

# Commercial and Residential Film in CA: What's Happening Today?

October 11, 2005

CIWMB's

## Increasing Plastic Film & Container Collection & Recycling Conference

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# Presentation Overview

- Film in the Marketplace
  - Quantities/What's Recyclable
- Market Information
  - Historical Pricing
  - Markets
- Opportunities & Challenges
  - Commercial
  - Residential
- Resources
- Current Efforts & Next Steps
- How to participate

# Film in the Marketplace

- Out of all the plastics in the waste stream, film makes up the largest portion by category.
- More film is used in the commercial sector than the residential sector (including retail bags)

# Film in the Marketplace

## APC Resin Review (2003)

- 66.5% LDPE (#4)
- 15.2% HDPE (#2)
- 10.1% PP (#5)
- 7.5% PVC (#3)
- 0.7% Nylon (#7)

Approximately **2/3**  
of film is readily  
**recyclable**  
(provided contamination is low)

## Historical Scrap Film Prices Baled/Delivered



Source: Moore Recycling Associates, Inc.

# Film Markets and Handlers (a few examples)

## Markets

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

## Handlers & Haulers

- Norcal in Santa Clara
- Bestway
- DART
- Smurfit
- GB Industrial
- Weyerhaeuser
- Ming's Recycling
- Rocky Mountain Recycling

# Opportunities

- The scrap price for clean, clear film on the West Coast is around \$0.25 per pound (delivered)
  - Approximately \$10,000 per truckload
- Therefore there is a huge opportunity to not only recover more of our waste, but there is an economic opportunity as well.

# Challenges in Film Recovery

- Lack of education in both public and private sector
- Efficient collection or consolidation (like all recyclables)
- Film is particularly challenging because of its low weight to volume ratio (like all plastics but film is even more so)

# Source Reduction & Proper Disposal



# Challenges in Film Recovery

- There is no wash line on the West Coast, so dirty material must travel across or out of the country.
- While some MRF operators can effectively pull and market scrap film, others struggle with film in their system and would rather not see more of it....especially since we measure diversion based on weight.

# Screen In A Single Stream MRF



# Residential Collection Programs

- More than a 16 communities collect film curbside.
- Including communities in the following counties:
  - Sacramento
  - Santa Clara
  - Los Angeles
  - Orange
  - Fresno
- Many MRF's now bale and market film even though residents are not asked to recycle film curbside. Many more communities are exploring curbside collection.

# Green Team

## San Jose, CA

- Green Team in San Jose has been collecting plastic bags and all PE film through curbside for over 4 years.
- 40% of their plastics recovered is film
- They reported no operational or market problems

# Commercial Collection Programs

- More haulers are recognizing the economic benefit (to them and their customers) in film collection combined with cardboard collection since film is worth much more than cardboard.
- Haulers are now picking up bagged (with OCC) or baled film in the following counties:
  - Santa Clara, Santa Cruz, Fresno, Sacramento, LA, Sonoma, Alameda, and Santa Barbara.
- There are additional programs throughout the US. In addition to grocers and big retailers such as Wal-Mart, smaller generators are now recovering film through service from haulers who collect clean film with OCC. If you generate film ask if your hauler will handle your film too. We can help them with market info.

# CA Grey Bears S.C.R.A.P. Santa Cruz, CA

- They pick up material from over 300 businesses.
- Film collection piggy backs on the collection of OCC, but generates far more revenue.
- Will Horne, the operations manager, said “film is the cornerstone of their recycling program.”
- Reported no challenges and they market about 20 tons every 5 weeks.

# It's In the Bag

- SUPERVALU and MN Waste Wise initiated a voluntary recycling program involving several businesses, non-profit organizations and associations.
- APC, Trex, Merrick, Hennepin County, other grocers, Minnesota Office of Environmental Assistance, Target, Star Tribune, St. Paul Pioneer Press, GreenGuardian.com and Minnesota Grocers' Education Foundation
- The goal was to collect 500,000 pounds; a little over a year later they've collected 1 million pounds

# Grocery Store Drop Off's



# Resources

[www.PlasticBagRecycling.org](http://www.PlasticBagRecycling.org)

APC Funded Online Film Recovery Resource

[www.ciwmb.ca.gov/Plastic](http://www.ciwmb.ca.gov/Plastic)

Check out documents from the Film Recovery Work Groups

[www.cpia.ca/film/](http://www.cpia.ca/film/)

Canadian Resource

[www.StopWaste.org](http://www.StopWaste.org)

Stop Waste also potential grants for businesses in Alameda County.  
They also have information about source reduction and best practices.



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# www.PlasticBagRecycling.org

## Three Tiered Resource

General Public



Recycling Coordinators



Businesses



# Web Site Features

- Film Identification
- Calculator
- Market Database
- How to set up a program
- Handling and Loading Guidelines
- How to make weight
- Equipment Info
- Signage

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[Home](#)

[Information for the General Public](#)

[Information for Recycling Coordinators](#)

[Information for Businesses](#)

- Determine the type of film
- Set up a film collection program
- Search for markets
- Handling and loading guidelines
- [Determine the volume of film generated](#)
- Submit comments or request assistance

[Resources](#)

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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. [Click here](#) to learn more about types of film.)

Enter your disposal cost:  \$/ton

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

Enter your disposal container size:  cubic yards

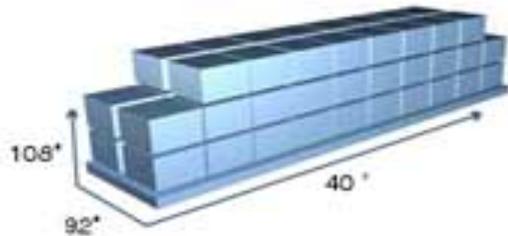
Web site developed and administered by Moore Recycling Associates, Inc.  
[Help@PlasticBagRecycling.org](mailto:Help@PlasticBagRecycling.org)  
888-753-7485

© 2004, American Plastics Council. All rights reserved.  
1300 Wilson Blvd., Arlington VA 22209  
1-800-2-HELP-90, Outside U.S. 703-741-5000.  
[Terms and Conditions](#) [Privacy Policy](#)

Recycling of plastic bags may not be available everywhere.

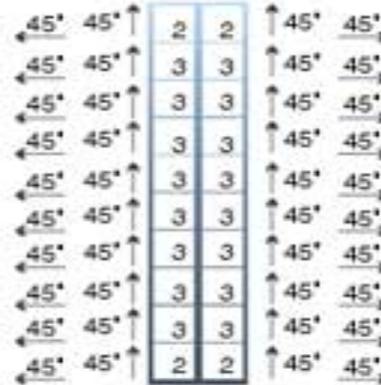
# Info on how to make weight

45' x 30' x 45' Bale  
L x W x H



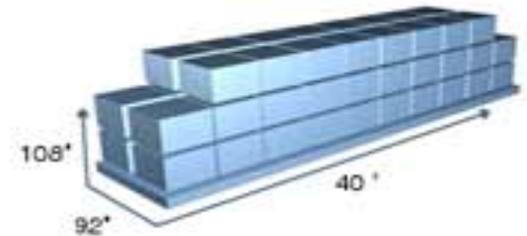
Front

Bale Orientation	Bale Stacking	Bale Orientation
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Front

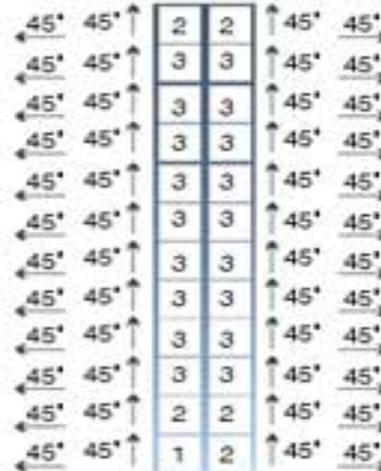
40' High Cube  
Export Container  
56 Bales  
Avg. Wt. 714 lbs.



Rear



Front



Front

48' Domestic Trailer  
65 Bales  
Avg. Wt. 620 lbs.



Rear

# Signage

Please Recycle Clean,  
Dry Plastic Bags Here



TURN BAGS INSIDE OUT  
NO RECEIPTS OR OTHER ITEMS PLEASE

**Please include the following:**

- Grocery bags
- Retail bags (no draw string handles)
- Plastic newspaper bags
- Plastic dry cleaning bags
- All clean, clear bags labeled with:



**DO NOT INCLUDE the following:**

The following are considered film contaminants

- NO Food Wrap (e.g., Saran Wrap®)
- NO Film (bags) that has had direct contact with food or organic material

Thank You!

# Outreach Efforts

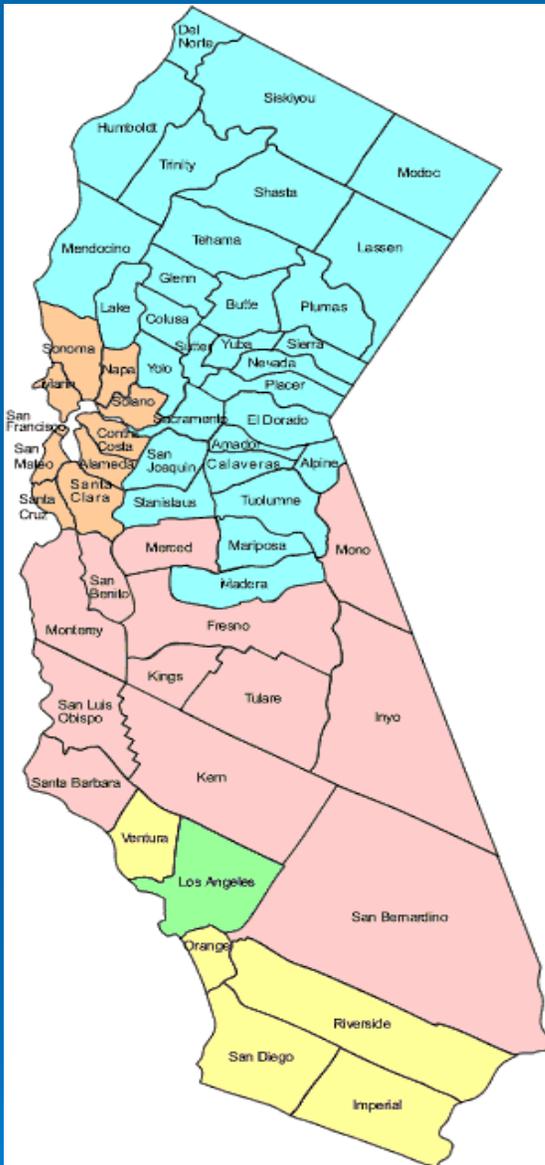
- We have included over a thousand Drop Off Locations in our directory and need your help to grow that number.
- We have been meeting with MRF operators, Recyclers, Haulers, Landfill operators, Local Officials, and Grocers to consider the opportunities in film recovery
- We strongly encourage the recycling community to utilize the existing fiber infrastructure to recover commercial film.

# OCC and Film Collection



# Collaboration

- Successful film recovery requires both public and private entities working together.
- We need to grow the number of consolidation points and collection programs throughout the state.
- And we also need to improve the dissemination of information so that everyone is aware of the options available.



# How to Participate

- Use the tools on the web site to analyze the economics of film recovery
- Identify film collection locations in your area or implement your own film recovery program
- Contact us if you need additional assistance

The American Plastics Council provides free one on one consulting services for businesses and municipalities in CA.

# Add a link to your site!



Recycle  
Plastic  
Bags! [PlasticBagRecycling.org](http://PlasticBagRecycling.org)  
Click Here >>  
Find Your Nearest Drop-off Location

[www.PlasticBagRecycling.org](http://www.PlasticBagRecycling.org)

Please get in touch with us  
if you're interested in film  
recovery...

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or 707/935-3390 x 33

