



ROADMAP TO A SUSTAINABLE SOLID WASTE MANAGEMENT FUTURE



12/09/2015

County Inter-Departmental Working Group

Working Group Meeting Agenda

2

Wednesday, December 9, 2015
9:00 A.M. – 11:00 A.M.

Welcome	(10 min)
Summary of Activities	(20 min)
MRF Presentation	(20 min)
Facilitating Sustainable Practices	(20 min)
EPR- Pharmaceuticals and Sharps Waste Ordinance	(15 min)
Open Discussion and Next Steps	(20 min)

Summary of Activities

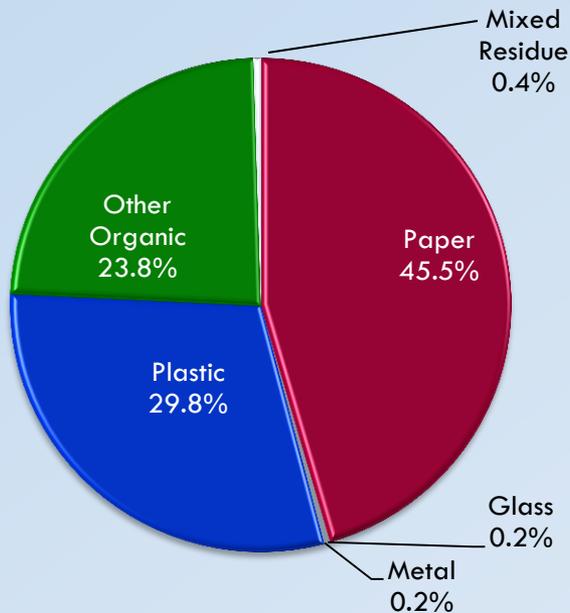
3

- County Operations
 - ▣ Trash and Recycling Service at County Departments
 - ▣ Waste Assessments at County Facilities
 - ▣ Surplus Program/LACoMAX

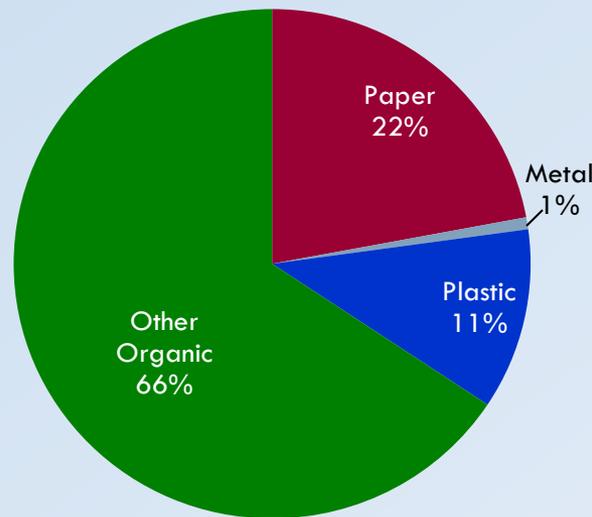
Waste Assessments at County Facilities: Department of Health Services

- October 2015 Waste Audit
- Characterized waste streams from
Administrative Offices and Cafeteria

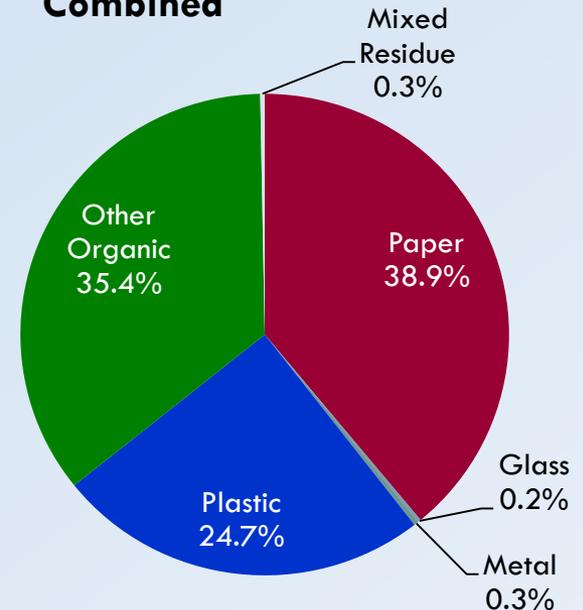
Administration



Cafeteria



Combined



Administrative Building Waste



Administrative Building Waste



Summary of Activities

7

- County Unincorporated Communities
 - ▣ EPR – Pharmaceuticals and Sharps Waste Ordinance
 - ▣ Waste Characterization Study
 - ▣ Eliminating Items from Our Waste Stream

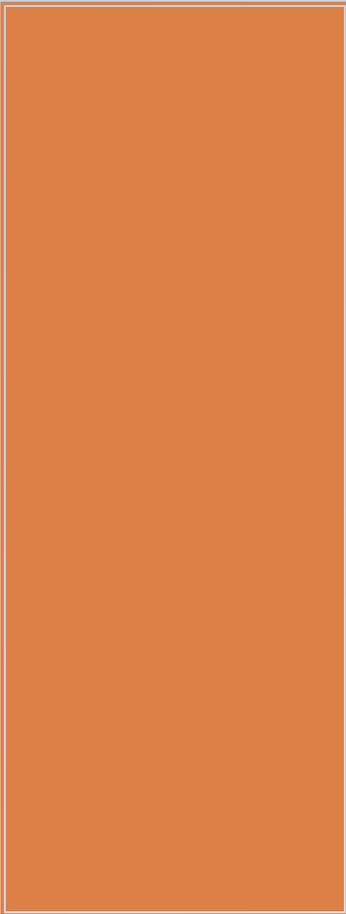
Summary of Activities

8

- Regional/Countywide
 - Emergency Response and Debris Management
 - LACoMAX
 - Overview of Waste Management

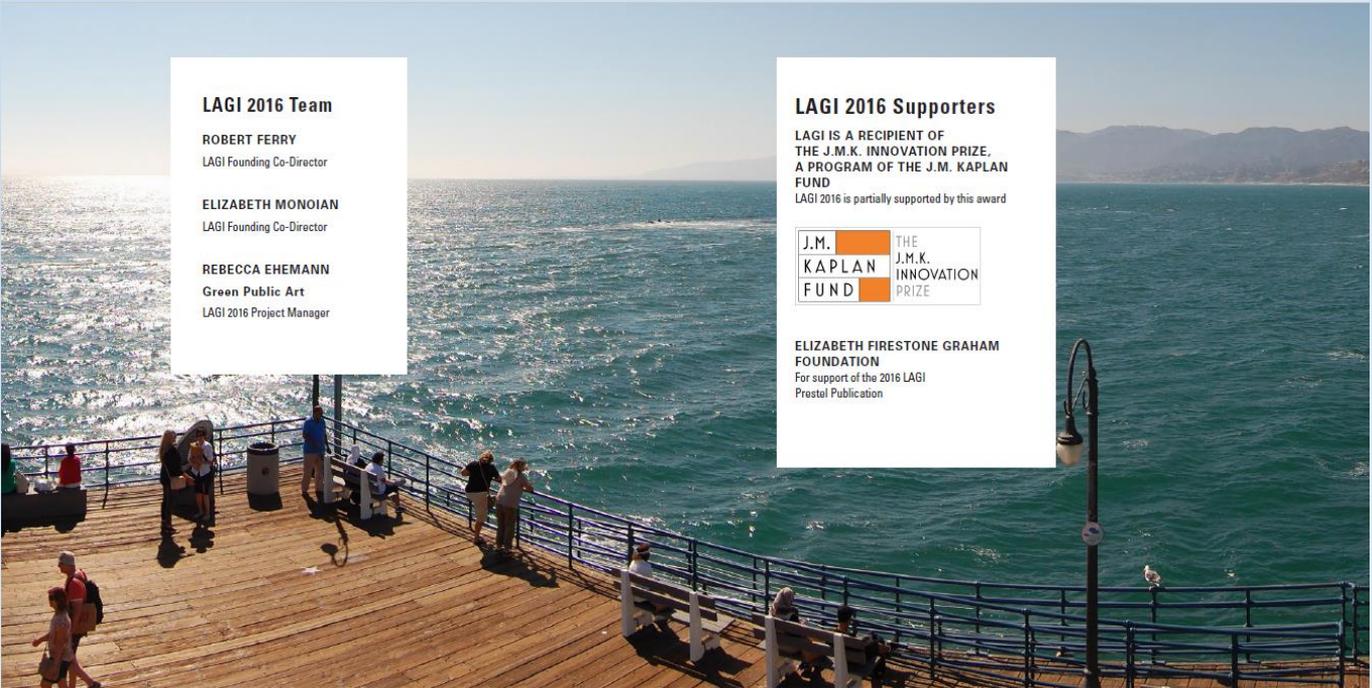
Summary of Activities

9

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- Outreach and Education
 - Roadmap Brochure
 - Audience
 - Purpose
 - Content
 - Action
 - County Department Recycling Program
 - Define Roles
 - A-Z Guide
 - General Office Tips
 - Top Three Topics
 - Hazardous Waste
 - E-Waste
 - Surplus Office Supplies

Land Art Generator Initiative

10



LAGI 2016 Team

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LAGI Founding Co-Director

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LAGI Founding Co-Director

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Green Public Art
LAGI 2016 Project Manager

LAGI 2016 Supporters

LAGI IS A RECIPIENT OF
THE J.M.K. INNOVATION PRIZE,
A PROGRAM OF THE J.M. KAPLAN
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LAGI 2016 is partially supported by this award

J.M. KAPLAN FUND THE J.M.K. INNOVATION PRIZE

ELIZABETH FIRESTONE GRAHAM FOUNDATION
For support of the 2016 LAGI
Prestal Publication

LAGI 2016 Partners



City of Santa Monica

GREEN PUBLIC ART CONSULTANCY

U.S. GREEN BUILDING COUNCIL CHAPTER - LOS ANGELES

SANTA MONICA BAY FOUNDATION

SANTA MONICA PIER

arts earth PARTNERSHIP

GREEN MOAH INITIATIVE

MUSEUM OF ART & HISTORY

lancaster + ca
it's positively clean

12/14/2015

Holiday KOST Campaign

11



Tis the Season to Be Green
RESOLVE TO REDUCE - REUSE - RECYCLE



- Radio Commercials
- Online Streaming Commercials
- Digital Banners
- Twitter Contest

Recovering Materials



Recycling Background



What is Recyclable?

14



Plastic Types

- The number 1 signals highly recyclable PET, and 2 indicates the equally recyclable HDPE (milk jugs, soda, water, shampoo, and peanut butter). PET can be melted down and reused again and again without loss of function
- Number 3 PVC is hardly ever recycled because most PVC products require virgin material for construction. Or pleather purses and couches.
- Numbers 4 (low-density polyethylene) like plastic bags and 5 (polypropylene) like straws, packing tape, and even in some ropes are slowly gaining popularity with recycling facilities, but they still have a way to go before they're widely recycled.
- Number 6 Polystyrene is Styrofoam has virtually no market value due to so light weight, breaks apart, and difficult to clean
- Number 7 is Polycarbonate and others. Since these are not standardized they have no value or are composed of two or more material types that are difficult to separate.

Incoming Waste

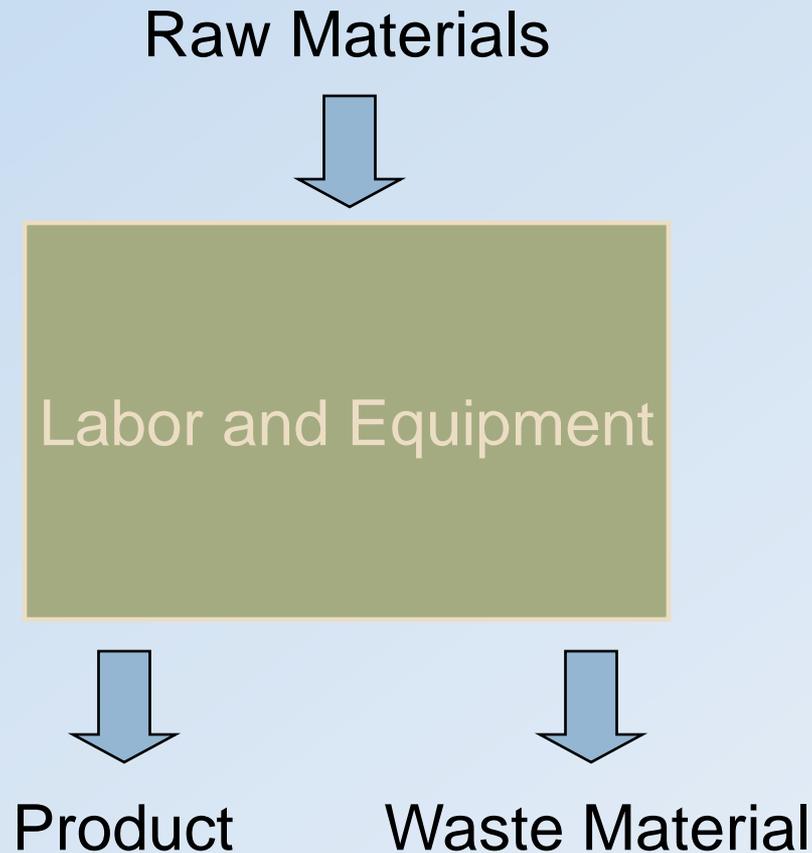




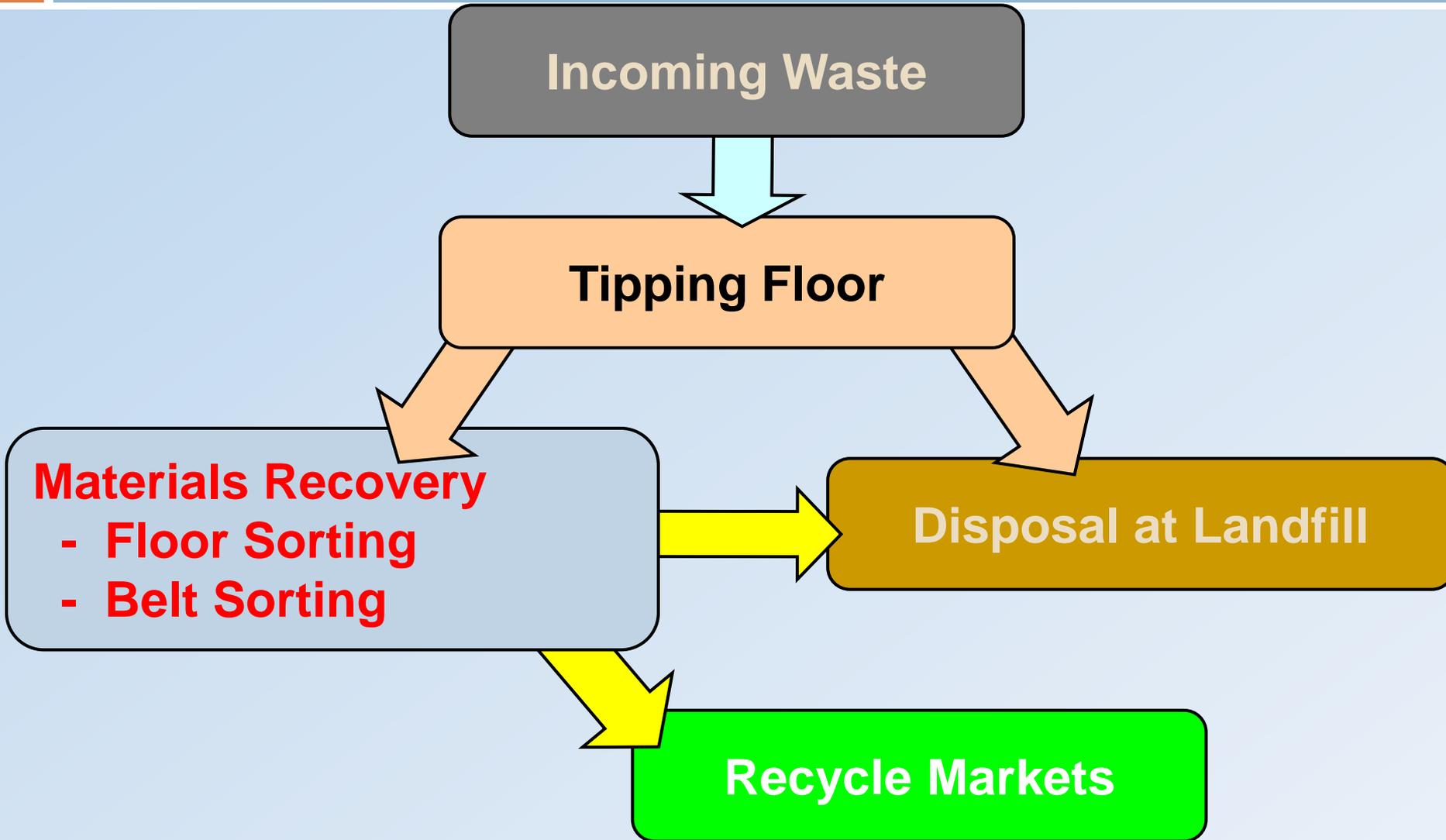
Recovery

- MSW Floor Sorting – 50% recovery
 - Wood, Concrete, Carpet, Drywall, Cardboard, Steel, Scrap Plastic, etc.
- MSW Belt Sorting – 7 to 12% recovery
- Commercial Belt Sorting – 30 to 40% recovery
- Residential Recyclables, Belt Sorting – 82% recovery

A MRF is a Commodity “Factory”



How does it all work?



Tipping Floor



Labor for Floor Sorting



Equipment Use in Floor Sorting



Belt Sort



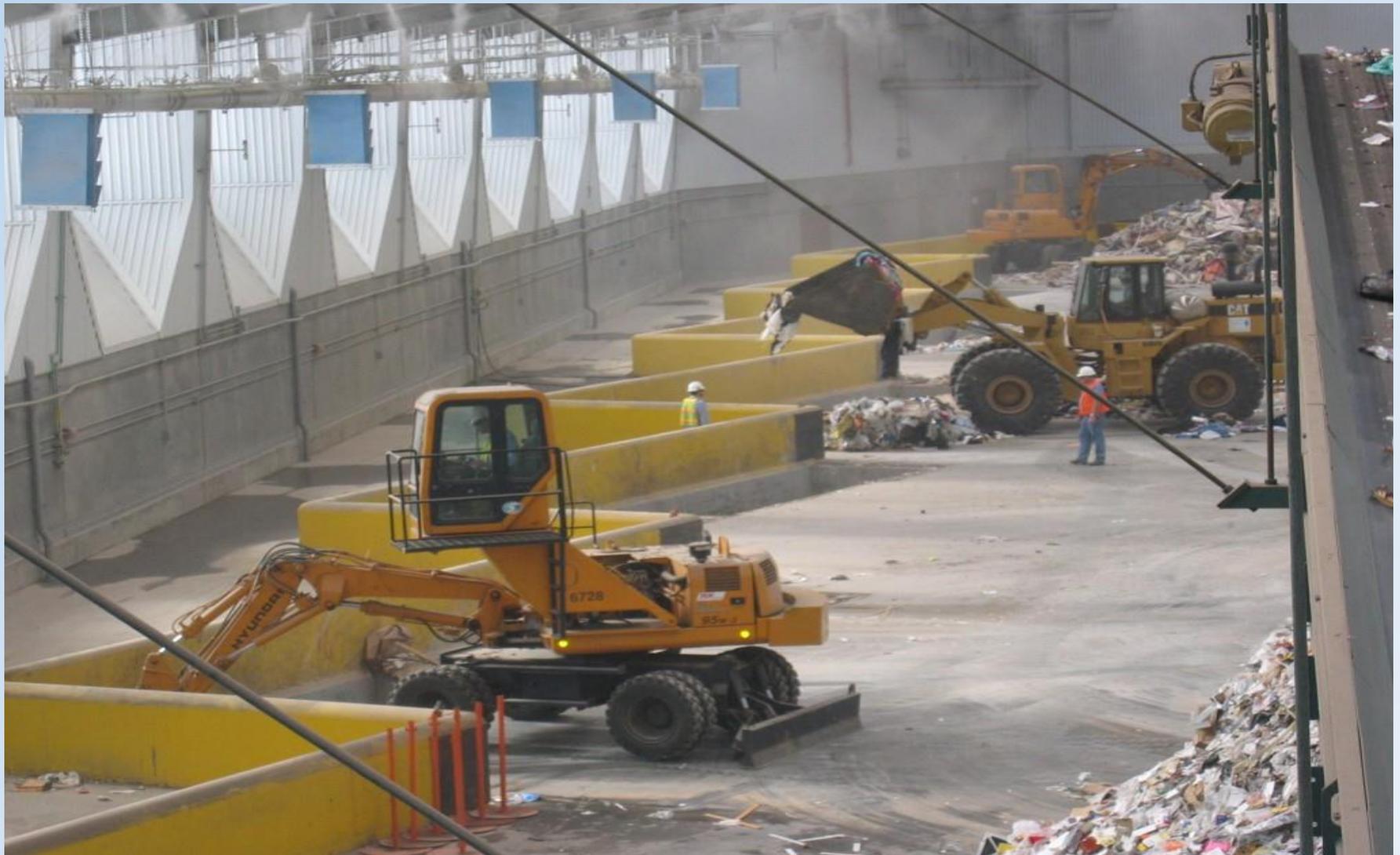
Baler Operation



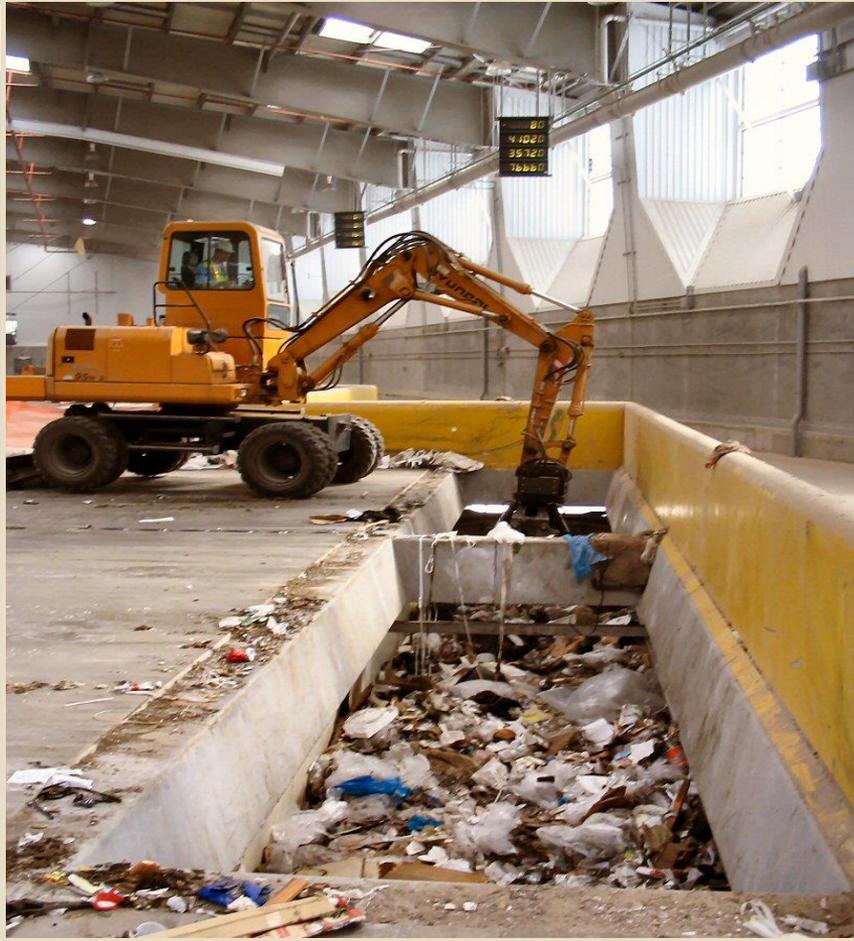
Portable Belt Sort Line



Out-loading of Waste and Commodities



Out-loading of Waste



Loading Transfer Truck

Transfer Truck



Recovered Recyclables (non CRV)



Recovered Recyclables (CRV)



Greenwaste Shredding



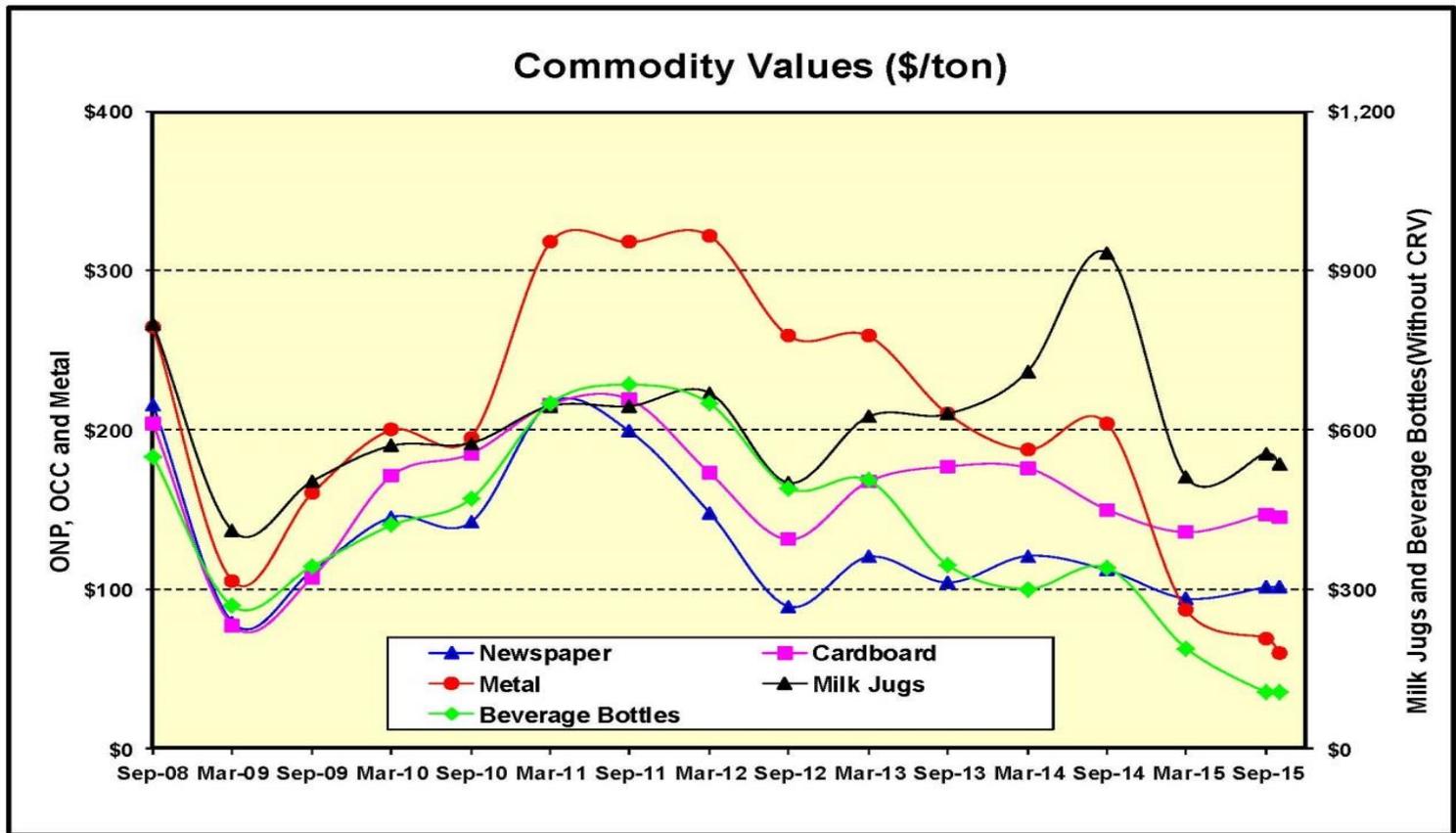
Wood Shredding



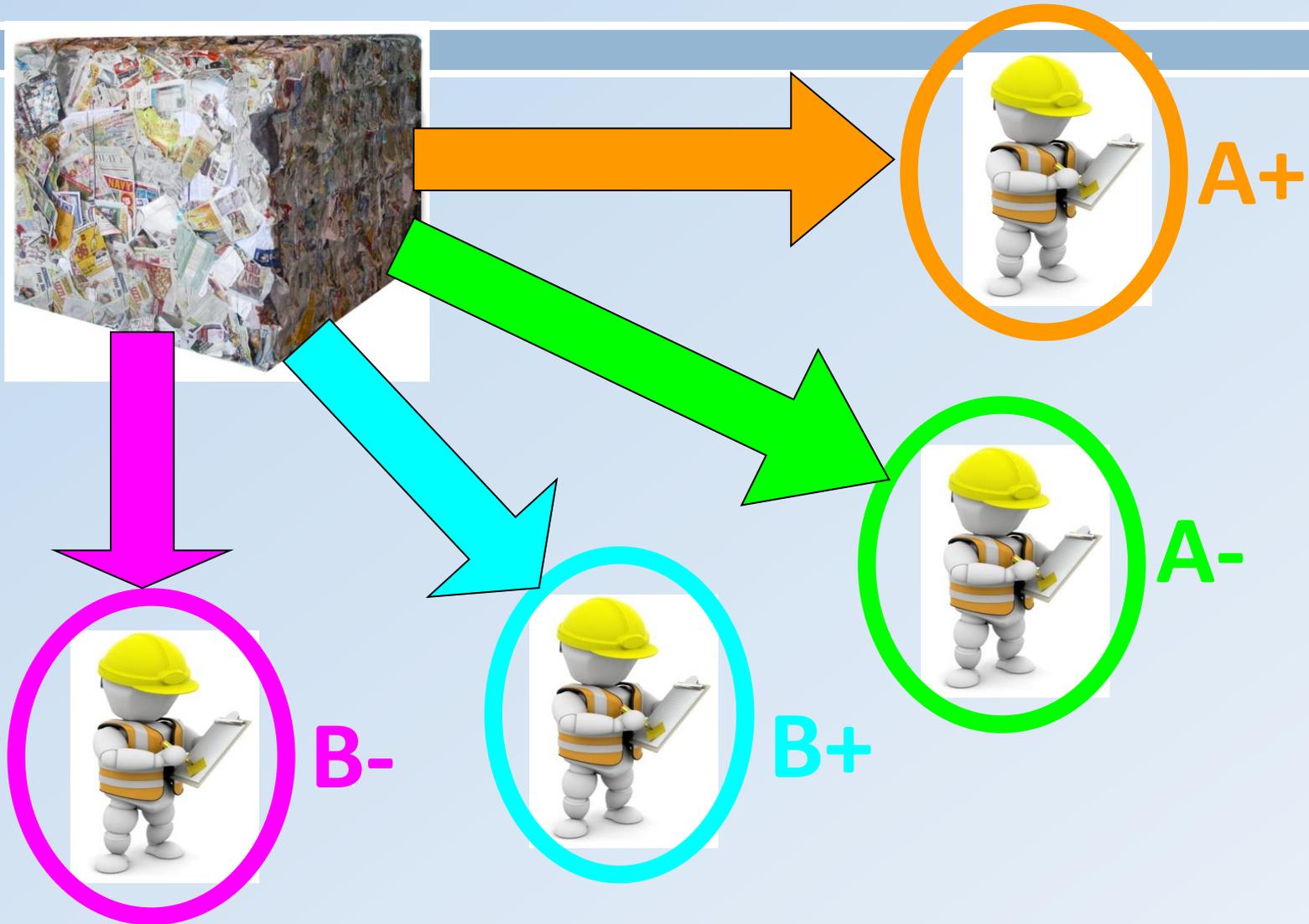
Commodity Destinations

- Asian Markets:
 - Paper, Cardboard, Plastics
- Local Markets:
 - Glass, Steel, Concrete, Wood, Greenwaste
- Volatility (must react to market conditions) :
 - Quality (China – Green Fence Initiative)
 - Market (supply and demand), shipping
 - Value of Commodities

Market Volatility



Quality Inspection



Loading Commodities in Intermodal Containers



Storage!!!



Inventory and Shipment



Recyclables Market



Should we MRF everything?

40

Depends on:

- ❑ Costs for collection and transport
- ❑ Costs for recycling services
- ❑ Cost of disposal
- ❑ Age and condition of the existing infrastructure
- ❑ Availability and distance to mills and ports where recyclables can be shipped

Recycling Issues

- Mixed Materials
- Shredded Paper
- Mixed Paper
- Separating difficulties
- Storage
- Fluctuating Market

Recycling Confusion

- In a 2014 online poll by the Institute of Scrap Recycling Industries and Earth911, 65% of respondents said they don't understand what plastics are acceptable in curbside collection
- Confusion leads to Contamination

Recycling Solutions

- Attempt to create a nationally adopted system
- Buy products that can easily be recycled
- Especially those containing recycled content
- Spread the word and educate
- Consider banning problem materials

Recycling is only a part of reducing waste, need to focus upstream and downstream as well

Should We Ban?



Facilitating Sustainable Practices

Thriving Zero Waste Community



EPR in Los Angeles County

46

- Pharmaceuticals and Sharps Waste Ordinance Update



Open Discussion & Next Steps

47

- Priorities for 2016
- Meeting Format
- New participation



Open Discussion and Next Steps

48

**Thank you for your
participation.**

Upcoming Meetings

- Subcommittee Meetings – January 14, 2016
- Working Group Meeting – March 9, 2016

