Old Dixie MRF
Our First Year Program For
Post-Consumer Carpet Recycling
Partnerships-Relationships &
Piggy Backing

Presented at the
5th Annual CARE Conference May 8-10, 2007
Francis Marion Hotel, Charleston, SC
Our First Year At Our MRF
For the PCC Program
(Scanning and Sorting & Baling Facility)

- Tag-along/piggy back existing infrastructure
- MRF Opened January 2, 2002
- This year is our 6th year in operation
- 2006 Outbound Breakdown 85% Carpet & 15% Traditional Recycling
- April 1, 2006 to April 1, 2007 our first year for our PCC Program (accounted for less than 10% of Carpet in 2006)
40,000sf MRF-6 Dock Doors-3 Receiving Overhead Doors
Training Room & Offices
Roll up doors wide enough for our widest load & tall enough for our highest truck boomed up
Our Infrastructure:

- Area to ID-Sort-Store
- 4 bunker areas to store loose (20ft X 12ft)
- Area to store bales (stack 4 high)
- Dock doors to load out trailers
- Baler (1000 to 1300 lbs per bale)
  (bale size 31” X 45” X 64”)
- Mobile Equipment:
  (Forklift & Skid Steer Loader)
Mobile Instrument to ID Carpet Face Fiber

- Axsun Technologies
- Bruker Optics
- CarPID
- Phazir (Polychromix)
- **Must Have Ability To ID Carpet Face Fiber**
- N-6 (30%), N-66 (40%), PP (15%), PET (10%)
- Mixed Polymer Weaves
Hand-held Instrument To ID Carpet
Bunkers for Post-Consumer Carpet
Built Outside Storage as Needed
Ample Floor Space To Sort & Separate & Feed Baler
Carpet Pole & Skid Steer & Bale Squeeze
Bale Squeeze Attachment to Handle Bales

Must open large enough for largest bale and small enough for smallest width.
• Dry (water free)
• No gross contamination
• Bale form and size must allow for stable stacking
• Weight 1000 to 1800 lbs per bale
• Strapping 4 to 6 per bale
• Some markets no jute backing
• Minimum 40,000 lbs (20 tons) payload on trailer
Source of Feedstock:

- Generator
- Carpet Installer *(Our first partnership)*
  Participation from carpet retailers and their installers is critical to the success of a PCC recycling program.
- Carpet Store *(Hope to be our 2nd partnership)*
- Others *(Our local carpet manufacturers)*
Partnerships With Carpet Installers
Market Place:
Remelters/Shoddy Grinders/WTE

- N-6 Remelters/Shoddy Grinders/WTE .01 to .05 per lb
- N-66 Remelters/Shoddy Grinders/WTE .01 to .05 per lb
- PP Remelters/Shoddy Grinders/WTE .01 to .05 per lb
- PET Remelters/Shoddy Grinders/WTE .01 to .05 per lb
- Carpet Pad Carpet rebond mfg’s .10 to .25 per lb
Generic Markets:
Must Have Multiple Markets for all Four Face Fibers & Back Up Markets

- Automotive (needle-punched fiber-mats)
- Carpet pad and underlayment
- Composite deckings, railings, roofing & backer boards
- Composite plastic leach field drainage chambers
- RR ties
Other (reinforcing fibers, pelletized)
Economics:

• Charges to receive carpet waste (feedstock)
  .005 to .01 per lb
  ($10. to $20. per ton)

May want to provide incentives for all participants

* Sales on outbound baled feedstock
  .01 to .05 per lb

* Surcharge on collection program
  .01 to .04 per lb
Going to the next level for our PCC program:

- Expanding into a preferred type of collection container through:
  - FE Loader Containers (8cy) (.5 to 1 ton) (Compacted) FEL Truck Loaded (8 to 10 ton)
  - Roll-off Containers (40cy) (3 to 5 ton)
  - Trailers (45ft to 53ft) (8 to 10 ton)
- What really works best?
Front End Loader Service
40cy Enclosed Roll-Off Container
45ft to 53ft Van Trailer
Is there enough population base for the economics to work?

- 12 to 18 lbs per person per year
- Based on 100,000 population
- 750 tpy
- 63 tpm
- 3 tpd
- 2 to 3 trailers per month
- Will the economics work?
15 Years of Operations of a Mono fill for Carpet (Balefill)

- Over 300,000 tons of feedstock
- (600,000,000 lbs)
- Value at .01 per lb $6,000,000.00
- Value at .05 per lb $30,000,000.00
Balefill for post-industrial carpet
Started in 1993
Thank You for the Opportunity to talk about our program & Contact Information

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