste streams, including MSW, post MRF Residuals, coal ash, drilling waste, ASR, biomass and other industrial wastestreams that are hard to remediate. The process is self-powering and able to convert its vitrified product into high value insulation and other green products, resulting in zero waste.

In the United Kingdom, Air Products is constructing two major MSW projects at their Tees Valley Renewable Energy Facility using the advanced Westinghouse plasma gasification technology of Alter NRG. The first of their kind in the UK and the largest of their kind in the world, each will generate 49.9 MW of baseload power, diverting

950 tonnes per day of non-recyclable waste from landfills and producing enough renewable electricity via combined cycle configuration to power the equivalent of 50,000 homes. The first plant is now commissioning and the second, well into construction, is expected to come on line in 2016.

Solena Fuels, in partnership with British Airways, has targeted 2017 for completion of a biorefinery east of London that will annually produce approximately 42 million gallons of sustainable jet fuel and diesel. Solena will employ its patented single-phase, high-temperature plasma gasification system and the modified fixed-bed, microchannel Fischer-Tropsch process of Velocys to convert 575,000 metric tons of post-recycled MSW, wood waste and agricultural waste to jet fuel and diesel. British Airways has made a long-term commitment to purchase all 17.5 million gallons of the jet fuel produced by the facility each year at market competitive rates.

E2 Environmental Entrepreneurs, in its 2014 Advanced Biofuel Market Report, identified seven companies in the US and Canada that are pursuing technologies capable of producing advanced biofuels from mixed MSW feedstocks. These are defined as technologies whose carbon intensity is at least 50% below that of petroleum, as measured by the California Air Resources Board.

The 2014 E2 report predicted that 34 advanced biofuels plants will be on line by 2017, but only six of these were expected to process MSW, and three of them are projects of Enerkem. Only Fulcrum and Fiberright were projected to commission additional MSW-related biorefineries by that date.

Fulcrum BioEnergy has traveled a long and challenging road in technology development and project finance, but the company has

remained firm in its commitment to convert MSW into biofuels, obtaining long-term, zero-cost MSW feedstock commitments representing about 4% of the MSW being landfilled annually in the US.

After initially focusing on ethanol, Fulcrum has moved to the production of a syncrude that can be upgraded to “drop-in” jet fuel or diesel. It will use the steam reforming gasification process of Baltimore-based ThermoChem Recovery International and conventional Fischer-Tropsch technology. Benefiting from commitments for a \$105 million USDA loan guarantee and a \$70 million grant from the Advanced Drop-in Biofuels Production Project of the Department of Defense, its first plant, now commencing construction east of Reno, Nevada, will annually consume 147,000 tons of zero-cost MSW to be delivered by Waste Management and Waste Connections. Aware of the need for gasification feedstock consistency, Fulcrum is building its own pre-processing facility onsite.

Fiberright has operated a demonstration facility in Lawrenceburg, VA, for more than 5,000 hours, that involves MSW feedstock pretreatment, including pulping, and enzymatic hydrolysis to produce industrial sugars that can be sold as is or fermented to produce ethanol. After EPA ruled that CNG produced from biogas qualifies as advanced biofuel and for D3 RINs, Fiberright put on hold its plans to convert organic residuals to ethanol at its shuttered Blairstown, IA, ethanol plant, and now plans to employ anaerobic digestion to produce CNG from C5 sugars at a 300 ton-per-day MSW shredding and sorting facility in Marion, IA. In Maine, it is pursuing the same concept, only larger, through a public-private partnership formed to process the MSW of 187 mid-coast communities.

In the past two years, substantial development capital and



shredding + briquetting

**EXPERIENCE.
GROWTH.
DEPENDABILITY.**
SIZE REDUCTION TECHNOLOGY

888-440-7170
INFO@WEIMAAMERICA.COM

WEIMAAMERICA.COM

waste expo
a waste 2015 event

BOOTH NUMBER #2997



Scan to see this shredder in action!



research has been focused on biobased chemicals and bioplastics, where prices and margins are more attractive, markets are more stable, and the plant-based feedstocks used to create C5 and C6 sugars are less vulnerable to the commodities speculation we have experienced with petroleum and corn. Renewable chemicals and bio-based products face a less intrusive federal regulatory environment than biofuels, and they are now eligible for loan guarantees.

However, one promising biobased chemicals producer that remains focused on MSW is Kiverdi. Among its feedstocks, Kiverdi can gasify MSW as its first step in producing high-value oils and chemicals for such product applications as detergents, biomaterials and fuel additives. Its proprietary high-yield microbes can sustainably produce high quantities of oils from waste carbon, decoupled from the price fluctuations, supply chain disruptions, and geopolitics associated with commodities.

So, what does this mean for waste managers who are beginning to think about options for the future?

It means be patient. Look for modular technologies that can easily be replicated, ones that are feedstock flexible and capable of creating multiple revenue streams. "Drop-in" fuels—those with the same molecular structure as refined petroleum, that can be transported through existing pipelines, that can be blended with or replace petroleum-based fuels without regulatory limitation—will have an easier time entering the marketplace. Some version of California's LCFS will one day be adopted by other states across the nation, and

For related articles:

www.mswmanagement.com/WTE

MSW-based drop-in fuels will be well positioned to help achieve their goals.

A recent study by Columbia University's Earth Engineering Center estimated that if all of the MSW that is being landfilled in the United States were converted to power,

it could generate enough coveted base load power to serve nearly 14 million homes, or 12% of the nation's total. It would reduce greenhouse gas emissions by at least 123 million tons of carbon dioxide equivalents per year, an amount comparable to taking more than 23 million cars off the road.

Viewed another way, the organic materials that America places in landfills each year contain the energy equivalent of approximately 240 million barrels of oil.

Worldwide, there is enough MSW available to produce 42 billion gallons of cellulosic biofuels.

It has been estimated that energy recovery will ultimately generate 70% of the revenue attributable to next-generation waste management technologies in North America.

The industry has embarked on a paradigm shift. By the end of this decade, MSW will be seen as an asset, a strategic resource in a circular economy.

So, stay the course. Take an active part in the political process. The logic of recovering the energy value in the nation's MSW residuals—before they are placed in landfills will ultimately prevail. **MSW**

James L. Stewart is the Chairman of the Board of California's BioEnergy Producers Association.

YARD AND FOOD WASTE

• LOW-MAINTENANCE OPERATION

• MAXIMIZED BIOGAS PRODUCTION

Now do you
maximize the value
of your organic waste?

EISENMANN

WasteExpo
Booth #3661

Eisenmann's fully automated anaerobic digestion solutions turn today's organic waste into tomorrow's green energy.



Free Webinar "Anaerobic Digestion of Organic Waste Streams"

forester.net/organics

organics@eisenmann.com • www.eisenmann.us.com

Issue Brief

Creating Fuels from Post-Use Plastics

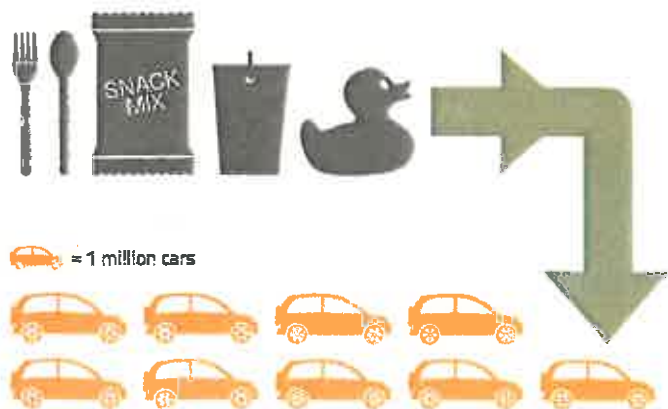
Transforming non-recycled used plastics into valuable fuels, petroleum products and chemical feedstocks

Producing Sustainable, Alternative Energy with Plastics-to-Fuel Technology

A rapidly expanding set of technologies is enabling communities to divert non-recycled plastics from the landfill by converting them into useful fuels and chemical feedstocks. And there's plenty of potential for these technologies to be adopted in communities across the country. Consider this: If all of the non-recycled used plastics headed to U.S. landfills each year were instead converted into fuel, it is estimated that these technologies could produce enough fuel to power more than nine million cars each year.¹

At present, however, many state governments lack a clear regulatory framework for permitting these new technologies, so adoption is somewhat limited. Recognizing that used plastics actually are a valuable feedstock for manufacturing — rather than a waste — will likely require a paradigm shift. A better

If all of the non-recycled used plastics headed to U.S. landfills each year were converted to fuel, it is estimated the nation could produce enough fuel to power more than 9 million cars each year.



understanding of the plastics-to-fuel process, plus updated regulations for these facilities, can enable the energy from non-recycled plastics to be safely and efficiently recovered.

Economic and Environmental Value of Creating Fuels from Non-Recycled Plastics

Plastics recycling continues to increase in the U.S. While reuse and recycling are the preferred methods of plastics recovery, it is not always possible for all plastics to be recycled. So there is a real need and opportunity to identify viable means of recovering those plastics that are not recycled.

For the material that currently ends up in landfills, one option is to convert plastics into usable sources of energy. Many of the plastics that cannot be recycled are viable sources, or feedstocks, for plastics-to-fuel conversion.

Plastics-to-fuel technologies use a chemical process (pyrolysis) to change the materials' properties, thereby salvaging and repurposing the energy for use in other products. The standard plastics-to-fuel process goes something like this:

1. Collect plastics that cannot be recycled.
2. Remove contaminants — such as metal and glass — from the plastics stream.
3. Heat plastics without the presence of oxygen to create gases.
4. Cool and condense the gases into oil, fuels and petroleum products.

Processes may vary slightly, but they can be designed to create fuels and/or new feedstocks for transportation, manufacturing and other industrial uses. For example, some plastics-to-fuel technologies can produce low-sulfur crude oil that can be refined into synthetic diesel fuels, lubricants, waxes or even feedstocks for new chemicals and plastics. Fuels can be used for transportation (e.g., cars, ships, planes) or industrial boilers. A carbon-based by-product of the process, sometimes

The Plastics-to-Fuel Process

STEP 1:
Plastics that can't be recycled are delivered for processing.



STEP 2:
Contaminants like metal and glass are removed from the plastics stream.



STEP 3:
Plastics are heated without oxygen (pyrolysis).

STEP 4:
Gas is cooled and condensed into oil, fuels and petroleum products.



Fuels can power cars, buses, ships and planes.



Petroleum products can then be used by manufacturers and industrial users.



called "char," may (under certain conditions) be used as a carbon black or even as a coal replacement in cement kilns and boilers. And non-condensable gases (including propane) can be captured for use as process energy.

This conversion process can be used to efficiently recover the energy embodied in plastics, can displace some of the need for virgin crude oil extraction and can help preserve the open space that otherwise would have been used for a landfill.

Misconceptions About Plastics-to-Fuel Facilities

The potential benefits of plastics-to-fuel conversion are many, but the technology is not yet widely used. It's important to understand some of the barriers to innovation.

One common misconception is that plastics-to-fuel conversion will counter recycling efforts. However, high-value, widely recycled plastics are not converted into fuels because it often doesn't make economic sense. On the other hand, many non-recycled plastics are ideal for conversion. Examples include food-contaminated plastics, agricultural plastics, multi-layered flexible packaging, some plastic toys and some engineered resins.

A challenge to more rapid commercialization of this technology involves the regulatory classification of plastics-to-fuel technologies. These innovative manufacturing technologies don't fit neatly into most current regulatory schemes that, by default, may classify these manufacturing

processes as solid waste disposal or waste-to-energy (where mixed, unprocessed waste is combusted to produce energy). Such inaccurate and outdated classifications place unnecessary restrictions on these facilities.

Compare, for example, a plastics-to-fuel facility to a typical solid waste disposal endpoint, such as a landfill. A landfill stores mixed solid waste and after it no longer receives waste it often must be managed over its life for methane recovery and

Four Things to Know About the Plastics-to-Fuel Conversion Process

- 1 It helps keep non-recycled plastics out of landfills.
- 2 The resulting petroleum products can displace some virgin energy sources.
- 3 Plastics are heated in an oxygen-deficient environment until they melt and then become gases. The gases are then condensed into petroleum products.
- 4 It is very efficient — it uses a small amount of energy to produce a large amount of energy.

leachate. By comparison, decommissioning a plastics-to-fuel facility typically requires removal of any remaining plastics and disassembly and removal of the machinery.

The Ins and Outs of Properly Regulating Plastics-to-Fuel Technology

Regulatory best practices that resolve discrepancies between dated waste policies and current opportunities might begin by broadening the definitions of "clean energy" and "renewable energy" to include energy recovery — the recovery of non-recycled waste that is transformed into usable energy and fuels. Such best practices might also take into account the benefits of regulating plastics-to-fuel facilities like

other manufacturing processes. And they might recognize that manufacturing fuels and petroleum products from non-recycled plastic feedstocks can strengthen community-based, integrated resource management strategies.

Following are some guidelines for modernizing and streamlining state and local regulations to help standardize the approval process for plastics-to-fuel facilities and to capitalize on non-recycled plastics as a local resource.

- 1. Zone plastics-to-fuel facilities as light industrial manufacturing facilities.** Manufacturing is generally defined as the process of converting raw materials, components and parts into finished goods that meet a customer's expectation. Plastics-to-fuel conversion is a

Non-Recycled Plastics as a Valuable Energy Resource

Many states, such as North and South Carolina, have a robust plastic recycling industry. In this Q&A, Scott Mouw, the state recycling director for North Carolina's Division of Environmental Assistance & Customer Service, shared some thoughts on how the Carolinas are building upon this foundation and remain open to the development of plastics-to-fuel facilities to reduce landfill waste and create economic growth throughout the region.



Q: What do recycling efforts currently look like in the Carolinas?

SCOTT MOUW: We take recycling very seriously. For example, we helped form the Carolina Plastics Recycling Council, a partnership of recycling companies and other stakeholders, to increase plastics recovery in North and South Carolina. Our state recycling program has worked hard to expand drop-off and curbside services, as well as develop other programs to recover industrial and agricultural plastics. In the interest of landfill diversion, we are striving to capture all of the value of plastics we can, and that would include the energy value of the material.

Q: How might plastics-to-fuel technology fit into that infrastructure?

SCOTT MOUW: This new technology has the potential to enlarge the spectrum of divertible materials. More and more low-grade plastics are entering the recycling stream and more could be captured. These plastics need markets to help us reduce their flow to landfills.

Q: Might some regulators and recycling companies fear that recyclable plastics will end up in plastics-to-fuel facilities?

SCOTT MOUW: Plastics-to-fuel technology should ideally complement recycling. Some plastic recyclers may worry they'll lose their streams, but I don't believe they will. The technology targets low-value, mostly non-recycled plastics, not high-value recyclables, so there should not be a use conflict but instead an opportunity to capture more plastics from disposal.

Q: What are some key permitting and zoning concerns?

SCOTT MOUW: Regulators always seek to protect public health and reduce environmental risks, so they'll ask lots of questions

about plastics-to-fuel technology and its use. What does the conversion process involve, and what's the incoming stream like? And what's left over at the end of the process?

South Carolina has a plastics-to-fuel facility zoned as light industrial manufacturing, and another facility may open in Fayetteville, N.C. While other materials may inadvertently be mixed in with the plastics and require management and disposal, the facilities themselves don't store solid waste. The process isn't one of waste disposal or waste to energy; the site's not a landfill. The site would be permitted and zoned accordingly.

Q: It sounds like the Carolinas are trying to lay a solid groundwork for use of the technology.

SCOTT MOUW: That's right. I think we're prepared to explore opportunities in a smart, strategic way. From there, the market will dictate what makes the most sense. As the industry develops — and I hope it does — we'll all need to improve our understanding of how the technology fits into broader materials management efforts.

Q: What do you see happening at the state level going forward?

SCOTT MOUW: We want to connect plastics-to-fuel companies with the appropriate resources and be part of the conversation. We'll help companies find industrial-zoned properties and identify incentives that might apply. In the long term, we would love to see facilities with the right business model located in the Carolinas and be part of how our state manages the plastics discard stream. We don't see any advantage to putting non-recycled plastics in landfills, especially if we can extract value from them; instead, we want to harness the embodied energy in the materials and not let that go to waste.

A new 21st-century paradigm is needed that recognizes the value of non-recycled waste and allows innovative conversion technologies to flourish. By altering the prevailing perspective on used materials from a liability to an asset, the nation can realize the benefits of recovering energy from more of its post-use resources and send fewer plastics to landfills.

manufacturing process because it uses non-recycled plastics as a raw material for conversion to fuels and chemical feedstocks. It is not a disposal process that stores solid waste (materials that cannot be sorted and upgraded for reuse).

2. Identify manufacturers of fuels from non-recycled plastics feedstock as alternative energy producers, not as waste disposal companies.

Plastics-to-fuel facilities do not treat waste for disposal onsite. They create marketable alternative energy products and should be regulated as such. In addition, the plastics-to-fuel process can have a similar environmental impact as that of manufacturers that use equipment and machinery.

3. Do not require unnecessary financial guarantees that discourage investment and may therefore inadvertently encourage landfill disposal.

Plastics-to-fuel facilities do not store waste for extended periods of time, so these facilities should not be required to create large post-closure maintenance funds, such as those generally required for landfills. A plastics-to-fuel facility makes money only when converting non-recycled plastic feedstocks into a marketable commodity. These facilities have no incentive to store waste and should not be treated like landfills.

4. Allow for disposal of off-spec feedstocks and by-products.

Inevitably, some materials such as metals, wood and fiber will be delivered to a plastics-to-fuel facility and won't be able to be used. Like other manufacturing facilities, regulations should allow for proper disposal of off-spec feedstocks and by-products.

5. Let recyclers determine if there is a viable market for their plastics.

Rigid requirements that prohibit the use of certain plastics in plastics-to-fuel conversion could result in large volumes of recyclable materials being disposed of as waste, for example during periods when there are insufficient recycling markets for these materials. Restrictions that result in disposal of these materials obviously would not support the goals of recycling and recovery.

A 21st-Century Framework for Beneficial Energy Recovery

Plastics-to-fuel technology complements recycling and can be used to extract usable energy from materials that would otherwise be buried in landfills.

The opportunity is large. To fulfill this potential, a new 21st-century paradigm is needed that recognizes the value of non-recycled waste and allows innovative conversion technologies to flourish. By altering the prevailing perspective on used materials from a liability to an asset, the nation can realize the benefits of recovering energy from more of its post-use resources and send fewer plastics to landfills.

Changing the way policy makers view post-use plastics and revising outdated laws and regulations will help unleash the value of non-recycled plastics.

Endnotes

1. Themelis, Nickolas and Mussche, Charles, Columbia University, "2014 Energy and Economic Value of Municipal Solid Waste, Including Non-Recycled Plastics, Currently Landfilled in the Fifty States," July 2014, <http://www.americanchemistry.com/Policy/Energy/Energy-Recovery/2014-Update-of-Potential-for-Energy-Recovery-from-Municipal-Solid-Waste-and-Non-Recycled-Plastics.pdf>
2. All information from interview with Scott Mouw conducted on June 2, 2015.

Underwritten by:



The American Chemistry Council's Plastics Division represents leading companies dedicated to providing innovative solutions to the challenges of today and tomorrow through plastics. Advances in plastics are helping Americans save energy, reduce greenhouse gas emissions and decrease waste. Because plastics are such a valuable resource, the Plastics Division is leading efforts to "reduce, reuse, recycle and recover," including through outreach, education and access to advances in recycling technology.

The Plastics-to-Oil Technologies Alliance was founded in 2014 to work on enhancing public policy in support of technologies that convert non-recycled plastics into petroleum-based products. The Alliance counts the following as its members: Agilyx Corporation (Beaverton, Ore.), Cynar Plc (London, UK), RES Polyflow (Akron, Ohio), Americas Styrenics (The Woodlands, Texas), Sealed Air (Charlotte, N.C.), and Tetra Tech (Pasadena, Calif.).

To learn more, please visit plastics.americanchemistry.com/RegulatingPlastics-to-Fuel.

Drowning in Non-Collected Recyclables... Where's the Life Vest?

(Part 2 of 4)

Do you swim alone, or with the sharks? BY BOB BRICKNER AND LOIS CLARKE

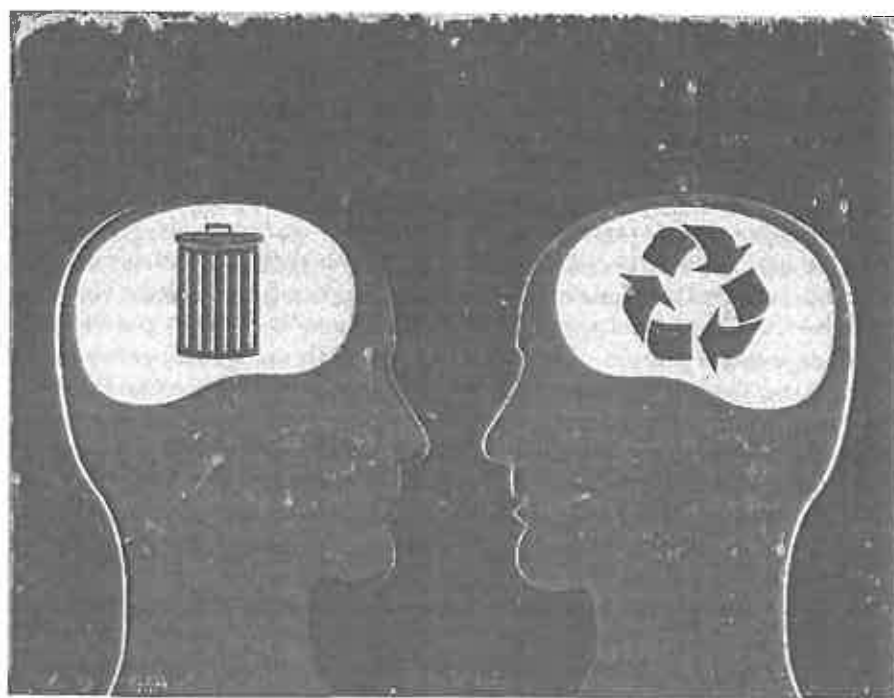
Introduction

In *Article 1*, "If At End of a Diving Board . . . Should You Take the Next Step?", we raised the question of how to increase materials recovery rates, and at what cost. Particularly, the subject was raised pertaining to the municipal solid waste (MSW) and curbside recycling components (excluding yard waste for now), in the context of a Mixed Waste Processing Facility (MWPF). The first article set the stage for this four-part series, designed to provide jurisdictions with information on how to think about (*Author's note: This does not say implement*) the "one bin" collection question, versus their current and/or traditional multi-bin or multi-cart collection systems. The focus of it was to stress the importance and need to understand what is actually in your MSW stream.

This article (*Part 2*), will identify how waste can actually move around, and the potential evaluation criteria when comparing costs for collecting trash and recyclables separately (two carts), versus the costs for collecting trash and recyclables together (one cart). We also include cost data on certain waste collection and system cost information, including representative public-sector costs/household or costs/ton for their waste handling strategies and diversion levels achieved.

Part 3 will identify the criteria to consider in developing a MWPF and the current state of waste separation equipment, as well as the ability to recover marketable materials from MSW.

Then, *Part 4* will pull the highpoints of the three previous articles together, and include a look at the preliminary economics of a community (1) using only a single-



stream materials recovery facility (MRF) and landfilling the rest, versus (2) a MWPF (with a "one bin" collection program) and landfilling the non-marketable materials.

Do You Swim Alone or With the Sharks?

When focusing on the waste collection system only, we care not only about gross costs, but also about metrics associated with costs and landfill diversion rates achieved for the money being spent. Oftentimes, decision-makers ask: How much do we need to spend to increase our diversion level? Or, as a citizen might alternatively ask the same decision-maker at a public hearing: Why is it costing us so much for so little incremental diversion?

First, let's start with a basic understand-

ing of the types of collection systems. There are a myriad of systems to collect MSW and recyclables from residences, but, in general, they include the following:

- self-haul by the public to citizen dropoff centers (with multiple bins for recyclable materials and MSW);
- one cart set out (all MSW placed inside a cart with no required recycling);
- two carts set out (MSW and recyclables); and
- three carts set out (MSW, recyclables and yard waste).

Self-haul includes the generator bringing their MSW and/or recyclables, directly to a drop-off location (sometimes called a convenience center) or other location acting as a processing facility. Self-haul, especially in rural areas, can help reduce a jurisdictions

collection and education costs. However, this puts the onus on the individual citizens to gather and haul their MSW and recyclable materials to the dropoff site or a processing/disposal facility. Self-haul to a convenience center is generally a service offered in less dense areas, or in addition to one of the other publicly provided or subscription-type collection services, if no mandatory collection is provided.

If a one cart system is provided, all of the MSW materials are put into a single container, typically about 95 gallons in size, and then placed curbside for unloading into the collection truck. With only one container for all of the MSW, recyclables would be mixed with the MSW. Alternatively, recyclables can be kept separated in a specific colored bag and placed in the same large cart for pullout later. This single container, sometimes called a one-bin system, requires a single collection truck picking up all of the materials from one bin, and requires very little public education expense. In an urban setting, and usually by ordinance and for public health and safety reasons, every residence is required to participate in the government-elected program.

A two-cart system is typically where MSW is placed in one bin and recyclables are separated by the homeowner and placed in a second bin. Each bin is collected by a separate truck or a split body truck. If the recyclables are commingled, this is referred to as a set out of "single stream" recyclables. This form of collection service requires more education than the one-bin system, to help define what the acceptable recyclables are, but it is relatively easy for the citizenry to participate. A single-stream recyclables system can result in a broad range of contamination, depending upon the method of recyclables collection, the basis of service fees and the public relations and education provided. For example, a pay-as-you-throw (PAYT) MSW cart pricing model might lead to more non-recyclables and trash showing up in the larger recyclables cart when the smaller "paid for" trash cart is full. If there are recycling police used to enforce collection practices, some collection-related labor may be spent at the curbside leaving notices for the residence to educate them on the correct usage of the two carts. Also, with a two-cart system the customer must now be able to store two bins. However, as a benefit, the initial upfront costs for this system do not include the time spent by the resident to separate their initial recyclable materials.

A two-cart system could also define where MSW is placed in one cart and recyclables, generally fiber and containers (e.g., bottles, cans, etc.), are placed in bins. Two smaller recycling bins (versus a larger wheeled recyclables cart) are referred to as dual-stream recyclables, with fiber separated from the containers. This requires more education and generally results in lower participation rates than with the larger single-stream recyclables cart system. Generally, customers find the single-stream recyclables system easier to use, and thus participate to a greater degree. A dual-stream recyclables system generally results in the cleanest recyclables, though this depends on the effectiveness of the jurisdiction's public education and types of mechanical system used for processing the materials. Again, some labor may be spent at the curbside placing the correct material in the correct container or leaving notices for the customer to educate them on the correct usage of the smaller two-bin system. With a dual-stream system, the customer must now be able to store three containers, though each recycling bin is smaller than the one large recycling cart typically used in the single-stream recyclables system. Costs for this system do not include the time spent by the resident to complete the initial separation of their materials.

If a single- or dual-stream recycling collection exists, the third service is usually yard waste which is collected separately either in a cart, compostable bag, or bundled (for branches) and left at the curb.

Recent studies have found higher recycling rates with the single-stream recyclable collection systems than with the dual-stream recyclables system. Recycling rates for single-stream recycling can result in 20–30% more diversion than dual-stream recycling. The reason being it is easier for the residential customer to participate in the single-stream recyclables system. The customer only has to decide if it goes in the trash cart or recycling cart. Also the customer only has to bring two carts to the curb rather than three containers with dual-stream programs.

Another form of a waste collection system gaining momentum is called wet-dry, with the organics (food waste) and yard waste placed in a separate cart for eventually composting or anaerobic digestion (AD) processing.

In addition to overall costs and achieved diversion rates, jurisdictions should also consider the challenges of making changes

MOBILE SCREENING & CLASSIFICATION

D:MAX



D:MAX is a mobile screening and classification system used to recover materials such as grit, sand, sludge and fibrous rag from waste water within a range of industries.

CDenviro
cdenviro.com

to their solid waste system and the fact there may be other benefits to their current system. For example, a jurisdiction that has a robust recycling education program may be able to piggyback on that program to promote other conservation issues.

**Current Systems:
Are the Numbers All Wet,
or Waste Generators Wearing
Bathing Suits?**

GBB maintains a database regarding waste and recycling collection services in cities throughout the United States with populations over 100,000. The data includes information concerning collection frequency, bin or cart size, whether setouts are single- or dual-stream, whether service is provided by public or private entities, reported costs and how services are billed. Based on this database, it appears at this time that a significant majority—81%—of the cities utilize single-stream mixed recyclables setouts, while 18% utilized dual-stream collection. The remaining 1% of the cities collect commingled waste and recyclables together, diverting materials to a MWPF.

Table 1 shows a sampling of 10 cities

from across the nation with their current residential collection systems noted. The review that follows does not knowingly include multifamily or apartment units, but attempts to compare single-family systems of these cities.

The jurisdictions were selected solely to provide a wide geographic base from the East Coast to the West Coast, medium size and large population, a diversity of collection systems, at least one city with a MWPF and one with a waste-to-energy plant, and budgetary information pertaining to solid waste generally available. A significant difference exists in waste generated and quantities landfilled. Sometimes, but not always, this is called “diversion rates.” However, diversion rates are like schools of fish; differences exist in fish sizes, colors and even names, but they are all called “schools.”

The jurisdictions in Table 1 are presented in alphabetical order and municipal popula-

tions range from slightly over 200,000 in Fayetteville, NC, to over 1 million people in Houston, TX. Most of the jurisdictions shown have once per week refuse collection for 60,000 to 400,000 residential units. Most, but not all, have weekly recyclables collection program going into a single-stream recyclables processing system. Most communities have one cart (typically 64 to 96 gallons in size) for refuse and one cart for recyclables (typically 35 to 65 gallons in size).

Municipalities with longer-term programs or higher aspirations pertaining to diversion goals may provide 96-gallon recycling carts and small trash carts. However, because of the nature of this article, Table 1 lists the number of residential units that are typically, but not always, single family.

**If You Can't Stand the Heat,
Get Into the Water**

Comparing one community to another has become a national pastime. While not displacing the backstroke or butterfly stroke, the style of this game is firmly drawn and the “rules of comparison benchmarking” generally established. Picking up on the service descriptions presented in Table 1,

See <http://foresternetwork.com/msw/recycling-part-2> for Tables 1-4.

APWA
THE BEST
SHOW IN
PUBLIC
WORKS
ARIZONA 2015

REGISTRATION IS OPEN!

APWA INTERNATIONAL PUBLIC WORKS
CONGRESS & EXPOSITION

AUGUST 30 - SEPTEMBER 2, 2015 ↓ PHOENIX CONVENTION CENTER

Table 2 provides a little “cost benchmarking” information for when you are laying at the beach this summer and really wishing you were in San Francisco, CA, or Seattle, WA. The uncomfortable column for cold water fish in a hot tub might be the cost summary column that indicates all of the residential solid waste costs on a per-ton managed basis. Yes, fortunately, this is an article and not a treatise, or the details associated with all of the highlights, exceptions and summary discussions of each community might consume at least 20 pages . . . a little too long for *MSW Management* to publish in this edition. However, each summary in the “\$/Ton Managed” column has a few nuggets of intrigue, creating the comparable benchmarking costs. Examples to wet your whistle could include: differences in base labor costs, cost of living index adjustments, union versus non-union pay scales, tenure (seniority) of drivers impacting budgets, age and type of vehicles utilized, fringe benefit packages, a task or full-day pay system, etc. The reader is encouraged to fish without borders into these deep seas, but secure a fishing license, too.

Fishing in the Shallows or the Deep Blue Sea?

For those familiar with the expression “the Greatest Generation,” and those that are such—we salute you! For those thinking about the expression, and not sure when it appeared on the US lexicon, we would offer an original thought associated with the waste industry in the 1950s and ’60s. At that time, dumps were really dumps. Quite frequently an “act of God” would occur and the dump would catch on fire to reduce the incoming wastes volume to extend the dump’s life. So did such situations, which definitely extended the dumps life in many locations, initiate an early “event of diversion”?

Well, times have changed. Mostly, but not always, for the better. But we think we can all agree that we are all better off with the tens of thousands of uncontrolled dumps that existed 50–60 years ago in this country closed, and sanitary landfill designs and operational practices diligently controlled today by state regulators.

However, the phrase “landfill diversion,” or “waste diverted from burial in a landfill,” is still causing discussions among the big fish. Excluding waste reduction practices

for purposes of this discussion, the key premise of the debate seems like it should be on the merits of performing (or providing) environmentally acceptable options for waste management to landfill disposal. You know, maybe like the original EPA waste hierarchy illustrated!

In certain locations around the US, the environmental community is very active, and waste-related issues are always part of the discussion. Since the Constitution provides a whole set of rights preserved for each of the current 50 states, we have a patchwork quilt of diversion-based mathematics, goals, and even regulatory obligations that states have promulgated. Oftentimes, even cities within states have opted to enact stricter diversion goals and/or mandated waste programs to create a more eco-friendly environment.

However, as with any bill, law, ordinance, or requirement, sometimes as small as a no parking sign with a \$250 towing expense (if you can even find your car), the unintended consequences are what can’t be seen through the dark depths of the ocean. Hence, Table 3 is provided to overview these 10-city residential waste management

costs on a \$/overall-tons-managed basis and their diversion rates.

Table 3 also provides a new metric associated with the cost of residential service, the basis of local costs on a \$/ton of waste actually diverted. This metric is thought to be a brand new measure introduced in this article as bait for those wanting to consider the impact of the hook, versus leisurely attempting free-style swimming with the sharks.

We all appear to be chasing diversion goals. The data presented in Table 3 builds off the Table 2 data and provides the over-

all cost for each ton of residential waste that is actually diverted. That is, for all of the money spent to provide the myriad of collection, processing/marketing and applicable disposal systems, what is the actual cost per ton for the achieved result of diverting some waste from a landfill? This is a unique metric for comparison of one municipality to another in a cost-versus-benefit oriented society. This might be the spot where fish that can change colors to camouflage themselves from predators will survive more than the others.

For example, based on Table 2, Seattle spends nearly \$175 million per year on their residential-based solid waste program. Table 3 indicates that Seattle handles almost 725,000 tons per year and reportedly diverts over 400,000 tons per year. These costs amount to nearly \$240 per ton actually managed. With their publicized 56% diversion rate from landfilling, this amounts to an estimated \$430 for each ton diverted.

Referring to Table 3, when one divides the residential waste Cost per Ton Diverted by the residential waste Cost per Ton Managed, one calculates the Diversion Cost Ratio (DCR). If all of the generated MSW were diverted (recycled), the DCR would be 1.0. Therefore, as shown in Table 3, for Seattle, this equates to a Diversion Ratio of 1.8. Many cities know and consistently publish their estimated diversion rates as a matter of fact. Oftentimes, the latter is used, in part by cities with low rates to announce new recycling initiatives to address the issue. New programs will inevitably cost money and the economic implication of being a "change agent" is at times, very controversial, and might even be the reason for a shortened political career. However, this article is just intended to present some of the more behind-the-scenes financial data to help school the reader and provide data to add to the discussion.

Based on the methodology of the review presented, it should not come as a shock that the city of Indianapolis, while having a respectable average cost per ton managed at about \$160 per ton, has the lowest diversion rate by a considerable margin. This then calculates to both the highest cost per ton of recyclables diverted and the highest DCR as presented in Table 3. The city of Cleveland, OH, also has a relatively low diversion rate at 12% and a high DCR.

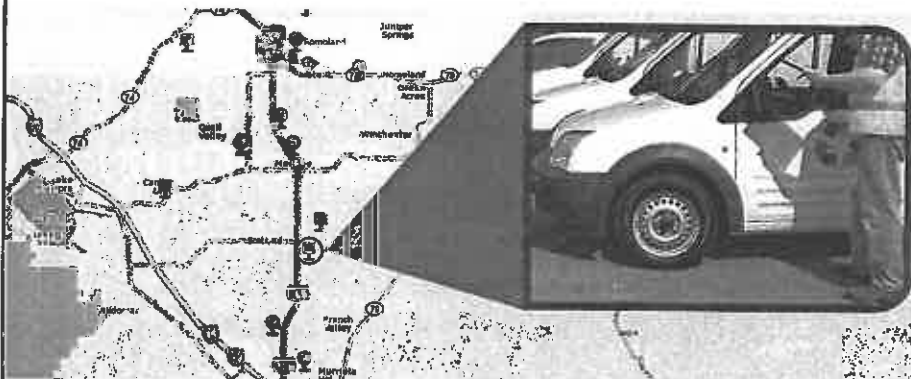
The city of Cleveland has the lowest cost per ton managed at just over \$100 per ton, but also has a very low diversion rate. With a 28% diversion rate, the City of Fort Worth, TX, and three others created a mid-tier diversion rate of 28% to 38%, creating a DCR for these for the four cities which a range from 2.6 in Fayetteville, to 3.5 in Fort Worth. The city of Charlotte has a DCR at 2.8 and the city of Houston, with a DCR of 3.3, is also between those two cities. Based on our research, the three west-coast cities have the highest program costs per ton, but also have high diversion rates, and therefore very low DCRs, which range from a DCR of 1.6 in Portland, OR, to a 2.1 DCR

Register today at
ForesterUniversity.net

Free
Webinar!

FORESTER UNIVERSITY PRESENTS

Adding GPS Fleet Management to Your Team



Wednesday, July 22nd

Join speaker Bob Laabs for a **FREE** webinar exploring GPS fleet management systems (e.g., how they work, benefits, etc.) and how you can implement telematics in your fleet to improve driver and vehicle safety, reduce fuel spend, and increase your fleet's productivity and efficiency.

Speaker: Bob Laabs, Verizon

Earn 1 PDH / 0.1 CEU Credits!



BRINGING YOU CUTTING-EDGE TECHNOLOGY AND TOOLS—ANYTIME, ANYWHERE

FORESTER UNIVERSITY.NET

Follow us on Facebook, Twitter, LinkedIn, and YouTube.

in San Francisco.

Oftentimes, much of the public does not know what their city waste programs actually cost relative to other cities. This data is even more obtuse when the costs are buried with their general tax bill, and there are no direct monthly or quarterly line item charges or services bills presented to the resident for review that force the occasional “environmental and social impact” moment.

Table 4 attempts to sort out the number of residential units serviced and their published service charges to establish a basis of funding. That is to say, are the service charges themselves paying for the actual services provided, or is the General Fund used to cover the costs. For example, it appears that in Seattle the full costs of the services provided are covered by the residential service charges. Alternatively, in Houston, all of the costs appear to be paid out of the General Fund.

Understanding the Costs of the Seafood Salad

If all you want is seafood, your mate might buy you a fish and chips sandwich or a Maine lobster tail dinner. The cost is

substantially different, but if it was put on their or your credit card, don't worry about it for now! It is like a tax notice that states “this is not your bill” . . . at least for now anyways! As presented in Table 2, there are two major cost components to the solid waste system: collection and disposal. The Table 2 data speaks for itself. Based on EPA-published data used previously by GBB staff, Figure 1 breaks down the average cost of two collection-related activities, recyclables processing, and then disposal.

Nationwide, and prior to this new research, collection costs for both refuse (called MSW in Figure 1) and recyclables makes up approximately 60–65% of the average budgeted waste costs. As a data check, using the data developed for Table 2, the average collection costs for the nine cities indicated is 67%. Recyclables processing and disposal make up approximately 35–40% of the waste handling system costs. The administrative costs are assumed to be allocated



Figure 1. Representative costs of collection and disposal

proportionally, but this could not always be verified by the data reviewed. While more specific details are not presented in Table 2, issues that affect these proportional costs, and revenues where applicable, include:

- community size;
- government structure;
- public versus private systems;
- number of wastestreams identified for diversion programs;
- number of facilities used;
- revenue sharing back to community;

Binder, B. (2014). Update on Solid Waste and Alternative Conversion Technologies. [PowerPoint slides].

New ESG Innovations Are Rolling Out

We've developed the most technologically advanced line of complete waste stream products. Now it's time to see how these innovations improve your bottom line. Visit doveresg.com to learn more.

THE WASTE MANAGEMENT COMPANY

MARATHON

BAYNE

www.bayne.com

Curotto-Can

- local labor rates;
- distances away from processing/disposal locations;
- type of collection vehicles utilized;
- landfill disposal costs; and
- politics

When comparing costs for a jurisdiction collecting all of their MSW in one bin without a separate recycling collection program, versus the costs for separately collecting trash and recyclables, the two major cost elements influencing the incremental collection costs include labor and equipment. Equipment includes both trucks and the carts provided to the residents.

The amount of labor and equipment required for a one-bin collection system is less than collecting trash and recyclables separately. The former requires the crew for one collection truck and the latter with source separated recyclables requires the crew for two collection trucks passing through the exact same neighborhoods. While the crew for the MSW truck associated with a single-stream recyclables system, for example, may be collecting fewer tons because some of the tonnages have shifted to the recycling cart, the crews

for two trucks are still required to drive down the same street and typically service the same number of set outs. That is, unless the recycling collection system, or even the waste collection system, has shifted to an every-other-week (EOW) collection.

Cart costs scale down pretty much as you would expect when you move to a one-bin system, however, remember that the one-bin system will typically be larger (usually 96 gallons) and get more use (abuse). Therefore, repair and replacements costs per cart may be higher.

Model Community (Baiting You for Part 3)

A major dilemma faces a jurisdiction trying to increase its diversion. Do they keep a current two- or three-cart low diversion collection system that includes a dual-stream or single-stream MRF and landfill, and spend additional money on education to increase diversion; or, do they potentially spend less money on an automated collection system, move to a one-bin collection system, and employ a modern processing system that includes a MWPF and landfill?

To illustrate how a potential change could

be impacted by collecting MSW in a one-bin system, and not trash and recyclables separately, versus the current costs for the conventional two-bin system collecting trash and recyclables separately, we introduce a model community (see Table 5) under three collection scenarios.

Scenario A will be the baseline, where we assume the model community is currently collecting its wastestream as follows: 65% MSW, 15% recyclables and 20% yard waste.

Scenario B presents increased recycling, where we assume the model community has enhanced its public education program to increase the collection of recyclables from within its wastestream to collect 55% as MSW, achieve a 25% recyclables set-out rate for processing at a single-stream MRF and 20% is yard waste.

Scenario C assumes adoption of the one-bin system, where the model community has switched back to a one-bin system to change the collection of its wastestream to collect 80% as MSW (with deliver to a modern MWPF with the latest technologic advancements) and they still separate, collect and divert 20% as yard waste.

It is important to remember that both

FORESTER UNIVERSITY PRESENTS

Surviving a Media Crisis

Wednesday, July 8th 11am PDT / 2pm EDT

Any press can be good press...if you're prepared.

Join returning industry expert Melanie Goetz for the tips and tricks to quickly dig yourself and your company out of any media crisis, avoid long-tail fallout, AND turn that crisis into a marketing opportunity.

Earn 1 PDH / 0.1 CEUI



Speaker
Melanie Goetz, MBA
President, Hughes & Stuart



New Webinar!

Register today @
ForesterUniversity.net!

BRINGING YOU CUTTING-EDGE TECHNOLOGY AND TOOLS-ANYTIME, ANYWHERE

FORESTER UNIVERSITY.NET

Follow us @ ForesterU | Like us @ Forester University | Subscribe @ ForesterUniversity | Address @ Forester University

Table 5. Scenarios for Comparing Collection Costs and Diversion Rates

Scenario	Trash Cart	Yard Waste Cart	Recyclables Cart	Assumed Overall Diversion Rate
1: Baseline	60% of wastestream	20% of wastestream collected separately; assume 10% of residue	20% of wastestream collected separately (single stream recyclables); assume 10% residue	31.5%
2: Increase single stream via public education	50% of wastestream	20% of wastestream collected separately; assume 10% residue	30% of wastestream collected separately (single stream recyclables); assume 10% residue	39.25%
3: Move to one bin for MSW and recyclables	80% of wastestream; assume 50% recyclables with 10% residue	20% of wastestream collected separately; assume 10% residue	Retrieved via Mixed Waste Processing Facility*	58.0%

*Assumptions of Mixed Waste Processing Facility to be discussed in Part 3

Scenarios 1 and 2 are subject to significant human decision-making and intervention. Once the recyclables are placed in carts, no other “diversion ability” enters into the program. Multiple collection vehicles passing through neighborhoods might have been required in the early days of recycling when “human intervention” was ahead of mechanical processing technologies.

However, with Scenario 3, the entire wastestream is subject to a series of mechanical separations with human quality control review. All of the residential generators wastestream materials is subject to inspection and separation. Thus, all of the

generators are indirect participants in having their wastestreams undergo a series of recovery steps for pulling out recyclable materials. Setting politics aside, and the ground battles associated with those demanding to keep their current source separation system, which might truly be extremely inefficient, it appears the signs along the roads are being

adjusted to read: Fishing allowed, with a license, in this Pond!

The next article in this series will address the one-bin collection and MWPF technical opportunities in greater detail. Along with the types of equipment and performance currently available in the marketplace, it will review the basis of the greater diversion rates achievable, while also keeping the overall collection costs in check. **MSW**

For related articles:

www.mswmanagement.com/recycling

Bob Brickner is the executive vice president, and Lois Clarke is a project manager, both at Gershman, Brickner & Bratton Inc. in Fairfax, VA.

waste & recycling expo CANADA

November 4 - 5, 2015
Palais des Congrès, Montréal, QC Canada

Canada's ONLY trade event serving the waste, recycling and public works markets

Where key buyers from all segments of the industry find the latest innovations.

Composting • Construction & Demolition Waste • Scrap Recycling • Infrastructure
Redevelopment / Public Works • Incineration / Gasification / Thermal Technologies • Landfill
• MRFs / Transfer Stations / Storage / Containers • Recycling • Waste Treatment / Disposal •
Software / Technology • Trucks & Transportation Equipment

REGISTER NOW AT www.cwre.ca/ADS19

+1 403 589 4632
Arnie Gess@CWRE.ca
www.CWRE.ca

co-located with
municipal
equipment expo

EFSE
EFSE

messe frankfurt