

DEC 0 3 2009

DEP - WASTE REDUCTION

### **MEMORANDUM**

To:

Johanna B. Poston, Government Analyst I, Florida Department of Environmental

Protection

From:

Dave Jaye, Recycling Specialist, Collier County Solid Waste Management

Department, 239-252-7620 davidjaye@colliergov.net

Date:

November 30, 2009

Re:

Business "How to Recycle" Video Grant # IG8-09, Final Report

#### 1. Project Background

Businesses generate approximately 65% of the solid waste that is buried in Florida's Collier County Landfill. Therefore, boosting recycling helps save businesses money, protects our environment, and saves valuable landfill airspace.

Mecklenburg County, North Carolina, produced a business recycling video featuring recycling at a bank, a Frito Lay packaging plant, a utility company, and a two-person office. The video filmed each company's employees displaying good recycling habits and then interviewed a manager. Another segment featured a seven-step procedure for businesses to implement and sustain a recycling program.

The Florida Department of Environmental Protection Innovative Grant IG8-09 provided the opportunity to complete the Collier County SWMD business "How to Recycle" DVD training videos. The videos featured 11 segments of different County businesses, a business waste and recycling audit by SWMD staff, and a segment on how businesses can increase recycling and the proper disposal of hazardous materials at the County recycling centers.

## 2. Project Update Summary

Staff developed laminated business "Recycling Do's and Don'ts" posters similar to the City of Seattle's design (see Attachment B). These posters were designed for SWMD staff to distribute to individual businesses during business waste and recycling audits and to community groups. The budget amendment was formally approved by the FDEP officers and the Board of County Commissioners.



Staff purchased additional plastic liners for the temporary event recycling containers to increase recycling at temporary events.

Two recycling stickers were affixed to the tops of the 100 temporary event recycling frames.

### 3. Selecting and ordering temporary recycling containers, transporters and plastic liners

To optimize the remaining business grant funds FDEP granted permission to purchase recycling containers to boost recycling at temporary events. When the grant was written during the fall of 2006, the economy was booming. Unfortunately by the summer of 2009, many companies went out of business in Collier County. These temporary recycling containers can be used by temporary event organizers and business recycling haulers. Approximately half of all Collier County temporary event permits are issued to businesses for art and cultural festivals, non-profit fundraisers, events at hotels, the Collier County Fair, venue, and league sporting events.

Temporary recycling frames are provided by two rival vendors. The **ClearStream** frame on the left holds one 40-gallon clear plastic bag. The **Recycle Clear** frame on the right has a recycle XC that stores one 40-gallon clear plastic bag. The dimensions are different for each frame as **Recycle Clear** is a bit lower and wider. Staff selected a single recycling bin from **Recycle Clear** rather than a model that holds two 30-gallon plastic bag liners; one for trash and one for recyclables. Blue lids were selected to reinforce the message to people that this containers are for recycling.





Page 2

It is cumbersome to load and unload temporary event recycling frames into a vehicle. Staff benchmarked the option of the recycling frame transporters offered by both ClearStream and Recycle Clear. Several Florida recycling and Solid Waste Departments were contacted who had purchased these recycling frame transporters. The ClearStream recycling frames were too heavy for one or two people to lift into a vehicle (a recycling dolly or a recycling cart loaded with the frames inside). The recycling transporters were a great way to transport and store the recycling frames. One department used a golf cart to deliver and set up recycling frames, periodically collect plastic liners filled with recyclables and then retrieve the recycling frames after the temporary event.

The progress of the delivery of the recycling frames and transporters was tracked on the internet. Departments should be aware that factory delivery trucks do not usually come with a fork lift. The heaviest panel in this delivery weighed 800 pounds fully loaded with the recycling frames, recycling frame toters, caps and liners.

The SWMD considered ordering several combinations of recycling frames, transporters, dollies and plastic recycling liners. The optimal solution with the remaining grant funds was satisfied by Recycle Clear which provided 100 recycling frames, 5 recycling frame transporters holding 20 frames each, and 1,250 recycling plastic liners in the amount of \$7,609.86. The invoice and supporting documentation are provided as part of this final report. SWMD previously purchased 60 temporary recycling frames from ClearStream. The ClearStream five pack costs \$250 plus delivery costs.





# **Specifications**

Dimensions: 40 in x 25 in x 18 in

Footprint: 25 in x 18 in

Folded Dimensions: 40 in x 25 in x 3/4 in

Frame Strength: 3/8 in Steel

Frame Weight: 8 lbs

Lid Weight: 4 lb.

Case Weight: 60 lbsLid Hole: 3 holes (4 in)Bag Size: 40 in x 46 in

Stock Decal Size: 3 in x 18 in

Recycle Clear (Ph # 877-505-0226; website: Recycleclear.com) competing products:

# **RECYCLE X**







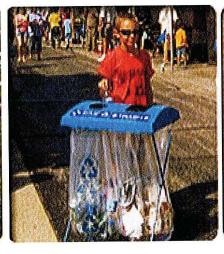
## **Specifications**

- All steel construction powder painted blue Holds 40 gallon 40" x by 46" 2 mill thick plastic bags
- Overall dimensions 22" X 22" X 35"
- Shipping weight 11.25 lbs.
- Recycled Content 82%
- Post-Consumer Content 68%

Pre-Consumer Content 14%

# RECYCLE X2







### **Specifications**

- All steel construction powder painted blue
- Holds (2) 30 gallon 30" by 46" 2 mil thick plastic bags
- Overall dimensions—22" X 22" X 35"
- Shipping weight—11.25 lbs.
- Recycled Content 82%
- Post-consumer Content 68%

Pre-Consumer Content 14%

# ClearStream™ Transporter Price: \$499.00 / Each

The Clear Stream Transporter is a simple storage and transportation system. The Transporter is a heavy duty galvanized steel frame. It has four 8-inch wheels for uneven terrain and locks in the front. It holds 20 Clear Stream frames, along with lids and bags. It is easy to use and move with just one person.

#### Features and Benefits:

- Dimensions: 36 in x 23 in x 44 in powder coated blue steel
- 8" wheels (the front two are locking) Heavy duty
- Holds 20 Clear Streams, 20 lids and bags
- Easy to store

.





### Recycle Clear's X-Porter and Transporter



X-PORTER
X-Porter + 10 Recycle
X/X2 Frames + 10 Tops
and 25 Bags

with X frames - \$700.00 each with X2 frames - \$750.00 each



Staff liked the pulling handle on Recycle Clear's frame transporter. This transporter has plastic spacers that presses the frames into place by alternating putting in and taking out the top and bottom frames. Both manufacturers have brake wings on the front wheels which can be locked or unlocked by foot. Above is a photo of two Recycle Clear recycling frame transporters in a storage shed at the Naples Recycling Center.

# 4. Economical Alternative to purchasing Plastic reyclicng bags (liner)

Currently, the clear plastic liners purchased from Staples are more cost effective. Staples Office Supply is a contract vendor with Collier County resulting in a substantial discount. The star seal bottom helps prevent leakage and is made from high-quality blended resins for superior strength and puncture resistance. Staff paid \$479.06 for 17 boxes of high density mini-rolls, waste can liners, 40-45 gallon 40" x 48", 16 micron/1.5 Mil, 25 bags per roll, 10 rolls per carton that included delivery. 17 boxes X 250 liners per box = 4,250 liners. \$479.06/4,250 liners = 11.3 cents per plastic liner. Staples Office Supply offers two-day free delivery on orders over \$50.00.

Plastic liners cost approximately \$0.50 more each with volume discounts when ordered from Recycle Clear and ClearStream. These vendor supplied plastic liners have the word "recycle" printed on their recycling liners. The thickness, mil rating, star seal on the bottom, cost and transparent or translucent material are key factors. Translucent plastic liners help remind people these containers are for recyclable items like cans and bottles and not trash. Translucent plastic recycling liners have a better chance of being accepted by a recycling factory.





Staples supplied liners

# Vendor supplied liners

2 mil thick 30 gallon 30" x 46"

2 mil thick 40 gallon 40" x 46"

# 5. Challenges in printing a Business Recycling Poster

Staff searched the internet for the best business recycling posters. The City of Seattle and Boulder, Colorado have excellent business and residential recycling posters. However, staff needed to get these cities' permission to use their posters. Also staff needed to get the original "native files" of the recycling poster. The "native files" contain original art work and photographs which save considerable time and money for a printer trying to customize and re-brand the recycling poster which matches each local community's business recycling program.

The recycling items that are collected locally from residents are determined by that community's contract with the recycling hauler. The recycling collection contract depends, in part, on the technology of the recycling separation factory called a Materials Recovery Facility (MRF), the technology of the recycling collection trucks, the economic value of the recyclables, the demographics of the community, and financial aspects of the recycling haulers' contract.

In Florida, business recycling collection is free market driven. Businesses may generate a large amount of certain products which might be recyclable. During the economic boom times, some business recycling haulers gave rebates to large generators of high quality office paper. Businesses may also generate scrap metal, wood and plastic bags that can be taken to a public or private recycling center, but cannot be processed by a MRF. Hazardous waste materials must be properly disposed of by the businesses.

The final business "How to Recycle" training DVD has a menu design so businesses can choose to watch all the videos or only the videos of companies that most closely match their business. There is a segment on the proper disposal of business hazardous waste. The video comes in English, Spanish and Creole languages.

The business "How to Recycle" training videos is on the Collier County SWMD website: http://www.colliergov.net/Index.aspx?page=2752. The business recycling poster will be on the website.

### 6. Grant Budget Amendment

After consultation with the FDEP Innovative Grant Manager, permission was granted to reallocate funds within the grant budget. Since the reallocation of funds exceeded 10% of the grant budget, a formal budget amendment with the FDEP was executed (Attachment C).

This budget amendment reallocated grant funds to purchase 100 temporary event recycling containers, five carts to transport recycling containers, and plastic liners for the temporary recycling containers. Commercial recycling haulers and temporary event organizers will be able to borrow these temporary event recycling frames.

The grant amendment provided additional funding to purchase business recycling "Do's and Don'ts" posters. Temporary event sponsors and/or organizers, waste and recycling haulers, and commercial businesses will be provided the posters.

### 7. Financial Activity

The final requests for reimbursement of \$23,661.95 include:

DESCRIPTION OF GOODS / SERVICES	DATE GOODS / SERVICES RECEIVED	AMOUNT	CHECK
Business Recycling Posters	10/30/2009	\$3,175.00	11/18/2009
Recycling containers, transporters, liners	10/26/2009	\$7,609.86	11/18/2009
Plastic Liners for recycling	9/25/2009	\$479.06	11/18/2009
DVDs containing business recycling videos  Printing Recycling Brochure	9/22/2009	\$7,000.00 \$633.74	10/7/2009
Postage and mailing Recycling Brochure	09/02/2009	\$1,540.55 \$1.642.61	10/07/2009
		· · · · · · · · · · · · · · · · · · ·	10/14/2009
	Business Recycling Posters Recycling containers, transporters, liners Plastic Liners for recycling  DVDs containing business recycling videos  Printing Recycling Brochure	Business Recycling Posters 10/30/2009 Recycling containers, transporters, liners 10/26/2009 Plastic Liners for recycling 9/25/2009  DVDs containing business recycling videos 9/22/2009  Printing Recycling Brochure 09/02/2009  Printing DVD mailer 0910/2009	DESCRIPTION OF GOODS / SERVICES         / SERVICES RECEIVED         AMOUNT           Business Recycling Posters         10/30/2009         \$3,175.00           Recycling containers, transporters, liners         10/26/2009         \$7,609.86           Plastic Liners for recycling         9/25/2009         \$479.06           DVDs containing business recycling videos         9/22/2009         \$7,000.00           Printing Recycling Brochure         09/02/2009         \$633.74           Postage and mailing Recycling Brochure         09/02/2009         \$1,540.55           Printing DVD mailer         0910/2009         \$1,642.61

- \$3,175.00 to Intech Printing for 3,000 business recycling posters, four color, 80 pounds gloss white paper, 5 mil flush cut gloss laminate.
- \$7,609.86 to Recycle Clear for five recycling container frame transporters, 100 recycling container X frames, 100 X frame plastic tops with 200 recycling stickers, 250 (40 gallon) recycle only plastic bags, 1,000 (40 gallon) extra recycle only plastic bags, shipping and handling five pallets delivered by 10-27-09.
- \$479.06 to Staples for 17 boxes of High Density mini-rolls, waste can liners, 40-45 gallon, 40" x 48", 16 micron/1.5 Mil, 25 bags per roll, 10 rolls per carton, including delivery. 17 boxes X 250 liners per box = 4,250 liners. \$479.06/4,250 liners = 11.3 cents per plastic liner.
- \$7,000 to The Naples Studio for delivery of the DVDs containing the business "How to Recycle" video.
- \$633.74 to Intech Printing for printing of the DVD recycling brochure.
- \$1,540.55 to Intech Printing for postage and mailing services for the DVD recycling brochure.
- \$1,642.61 to Intech Printing for printing of the business "How to Recycle" training DVD mailing sleeve.
- \$1,581.13 to Intech Printing for postage and mailing services for the business "How to Recycle" training DVD sleeve.

Per FDEP's request included is the DEP Voucher for Reimbursement of Travel Expenses form to supplement Collier County's travel request documentation. As part of the FDEP Grant IG8-09 requirements to disseminate lessons learned from managing the Business "How to Recycle" video grant, staff manned a display table presenting the "How to Recycle" business video lessons learned and a Power Point presentation at the 2009 Recycle Florida Today Conference. There were approximately eighty attendees at the RFT conference,

Attachment D, "Payment Request Summary Form," states that Collier County's in-kind staff time of 65.50 hours were added to 914 hours spent on this project during the previous eight quarters for a total of 979.50 hours valued at \$26,501.51. This figure is the employee hourly compensation rate and does not include the cost of employee benefits or support services. Collier County's staff time spent is documented in the attached Excel spreadsheet. To date, we have traveled 2,032.72 miles for an in-kind mileage expense of \$528.50. Therefore, as of October 31, 2009 Collier County has contributed \$26,501.51 in staff time plus \$528.50 of in-kind mileage for a total of \$27,030.01, approximately 112.2% of the in-kind budget of \$24,097. We requests reimbursement in the total amount of \$79,700.15 of approved expenditures from the FDEP Innovative Grant IG8-09(\$79,732.00)

A summary of mileage and our time sheets are attached. Most of the video vendor management and business recruitment is done by phone, postal mail, e-mail, and business group presentations.

#### 8. Next Steps

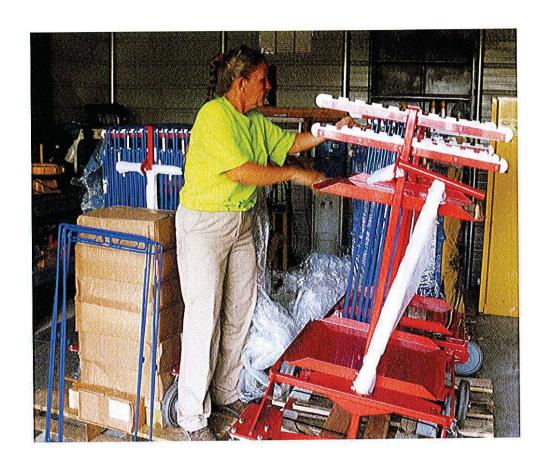
Our next steps are:

- 1. SWMD staff will contact commercial recycling haulers and temporary event organizers about the availability to borrow temporary event recycling container frames.
- 2. The business "How to Recycle" training DVD will be mailed to new businesses in Collier County.
- 3. The business "How to Recycle" training DVD will continue to be shared with various community, non- profit and educational groups. For example, staff gave a presentation to an Environmental Science Class at Edison College. Many college students have part time restaurant jobs and they enjoyed the recycling video segment featuring "The Naples Tomato" restaurant.

## Attachment A

Below are some photos of the pallets of delivery of temporary event recycling frames, lids, recycling stickers for the lids and lines delivered within Recycle Clear's transporter.





#### Attachment B

Our Business Recycling poster was based in part on the City of Seattle's poster.



Training videos on recycling in various business settings, including the proper disposal of hazardous wastes, are available on our web site at www.colliergov.net/recycles. To request a free DVD of the videos, or to schedule a free recycling/waste audit for your business, call 239-252-2380.



www.colliergov.net/recycles
For Information Call
Customer Service at 239-252-2380

