

# Creating Sustainable Workplaces

Capturing Beverage Containers, Paper and a Sense of Community

Presentation to

Federal Environmental Symposium West

June 17-19, 2008

**Thea McManus**

Acting Division Director

Municipal and Industrial Solid Waste Division

US EPA, Washington, DC



# Outline

- Introduction
- Keys to Success
- Audience Participation
- EPA Activities/Tools
- Audience Participation
  - Partnerships/Pilots
- Examples. . .



# The Workplace

- Workplaces have numerous environmental opportunities . . .
  - Batteries
  - Energy
  - Landscaping
  - Techno trash
  - Electronics
  - Water
  - Procurement
  - Cleaning Supplies
  - Green Building
  - Toner Cartridges
  - Organics



# Federal Basis for Action

- Executive Order 13423
  - Environmental Management System (EMS) and Environmental Compliance
  - Achieve 35% Recycling/Diversion Goals by each agency
  - Green Procurement
- Practice What We Preach



# The Workplace

- Workplaces have 80 to 90% recyclable waste streams.
  - Paper (up to 1.39 lbs/per person/day)
  - Beverage Containers (3 per person/day)
  - .59 lbs



# Goals

- Assess your programs.
  - Are they running well?
  - Is there room for improvement?
- Determine your issues and needs.
  - Take your program to the next level.
- Develop new strategies, pilots and approaches to improve Workplace Recycling.

# Workplace Recycling

## Keys to Success

- National Office Paper Recycling Project  
US Conference of Mayors

July 2001 Report:

Pilot Multi-Tenant Office Paper Recycling  
Program Evaluation



# Workplace Recycling Keys to Success

Building Management  
and Agency Commitment

Orientation Sessions with tenants,  
custodians and participants



# Workplace Recycling Keys to Success

Attractive Permanent Recycling Bins

Continuous Improvement

Ongoing follow through and education  
and communication with tenants



# Operational Strategies

## Keys to Success

Clearly Define Roles & Responsibilities

Utilize Hands On Approach

Regular Follow-Up Program Maintenance

Provide Adequate & Accessible Storage



# Operational Strategies

## Keys to Success

Consider permanent desk-side bins

Ensure Signage remains in place

Provide Consistent Service over time



# EPA Approach

Looking for success stories

Looking for pilots and partners

Not re-inventing “the wheel”



# EPA Tools Available

- WasteWise

<http://www.epa.gov/wastewise/>

- Business Guide for Reducing Business Wastes

<http://www.epa.gov/epaoswer/non-hw/muncpl/pubs/bus-guid.htm>

# EPA Tools Available

## COMING SOON:

- New Paper Website
- New Office Carbon Footprint Calculator
- Updated Workplace Recycling launch point on EPA OSW website

# Other Tools Available

- Sustainable Office Toolkit  
[www.p2ad.org/toolkit](http://www.p2ad.org/toolkit)  
[Thatcher\\_Young@p2ad.org](mailto:Thatcher_Young@p2ad.org)
- Earth 911 for business  
<http://business.earth911.org/>
- AF&PA  
[http://www.paperrecycles.org/workplace\\_recycling/](http://www.paperrecycles.org/workplace_recycling/)

# Audience Participation

- How many active recycling programs?
- What kind of programs do you have?
- How many have gotten a newsletter, e-mail or seen a poster regarding waste reduction or recycling in your office in the last few months?
- Do you know what your agency's Waste Reduction Goal is For 2010?

# Waste Diversion 2010 Goals for 27 Agencies

- USDA TBD
- CIA 25%
- DOC 30%
- CPSC 10%
- DoD Continuous improvement
- Ed TBD
- DOE Performance based goal (was 35%)
- EPA 45%
- GSA TBD
- HHS 60%
- DHS 35%
- HUD TBD
- DOI

# Waste Diversion 2010 Goals for 27 Agencies

- DOJ
- DOL 35%
- NASA 35%
- NRC 45%
- OPM \*
- RRB 33%
- SSA 25%
- DOS 30% (from a 2002 base year)
- DOT 40%
- TVA 35%
- Treasury 35%
- USPS 50%
- VA 40%

\*76 tons of paper, 1.1 tons of glass and plastic, 0.835 tons of aluminum, and 1.5 tons of corrugated

# CB Richard Ellis / GP Partnership

- CB Richard Ellis (CBRE)
  - #1 global real estate management company
    - Asset Service, Brokerage, Capital Markets
    - 100 years/ NYSE/ Fortune 500 Company
    - Fortune's top 100 Fastest Growing Companies
    - Manages and owns properties (**including many federal facilities**)
    - 1,431 office facilities/246 million square feet of office space in 43 US cities.



# CBRE Sustainability Plan

- CBRE goal: Carbon Neutral by 2010
- Created **Green Knights** to implement



National program of more than 65 LEED-trained CBRE Sensible Sustainability professionals in each market



**CBRECYCLING**  
Your Building, Our Planet.

# CBRE/Harmon/GP Implementation

- CBRE created a strategic alliance with Georgia Pacific and Harmon Recycling
- CBRE requiring each facility:
  - Waste Audit (Baseline)
  - Develop Recycling Waste Reduction Plan
  - Ongoing Education of Employees/Tenants
  - Monthly Reporting
  - Integrating with WasteWise



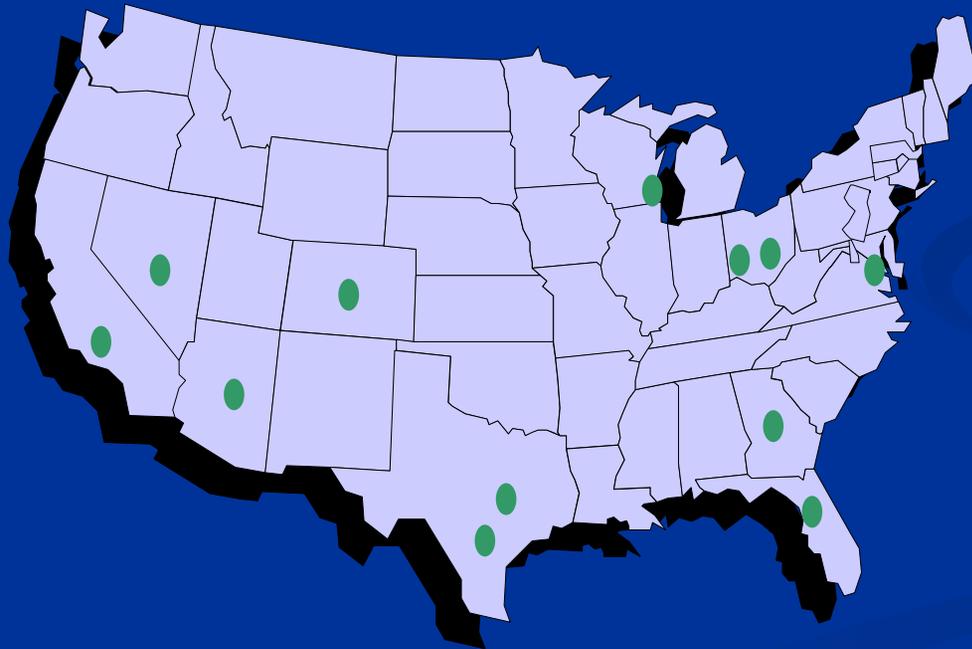
# CBRE Resource Conservation Programs



## Four Components To Our RC Efforts

- Workplace Recycling – Partnership with Georgia-Pacific
- O&M Recycling – Partnership With Aircycle and Esquire Environmental
- C&D Recycling
- Tenant Amenity Efforts

## 2008 WRI PROGRAM INTRODUCTION

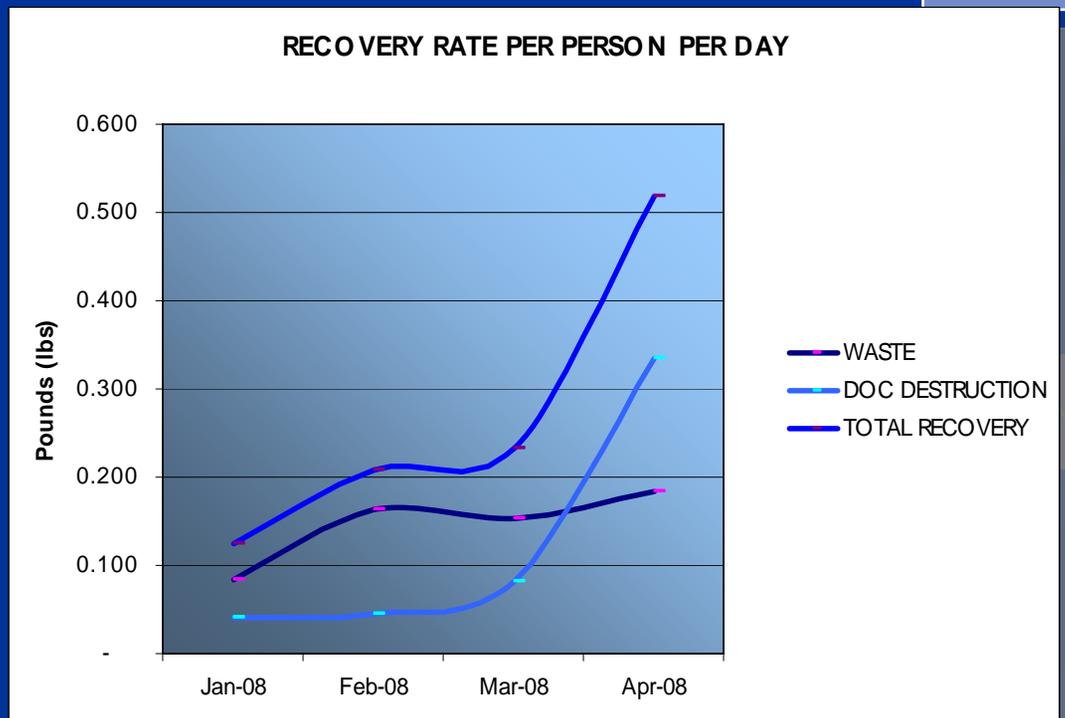


INITIAL PLAN CITIES 2008		
Atlanta	49	13.1MM
Chicago	94	18.9MM
Cincinnati	18	3.0 MM
Columbus	41	5.3MM
Dallas	77	16.6MM
DC	140	22.0MM
Denver	62	12.5MM
Houston	65	14.1MM
LA	105	20.1MM
Las Vegas	13	1.1MM
Orlando	29	3.6MM
Phoenix	77	10.4MM
	711	140.6 MSQ FT

# Pilot Building Set

- Every building is being audited before activation and following 6 months
- Statistically Significant results only from Atlanta after 4 months
- Currently only pulling fiber – plastics and aluminum launch in 60 days
- April Fiber Recovery reached over ½ lb per person per day

AUDIT	Walk-thru	Observed
Paper	66.17%	39.17%
Plastics	7.50%	19.33%
Metals	5.83%	5.50%
Wet	17.50%	15.17%
Other	0.00%	7.58%
	97.00%	86.75%



## WASTE FIBER RECOVERY

10,500 lbs Jan

18,220 lbs Feb

18,900 lbs Mar

## SECURE DOC RECOVERY

5,000 lbs Jan

5,000 lbs Feb

10,000 lbs Mar

40,100 lbs Apr

# Got Stories?



# Workplace Examples



- Montgomery County SORRT Program  
<http://www.montgomerycountymd.gov/swstmpl.asp?url=/Content/DPWT/solidwaste/education/sorrt/index.asp>
- New York City – new RFP
- Boston’s One Beacon Street (CBRE)
- EPA Headquarters
- National Park Services, DOD, USPS and many other federal agencies having success
- YOUR Agency?



# Workplace Examples

- Washington Area Council Of Governments

<http://www.mwcog.org/dep/gorecycle/>

- National Capitol Region GSA

<http://ncr.gsa.gov/Recycle>





# EPA Potomac Yard (PY) I & II



**GOLD LEED** Certified  
for Design and New Construction

Submitted application for **LEED GOLD**  
Existing Building (EB) 2008



# Other Materials Recycled at EPA

- Toner cartridges and ink jet cartridges
- Electronic equipment (e.g., computers, monitors, fax machines)
- Batteries
- Cell Phones
- Technotrash
- Tyvek® envelopes
- Metal hangers
- Cooking oil
- Oil and oil filters
- Fluorescent tubes and bulbs
- Solvents
- Polystyrene packaging material and polystyrene peanuts
- Plastic grocery bags
- Shrink wrap
- Tires



# Recycling/Waste Numbers for PY

2007	TOTAL (tons)
Mixed Office	16.77
Newspaper	5.985
Beverage Containers	5.38
Cardboard	11.49
Totals Recycled	19.56
Refuse	32.62
Total tons	52.18
Total Diversion	<b>37.49%</b>



# The Re Cap

- ✓ Looking for Success Stories and Pilots
- ✓ Have Tools Available and more Coming
- ✓ Time to Reenergize Workplace Recycling  
by reducing wastes,  
reusing items  
and recycling.



# Workplace Recycling

“C” Ya



THANKS!

Ideas. Suggestions.  
Looking for pilots?  
What do you need?



# EPA's Workplace Recycling Team

- EPA Regional Offices
  - R3 Mike Giuranna
  - R4 Jay Bassett
    - Karen Bandhauer
  - R5 Chris Newman
  - R6 Deanna DeBose
- Kent Foerster
- Ron Vance
- Marlene Regelski-Reddoor and Anthony Carrell (Federal Lead)
- Sara Hartwell (Office Calculator)
- WasteWise Team
  - YOU, if you are interested.

Other Regions  
TBD



# Workplace Recycling Project/Team Leader



**Kent Foerster**  
**Office of Solid Waste**  
**Washington, DC**  
**[Foerster.Kent@epa.gov](mailto:Foerster.Kent@epa.gov)**  
**(703) 308-0199**