

**Attachments to the November 16, 2006, Minutes
for the Los Angeles County
Integrated Waste Management Task Force**

The Registry currently has 95 members from solid waste companies, local government agencies, and businesses.

VII. UPDATE ON THE WASTE BOARD'S PROPOSED PERMIT IMPLEMENTATION REGULATIONS

Mr. Mohajer stated that the Waste Board released their proposed permit implementation regulations in September 2006. He submitted comments to the Waste Board regarding the issue of the land use permit (see attachment). He stated the Waste Board regulations would ~~require~~ allow the Local Enforcement Agency and the Waste Board to issue a solid waste facility permit without the local host jurisdiction's land use approval. Mr. Mohajer provided alternatives to the Waste Board staff's proposal, but his comments were not incorporated in the final regulations. The Waste Board approved the permit implementation regulations on October 17, 2006, and they will be submitted to the Office of Administrative Law for final approval.

VIII. 2006 ASCE CALIFORNIA INFRASTRUCTURE REPORT CARD, SOLID WASTE

Mr. Mohajer stated the American Society of Civil Engineers (ASCE) released their first statewide infrastructure report card (see attachment). The report card analyzed ten categories: aviation, levees/flood control, parks/open space, ports, public relations, solid waste, transportation, urban runoff, wastewater, and water.

Mr. Mohajer discussed the solid waste category of the report card, which consists of three components: collection, processing to remove recyclable and compostable materials, and disposal of waste that cannot be recycled. The existing system received a grade of "B."

Mr. Mohajer commented on the deficiencies of the report, which include a lack of information on transformation, conversion technology and waste-to-energy facilities. He also mentioned the report did not disclose the cost of local government to maintain closed landfills, and that most landfills are privately owned.

Mr. Paul Alva provided background on how the ASCE (solid waste section) report card was developed. He stated that the report card was a collaborative process put together by a team headed by Orange County and joined by representatives from the Waste Board, Northern California, San Diego, Riverside, and the County of Los Angeles. The team developed the solid waste report card to be consistent with the other categories. Mr. Alva stated the report was intended to give the public a brief simple overview of the solid waste infrastructure condition Statewide. Because the report card is statewide, some of the information may

64,000 participants attended the collection events and a total of 3,500 tons of household hazardous waste were collected, 53 percent of which was recycled. A total of 995 tons of E-waste were collected, and 100 percent of it was recycled. Over 2.1 million pounds of universal waste (U-waste) were collected, and 95 percent of it was recycled. The largest events were in the Cities of Santa Clarita, Pasadena, West Covina, Long Beach, and Arcadia, ranging from 2,500 to 3,000 participants each.

Mr. Lee Miller presented on the Antelope Valley Environmental Collection Center (AVECC). The AVECC is a permanent HHW/E-waste collection center established in partnership with the Cities of Palmdale and Lancaster, Waste Management, Inc., the County of Los Angeles, and grant funds from the Waste Board. Since its opening in August 2005, there has been a 55 percent increase in participation compared to the mobile collection events previously conducted in the area. Over 600,000 pounds of household hazardous waste and over 650,000 pounds of e-waste were collected.

There are six permanent centers located in the City of Los Angeles: East Los Angeles, West Los Angeles, Playa del Rey, San Pedro, Sun Valley, and a sixth near the City of L.A. and Glendale boundary. The Countywide HHW/E-Waste Program partially funds these centers, and they are open to all residents countywide. In fiscal year 2005/2006, residents disposed of over 2.5 million pounds of e-waste, 2.8 million pounds of u-waste, and 6.9 million pounds of HHW at the six permanent centers.

Mr. Miller continued to report on the County's efforts to expand the Countywide HHW/E-waste program to include the construction of a permanent HHW/E-waste collection center in the San Gabriel Valley, expansion of the number of events conducted annually, and enhancements to public outreach efforts.

Mr. Mohajer suggested that the Countywide HHW/E-waste website should include information on the cities that have u-waste programs for residents.

A motion was made to contact Pacific Gas & Electric Company in Northern California to inquire about their u-waste recycling program. A report will be provided to the Task Force so they can decide if a letter should be sent to Southern California Edison requesting them to sponsor/coordinate a similar program. The motion passed unanimously.

X. PROPOSED REGULATIONS FOR ACTIVE DISPOSAL SITE GAS MONITORING AND CONTROL

Ms. Linda Lee stated that at the September 17, 2004, meeting, the Waste Board directed staff to implement a recommendation made by a landfill facility compliance study. The recommendation was to modify the current regulations to apply to active landfills the more comprehensive gas monitoring and control



LINDA S. ADAMS
SECRETARY FOR
ENVIRONMENTAL PROTECTION

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD



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November 6, 2006

Ms. Margaret Clark
Los Angeles County Solid Waste Management Committee/
Integrated Waste Management Task Force
900 South Fremont Avenue
Alhambra, CA 91803-1331

Dear Ms. Clark,

Thank you for your October 18, 2006, letter on behalf of the Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force (Task Force) regarding "Conversion Technologies." I appreciate your comments regarding the California Integrated Waste Management Board's (CIWMB) ongoing efforts to evaluate alternatives to traditional disposal options, including conversion technologies.

In keeping with its mission and core goal of waste diversion in California the CIWMB has the responsibility to investigate the technical aspects of alternative technologies in accomplishing this goal. In this respect we are moving forward with our research with the Santa Barbara Air Pollution Control District to oversee additional emissions testing for conversion technologies, with a desired focus on gasification and hydrolysis processes.

Furthermore, as directed by Governor Schwarzenegger's recent Executive Orders, the CIWMB is a key participant in the Bioenergy Working Group and the Climate Action Team. As part of these efforts, the CIWMB is working diligently with the Administration and the Legislature to foster greenhouse gas emissions reductions and to stimulate the development of renewable energy and biofuels from solid waste and other biomass resources.

The CIWMB takes the responsibility for waste diversion in California seriously and we will continue to pursue the necessary research, development and demonstrations on a robust range of alternatives. For example, while anaerobic digestion is common in Europe, and while we are aware of many different anaerobic digestion companies and technologies, there are no existing commercial-scale facilities in the State that use solid waste.



Ms. Margaret Clark
November 6, 2006
Page 2

Since 30 percent of the waste stream is organic material such as green waste and food waste, it seems reasonable that the CIWMB support the demonstration of innovative anaerobic digestion and food waste composting approaches.

The Board has also concluded that the technical and economic feasibility of processes to convert solid waste to biofuels is much less understood, so the CIWMB collaborates with entities such as the California Energy Commission and the Biomass Collaborative under the auspices of the Bioenergy Working Group, to bring together experts on these processes. With information from this endeavor, we expect staff to return to the Board with recommendations for further work, which could include funding for demonstration projects.

The CIWMB role in the Bioenergy Task Force and Climate Action team provides us with an opportunity to examine many other areas with the Air Resources Board and the California Energy Commission to ensure that their funding programs (AB 1811 alternative fuel grants and the Public Interest Energy Research program, respectively) include consideration of technologies that can use solid waste to produce renewable energy and/or biofuels. These and other efforts are indicative of our commitment.

In closing, I would like to acknowledge the leadership of the Task Force in keeping these issues in the forefront of the policy debate. If you would like to discuss these matters further, please call my office and I would be glad to meet with you.

Thank you again for your letter and I look forward to working with you on these important issues.

Sincerely,

A handwritten signature in black ink that reads "Margo Reid Brown". The signature is written in a cursive, flowing style.

Margo Reid Brown
Chair



Plastics Markets and APC Resources

Los Angeles County Solid Waste Management Committee/
Integrated Waste Management Task Force Meeting

November 16th, 2006

Vahe Manoukian



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Presentation Overview

- Market Update
 - Historical Pricing
 - Recycling Rates
 - Markets
- APC's Support of Recycling
 - Collection
 - Processing
 - Recycled Content
- Other Resources



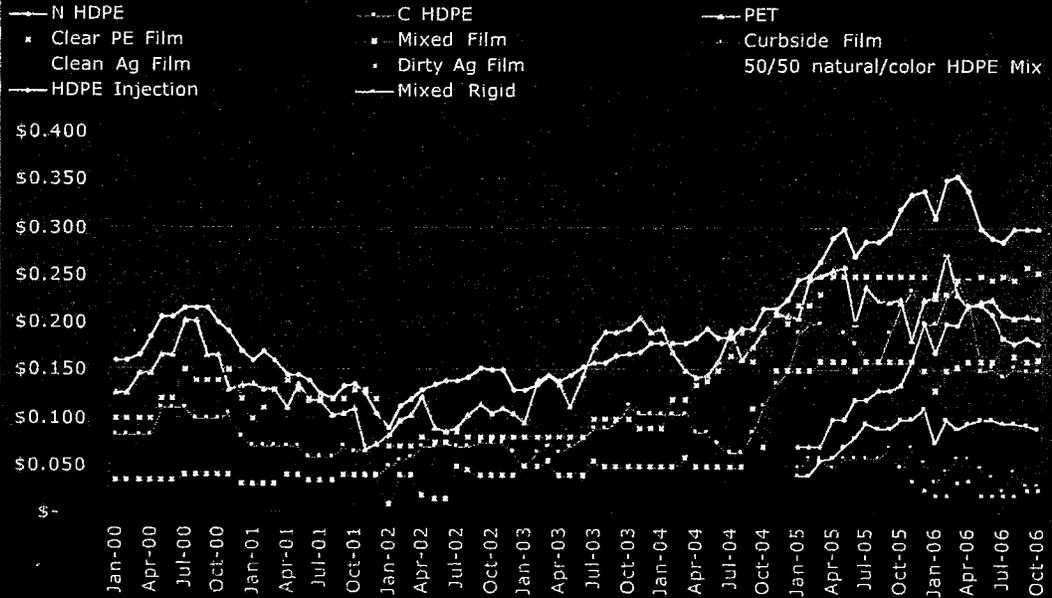
Scrap Plastic Price History

(Baled/Delivered)

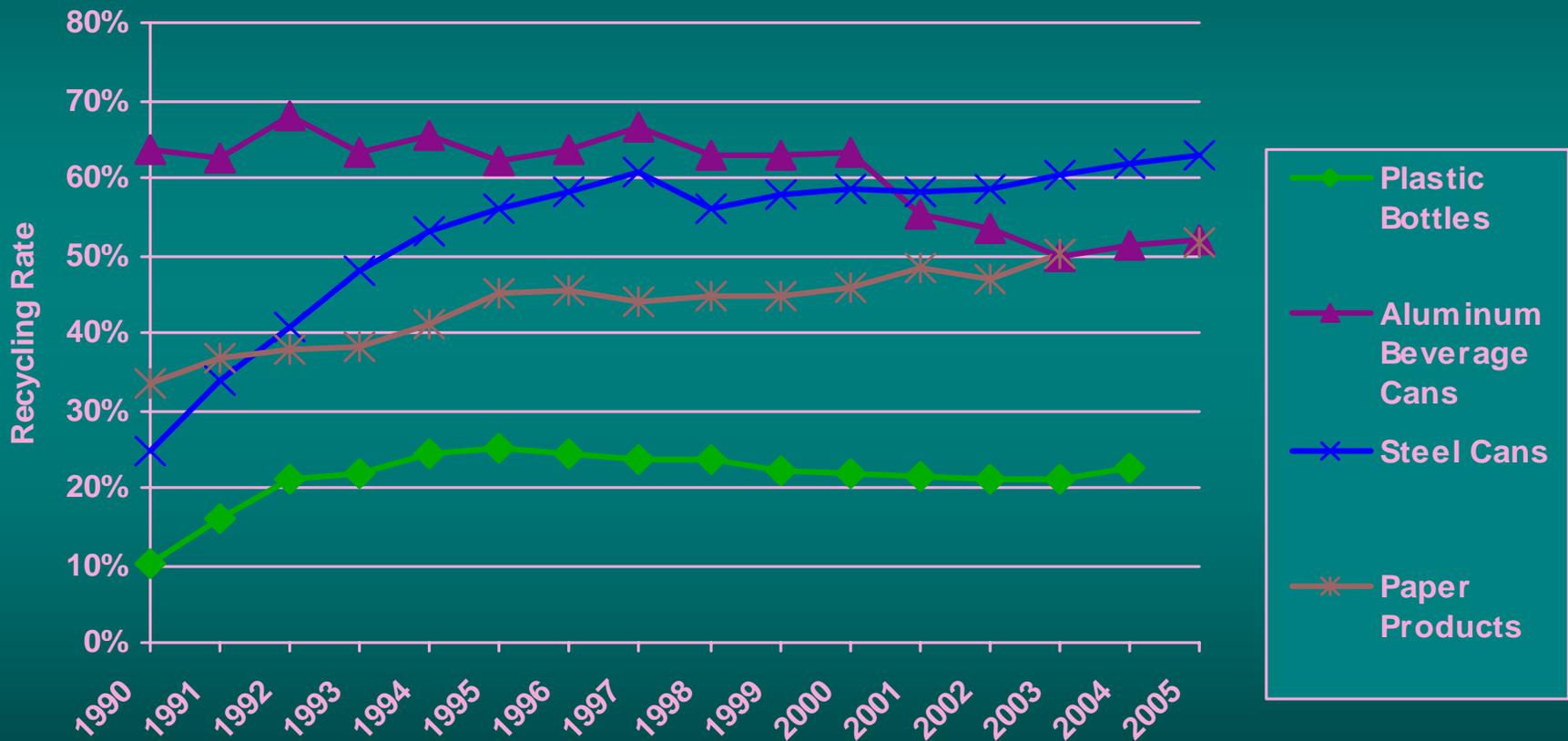


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Scrap Plastic Price History (Baled/Delivered)



National Recycling Rates



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Scrap Plastic Markets

(A few examples)

PET Bottles

- Mohawk Industries (GA)
- Clean Tech (MI)
- Global PET (CA)
- Export Market

HDPE Bottles

- KW Plastics (AL)
- Envision (NC &CA)
- Talco (CA)
- Export Market

PET Strapping

- Signode (KY)
- Evergreen (OH)
- Export Market



Scrap Plastic Markets

(A few examples)

Film

- Plastic Lumber Co's
(e.g., Trex & AERT)
- NextLife (TN)
- AgriPlas (OR)
- Hilex Poly (IN)
- Export Market

PE/PP Containers

- Champion Polymer (UT)
- KW Plastics (AL)
- Avangard (TX)
- Export Market



APC's Support of Recycling- CA & Beyond (Technical Assistance & Funding)

- Communities with low recycling rates*
- New rural drop-off programs *
- New school recycling programs*
- Best practices in single stream collection*
- Highway rest areas
- Commercial collection of all types of scrap plastics
- Convenience/gas station recycling
- Suggestions

APC developed and promotes the
“All Plastic Bottle” Program



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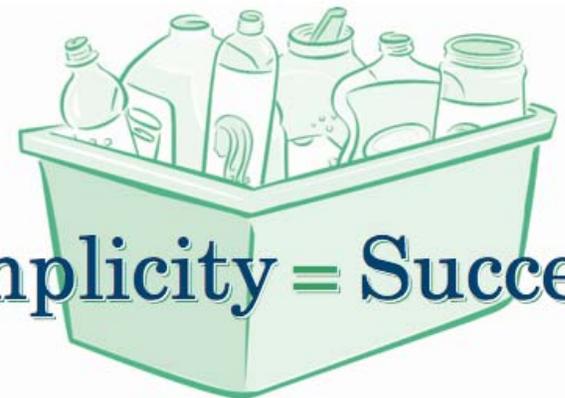
Community Support - Albuquerque, NM (low participation in curbside recycling)

All Plastic Bottles Promotion - 2005

- Newspaper, radio & PSA commercials,
- Posters around the city, recycling truck signage
- All bottles brochure mailing, recycling bins,
- Neighborhood meetings; newsletter articles

Results after All Bottles Promotion:

- PET 460% increase
- HDPE 240% increase



Simplicity = Success



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Rural Drop Off - PCG Counties, NC

All Plastic Bottles Promotion - 2005

- Perquimans, Chowan and Gates (PCG) convenience centers drop-offs
- Staff assists residents & monitors dumping
- New signage on 29 compactors, promotional items, recycling containers for single serve venues, program brochures listing acceptable & unacceptable bottles, newspaper articles to advertise program.

Results

- Increase in Plastic Bottle Recovery
- 0.4 tons in January '06
- 4.2 tons in August '06



School Recycling - San Juan Capistrano, CA



Recently donated to school system in San Juan Capistrano, CA – will determine tonnages collected in 2007

APC has donated hundreds of bins to increase collection of single serve plastic bottles

Recipients include schools, fairs (e.g. NY State Fair), sports facilities, state facilities, e.g. rest areas, parks



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Single Stream Recycling

- APC visited about thirty (30) SS facilities during 2005-2006
- Considerable loss of plastic bottles into paper bales and residue
- Well-managed facilities typically lower residual and lower losses of plastic bottles in bales
- MRFs owned by paper companies seem to have less bottles in their bales – do final paper sort
- MRFs with optical sorting typically have less losses



Increase collection & use of recycled content

www.CAPlasticsMarkets.com

Beyond collection APC supports connecting buyers and suppliers of baled material through 2 directories.

Beyond baled material the resource helps connect buyers and suppliers of processed scrap plastic through *caplasticsmarkets.com*, a directory of markets.



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Recycled Plastics Markets [Home](#) | [About Us](#) | [Site At A Glance](#) | [Contact Us](#)



Welcome to the FREE Recycled Plastics Markets Website

This site is sponsored by the **American Plastics Council (APC)**. The primary purpose of the web site and the Recovered Plastics Market Referral Service is to connect US West Coast sources of scrap plastic with buyers of all types of scrap plastic. This site is intended for use by the recycling industry in CA, OR, and WA. If you do not find what you are looking for, or need assistance, please email **Moore Recycling Associates** or call us toll-free: (888) 753-7485.

For household recycling options, please visit our [resources page](#).

Check out the new search engine!

The database now includes buyers and suppliers of not only unprocessed scrap plastics, but processed plastics as well. We look forward to your **feedback**. If you process recovered plastics from the West Coast, make sure your company is listed in the database. [Click here](#) to list your company.



Home
Information Booth
Search for Buyer/Seller
List Your Company
Market Reports
Recycling Resources
Site at a Glance
About Us
My Market

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Increase use of recycled content APC Online Recycled Products Directory

www.PlasticsResource.com

Over 2000 products

Averages 8-14,000 unique
visitors/month

Continuously updated by
individual companies

New companies
encouraged to add their
products to free directory



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The screenshot displays the website interface for PlasticsResource.com. At the top, the logo and navigation links (faqs, links, media contacts) are visible. The main header identifies the site as 'The American Plastics Council' and 'APC Sites'. A 'Main Menu' sidebar lists various categories such as 'Plastics 101', 'Green Living', and 'Recycled Products & Markets Databases'. The central content area is titled 'Recycled Plastic Products Directory' and includes a search bar with a 'Search' button and a link to 'Advanced Search'. Below the search bar, a list of product categories is provided, including 'Apparel & Accessories', 'Automotive Accessories', 'Bags & Liners', 'Bins & Containers', 'Building & Construction', 'Carpet, Fabric & Fiber', 'Custom Products', 'Farming & Agriculture', 'Film & Sheet', 'Furniture & Accessories (Indoor)', 'Furniture & Accessories (Outdoor)', 'Housewares', 'Industrial, Shipping & Warehouse', 'Janitorial Supplies', 'Landscape & Garden Design', 'Marine', 'Office Supplies', 'Packaging', 'Planting Materials & Accessories', 'Premium & Promotional Items', 'Recreational Products & Toys', 'Road, Highway & Parking', and 'Signage'. A 'Get on the List!' section encourages users to add their products, and a 'Sign Up!' section offers updates and more information.

Promoting New Technologies



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New Frontier Industries (Milton, NH)

- Pilot project with Northeast Resource Recycling Association (NRRA), EPA and stakeholders to implement a technology for recycling mixed plastics
- *Green Polymer* Technology
- Process manufacturers sound barriers and decking made from mixed plastic waste.



www.PlasticBagRecycling.org

plasticbagrecycling.org



©2004, American Plastics Council. All rights reserved. Recycling of plastic bags may not be available everywhere.

Web Resource – pilot in CA
Expanding nationally

Goals: increase recycling of
plastic bags & film.

Targeted assistance: consumer,
business, municipal level

PlasticBagRecycling.org - The online resource for film recovery in California



Home
Information for the General Public
Information for Recycling Coordinators
Information for Businesses
[Calculate Your Film Generation](#)
Resources
About Us
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Step 1: Determine the Volume And Cost of Film Disposal

Enter the values below to receive an estimate of your monthly film generation. Please enter numeric values only. Do not include letters or symbols (decimals are okay).

Enter your monthly disposal: tons/month

(Collect invoices from your waste hauler for the previous 3 months. Add the weights for each month together and divide by 3 to estimate your average monthly disposal)

Enter the percentage of film in your waste: %

(Observe your waste stream and estimate the average percent **by volume** of your waste that is film. **Note:** not all film is readily recyclable.)

Enter your disposal cost: \$/ton

Enter your pull charge per container: \$/pick up

Enter your disposal container size: cubic yards

Calculator:
helps businesses analyze the
economics of recycling



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Other Resources

- American Plastics Council
www.plasticsresource.com
www.allplasticbottles.org
www.plasticbagrecycling.org
www.caplásticosmarkets.com
- Assoc. of Post Consumer Plastic Recyclers
www.PlasticsRecycling.org
- National Association of PET Container Resources
www.napcor.com
- National Recycling Coalition
www.nrcrecycle.org



Plastic Recycling Issues and Programs in California

Presented by: California Integrated Waste
Management Board

www.ciwmb.ca.gov

Plastic Environmental Issues

- Generation increasing
- Low recycling rates
 - Approximately 5 percent (US EPA; "Municipal Solid Waste Generation, Recycling, and Disposal in the United States: Facts and Figures for 2003"; www.epa.gov/msw/pubs/msw05rpt.pdf)

Plastic Environmental Issues

- Disposal increasing
 - 9.5 percent of CA residential disposed waste (CIWMB; Statewide Waste Characterization Study; www.ciwmb.ca.gov/Publications/LocalAsst/34004005.pdf)



CIWMB Plastic Programs And Initiatives

- Rigid Plastic Packaging Containers (RPPC)
 - Must reduce plastic use or increase recycling
 - Annual certification
 - Penalties up to \$100,000 a year
- Plastic Trash Bag (PTB)
 - Focus on increasing recycled content in bags
 - Increasing the supply of recycled film plastic
- Plastic Recycling Initiatives
 - Film Products
 - Agricultural
 - Retail and Merchandise Bags
 - Stretch Wrap
 - Supporting New and Emerging Technologies

RPPC Program Requirements: Compliance Methods

1. 25% Post Consumer Material (PCM) used in manufacture of container
2. 10% Source Reduction (SR) of resins in manufacture of container for specific product
3. Container meets criteria for Reuse or Refill [*Title 14 CCR 17946.5(3)*]; the Product Manufacturer must offer a refill system or a replacement product
4. 45% recycling rate for product associated or particular resin type containers

PTB Program Requirements

- Annual Certification of wholesalers and manufacturers
 - Regulates plastic trash bags of 0.7 mil or greater
- Wholesalers
 - Report from whom they purchased PTBs and locations from which they shipped them
- Plastic trash bag manufacturers must certify that their either:
 - (1) Meet 10 percent recycled content requirement
 - (2) Meet 30 percent recycled content in all of their plastic products
 - (3) Demonstrate that there was an insufficient quality and/or quantity of post consumer materials to meet the 10 or 30 percent standards.

RPPC and PTB Program Results: Recycling Infrastructure Investment

- RPPC
 - Certified over 1600 companies since 1996
 - Negotiated 30 Settlement Agreements
 - 73 million pounds of PCM used in the manufacture of regulated containers and trash bags
 - 23 million fewer pounds of resin used due to source reduction of containers
- PTB
 - Certify about 350 companies per year since 1993
 - 172 millions pounds of PCM used

Plastics Recycling In California

- Where do we go from here?
 - Collaborative, voluntary process to increase diversion through expanded recycling opportunities
 - Plastic lumber
 - RR ties and piers
 - Packaging
 - Support new technologies
 - Compostable and biodegradable plastic products
 - Develop and demonstrate improved technologies for removing agricultural film from the field

Plastic Film Collaborative Recycling Initiatives

Invitation to Participate

- Asking for your help!
 - Manufacturers and Businesses
 - Government
 - Industry and environmental organizations
- Commit to expanding plastic film recovery / recycling
- How to keep in the loop?
 - Sign up for our listserv:
www.ciwmb.ca.gov/Listservs/ListSubscribe.asp?LID=23

Film Workgroups

Potential Action Items

- Agricultural
 - ID sources, amounts, and current practices
 - Improve collection techniques
 - Site consolidation points & wash lines
 - Educate growers and farming organizations
- Residential
 - Expand Curbside service
 - Increase collection through MRFs
 - Educate retailers & consumers
- Commercial
 - Expand collection at high generation business types
 - Promote potential economic benefits

Other Initiatives:

- Litter
 - CA Action Plan for Litter
 - LA RWQCB Discharge Limits
- Financing processing facilities
 - California Pollution Control Financing Authority (CPCFA) – Now funds these types of projects
 - CIWMB/RMDZ Loans
- Plastic Clearinghouse
 - Material Collection Database – lists brokers; recyclers and processors

Visit the Board's Plastics Web
page:

www.ciwmb.ca.gov/plastic

Helpful Holiday Hints for Waste Reduction

Do you know that Americans throw away 25% more trash or about 1 million extra tons each week during the Thanksgiving to New Year's holiday period? In fact, 38,000 miles of ribbon alone is thrown out each year--enough to tie a bow around the Earth we're trying to save!

Reduce your waste and reduce your stress by keeping the "green" Holiday spirit alive by following some of these simple yet helpful holiday hints:

For Dinner Preparations:

1. Buy baking goods and snack food in bulk or large volumes
2. Plan meals wisely and practice portion control to minimize waste
3. After a big dinner, you'll have leftovers galore. Plan for leftovers in advance
4. Pack and send leftovers home with guests. You can also donate food to the local food banks or charities
5. Compost your food waste – fruits and vegetables and their peels, pits and seeds are all perfect for composting – a great natural fertilizer
6. Use reusable rather than disposable tableware
7. Cut up last year's holiday cards and use as place cards
8. Place easily identifiable recycling containers at your celebration so guests can recycle their cans, bottles, etc.

Shopping for the Holidays:

9. Send an electronic greeting card
10. As you shop, consolidate your purchases into one bag. Better yet, bring your own shopping bags
11. For online purchases, request for items to be shipped together
12. Use shredded paper or newspaper instead of conventional packing "peanuts"
13. Recycle foam "peanuts" at a local drop-off or buy-back recycling center. For a location near you, call 1(800)CLEANUP, a service provided by Earth 911.
14. Buy rechargeable batteries to accompany your electronic gifts
15. Recycle the old cell phones at www.recyclewirelessphones.com

For Gift Wrapping:

16. Avoid metallic colored wrapping paper as they cannot be recycled.
17. Purchase recycled wrapping paper
18. Purchase sturdy cloth ribbon that can be reused year after year as most ribbon cannot be recycled.
19. Give a present in a present (for example, a hat in a matching scarf, jewelry in a wooden box, cookies in a reusable tin or cookie jar, barbecue grill utensils or picnic supplies in a tablecloth, kitchen gifts in an oven mitt or kitchen towel)
20. Reuse scarves, old posters and maps, pages from a child's coloring book, old sheet music, newspapers, sports pages, or old maps to wrap boxes.



Helpful Holiday Hints for Waste Reduction

For Gift Wrapping (con't.):

21. Have your children create their personalized wrapping paper by decorating reused brown paper grocery bags with drawings, stickers or even stamps
22. Reuse last year's holiday cards for gift tags or write your greeting on the box

For Decorations:

23. Use trimmed branches from your yard for decorating around the home or making wreaths
24. Use reusable glass icicles instead of disposable tinsel (keeps tree clean for mulching)
25. Reuse your tin cans as luminaries

After Opening Your Presents:

26. Consider donating your old appliances, toys, games, or clothing, as you received new ones, to a local charity or thrift store
27. Use leftover gift wrap to line shelves and dresser drawers

For the New Year:

28. Do something "green" for the new year's resolutions (For example: use reusable cloth shopping bags; switch to compact fluorescent lights to save energy; plant at least one tree)

For Your Christmas Trees:

29. Approximately 33 million live Christmas trees are sold in North America every year. Recycle your Christmas trees by contacting your city recycling coordinator or visit www.ladpw.org/epd/xmas/ for more information
30. Check out www.ladpw.org/epd/holiday or www.reduce.org for more ideas to reduce waste during the holiday

Keep the "green" spirit alive and make a conscious effort to help save the environment and reduce waste just like keeping the Holiday spirit alive throughout the year!

