



A cooperative effort of the N.C. Department of Environment and Natural Resources and the N.C. Department of Commerce.

# Recycling Works

Volume 16, Number 4

Fall 2010

## Two Top-Notch Tour Options for CRA's SE C&D Conference Attendees

By Matt Ewadinger, RBAC Manager

Plan to attend the Carolina Recycling Association's Southeast Construction and Demolition Recycling Conference to be held in Charlotte on Dec. 7-9, 2010, and you will have the opportunity to participate in one of two tour options on Dec. 7.

### Tour 1: Griffin Brothers Highway 49 C&D Landfill and Reprocessing Center and Linda Construction Inc.

At Griffin Brothers, tour participants will visit the 14,000-square-foot mixed C&D processing facility that includes an Erin C&D picking line and screener, formerly in operation at Griffin Brothers' Myrtle Beach C&D recycling operation. The fa-

cility is designed to process 400-500 tons of C&D material per day.

All mixed C&D loads arriving at the recycling facility enter a vibratory finger screener that separates fines from debris. The diverted fines are used as daily cover at the Highway 49 C&D Landfill. Debris travels up the conveyor belt to the picking lines where employees stationed at five bays separate concrete, brick & block, wood, metals, cardboard and asphalt shingles. The separated wood, concrete and gypsum wallboard proceed to a grinder and screener to produce marketable products. Long-term plans are to also construct and operate a state-of-the-art gypsum wall-

(See [TOURS](#), page 4)



The Erin screening and sorting system pictured here is being installed at Griffin Brothers' Highway 49 facility near Harrisburg.

## Inside

SE C&D Recycling Conference . . . . .	2
Harnett County & Johnson Brother's Shingle Recycling . . . . .	6
Pitt County Shingle Recycling Program Award . . . . .	7
RBAC Grants . . . . .	8
Market Pricing Trend Graphs. . . . .	9
Market Pricing . . . . .	9

# Attend The Southeast C&D Recycling Conference, Dec. 7-9, 2010

by Matt Todd, Recycling Business Development Specialist

The Carolina Recycling Association is offering a high-value, dynamic event entitled [The Southeast C&D Recycling Conference: Opportunities in Greener Building](#), Dec. 7-9, 2010, in Charlotte at the Sheraton Airport Hotel. The conference brings together builders, contractors, C&D recyclers, equipment vendors, government officials, architects and other leaders in the diversion and recycling of construction and demolition materials for a three-day event targeted at expanding C&D recycling in the southeast.

Approved by the U.S. Green Building Council as an official education provider, the conference qualifies



**EDUCATION PROVIDER**

for 9.5 hours of Green Building Certification Institute

continuing education credits for LEED AP credentials. The event also qualifies for up to 10 continuing education credits for any of the Solid Waste Association of North America's (SWANA's) professional certification programs.

The conference kicks off on Tuesday, Dec. 7, with two hands-on, unique tours of C&D facilities (see cover story). The tours are followed by a reception and grand opening of the exhibit hall.

Wednesday's agenda includes green building, material markets, equipment and operational issues, regulatory trends and cost-saving recycling techniques. The opening keynote speakers are two leaders in the field of C&D recycling:

- Emily Scofield, Executive Director of the USGBC - Charlotte Region Chapter
- Linda A. Holden, Owner and President of The Linda Construction Co. Inc.

Breakout sessions throughout the conference include two tracks. The "Builder Track" focuses on C&D recycling and reuse topics for design/build firms, archi-

( See [Conference](#), Page 3 )

## Keynote Speakers:

### Emily Scofield

Emily Scofield is the executive director of the Charlotte Region Chapter of the U.S. Green Building Council. Previously with RT Dooley, Scofield spearheaded efforts that led to the Charlotte Business Journal's Green Award in three categories: 2008 For-Profit Business of the Year; 2008 Innovative Idea for RT Dooley, Linda Construction and Wallace Farm; and, 2009 Innovative Idea for RT Dooley, National Gypsum and Drywall Consortium.



As an active member of the U.S. Green Building Council Charlotte Region Chapter since 2007, Scofield instructed the first LEED AP study group for the USGBC-CRC and introduced hundreds of college students to the ideas of sustainability. She received her master's degree from the University of Georgia in environmental health science and her bachelor's degree in biology from Queens University of Charlotte.

### Linda A. Holden

Linda A. Holden is the owner and president of The Linda Construction Co. Inc. of Charlotte. Incorporated in 1986, The Linda Construction Co. has earned a reputation as a leader in construction waste recycling and management, receiving awards for its demolition recycling efforts beginning in 2002. In 2006, the company added the Construction Waste Management Services Division, providing complete waste management planning and services for LEED and other construction and demolition projects. Linda Construction has more than 100 employees and is licensed to work in seven states.



In the construction industry for more than 20 years, Holden holds a bachelor's degree from the State University of New York at Binghamton. She is a member of the board of directors of both the Northwest Area Council of the Charlotte Chamber of Commerce and of the North End Development Partners.

CONF., from Page 2—

pects, contractors and engineers. The “Recycler Track” focuses on C&D recycling topics for public and private sector recyclers, haulers and landfill operators.

On Thursday, attendees will enjoy breakfast while participating in an open discussion about recycling markets for materials in the C&D stream. This market forum will be broken into three 30-minute panels:

**Panel 1:** Low hanging fruit (scrap metal, concrete, cardboard) and how to easily direct this material to market from jobsites and manage it at the facility.

**Panel 2:** Wood waste’s varied management options: power generation, composting, value-added end products.

**Panel 3:** Emerging markets of shingles and dry-wall (how to design recycling programs for these materials and where to get it done).

U.S. EPA’s Kim Cochran will close the conference with a keynote presentation discussing EPA’s focus on C&D recycling and outlining the agency’s “Roadmap to Increased C&D Materials Recovery.”

The conference features an affordable registration rate and is the only major C&D recycling conference in the southeastern U.S. Attendees can register online and can take advantage of the great hotel room

rates by reserving rooms by Nov. 23, 2010.

For more information, to register, sponsor, exhibit or book rooms at the Sheraton, please visit the conference website at: <http://www.cdrecyclingconference.com/index.htm>.

This event is presented by the Carolina Recycling Association. For questions, contact CRA at (877) 972-0007 or [staff@cra-recycle.org](mailto:staff@cra-recycle.org).

## ATTEND

## December 7-9

### “The Southeast Construction and Demolition Recycling Conference”

#### Learn How You Can Make the Most of Your Recyclables and Reusables.



The Carolina Recycling Association is offering a high value, dynamic event entitled “The Southeast Construction and Demolition Recycling Conference: Opportunities in Greener Building.” The conference is set for **December 7-9 in Charlotte at the Sheraton Airport Hotel**. The conference is bringing together builders, contractors, C&D debris recyclers, equipment vendors, government officials, architects and other leaders in the diversion and recycling of construction and demolition materials for a three-day event targeted at expanding C&D debris recycling in the southeast.

**Details on the conference are available at [www.CDRecyclingConference.com](http://www.CDRecyclingConference.com), including:**

- Hands-on, unique tours of C&D recycling facilities.
- An information-packed agenda addressing green-building, material markets, equipment and operational issues, regulatory trends, and cost-saving recycling techniques.
- Exhibitor space for contact with new customers.
- Sponsorship slots for higher visibility among clients and conference attendees.

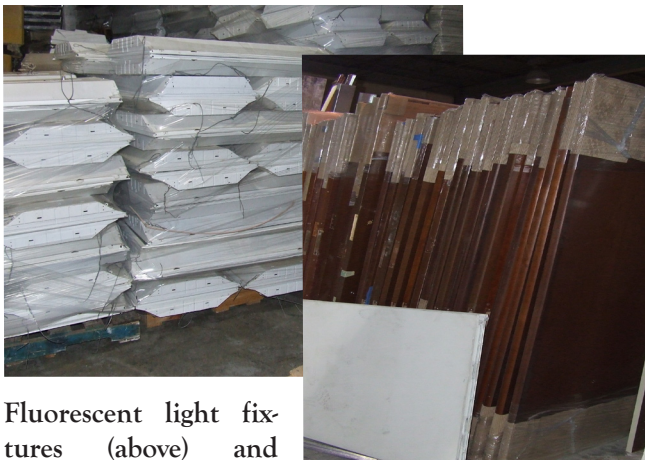
The conference features a highly affordable registration rate and is the only major C&D recycling conference in the Southeastern U.S. **Attendees can easily register online and can take advantage of the great hotel room rates by reserving rooms by November 23.**

## TOURS, from Page 1

board processing facility at the Highway 49 site.

Griffin Brothers owns and operates five combination C&D landfill and reclamation facilities, three in North Carolina and two in South Carolina. In addition, Griffin Brothers owns and operates Greenway Recycling in Kershaw, S.C., a gypsum wallboard recycling facility. For further information, contact Ron Gilkerson at (704) 455-1561 or [Ron@Griffinbrothers.com](mailto:Ron@Griffinbrothers.com), or check out the company's website at <http://www.griffinbrothers.com/reclamation/index.html>.

The second stop on Tour 1 will be *Linda Construction's* C&D processing operations as well as the company's salvage and reuse facility in Charlotte. In addition to viewing the inventory of salvaged materials, participants will see deconstructed items that have been incorporated into the company's own office renovations.



Fluorescent light fixtures (above) and wooden doors (right) are examples of the many items salvaged by Linda Construction and resold to market.

Linda Construction's Demolition Division develops waste management plans designed to reach the maximum recovery of recyclable materials, while maintaining an economical budget and project schedule. The company provides complete LEED waste management plans that include estimates of recycling percentages, on-site waste management training for field crews and monthly reporting schedules.

Some of the LEED job clients that Linda Construction has worked with include RT Dooley Construction and Choate Construction. Charlotte area projects include the Bank of America Corporate Center and the Ritz-Carlton Hotel. Recycling rates on new construction projects currently range from 55 percent to 86 percent; and, demolition projects currently range from 75 percent to 95 percent.

For additional information, contact Gary Olnowich at (704) 333-7120 or [gary@lindaconstruction.com](mailto:gary@lindaconstruction.com), or visit: <http://www.lindademo.com/demolition-wastemgmt.shtml>.

### Tour 2: Boggs Paving Inc. and Mecklenburg County's Foxhole Landfill

Tour participants will visit the *Boggs Paving's* new asphalt shingle recycling processing operation that begins with the delivery of loads of asphalt shingles from single family homes and ends with the recycling of those shingles into hot asphalt mix at Boggs' Concord Highway (US Highway 601) operation in Monroe.

The shingles are presorted into piles and tested for asbestos. The sorting crew removes all of the non-recyclable material such as felt paper, wood and other debris. The asphalt shingles enter a grinder and are deposited onto a pile of finished recycled asphalt shingles. The material proceeds through the plant and becomes part of the final hot mix asphalt material that is sent to various jobsites.

(See *TOURS*, page 5)



Segregated asphalt shingles await loading for delivery to Boggs Paving's asphalt shingle recycling operation.

## TOURS, from Page 4

“We expect that the reduced tipping fees, which will be around two-thirds of the going rate at C&D landfills in the region, plus easy access in and out of the facility, will make recycling shingles a more appealing alternative to transporting them to a landfill,” said Drew Boggs, president of Boggs Paving Inc.

Boggs plans to hold an informational forum in the spring of 2011 and invite all public and private contractors, haulers and roofing companies within the Charlotte-Mecklenburg region to introduce the industry to the concept of shingle recycling. For further information, contact Mike Batson, shingle recycling manager, at (704) 634-9784 or check out Boggs’ website at <http://www.boggpaving.com/recycling>.

The second stop on Tour 2 will be *Mecklenburg County’s Foxhole Landfill*, located on Highway 521 at the southern end of Mecklenburg County. The Foxhole Landfill is the only ISO 14001 registered landfill on the east coast. Participants will view Mecklenburg County’s landfill and C&D recycling operation. The recycling operation receives source-separated concrete, gypsum wallboard, metal, clean wood and asphalt shingles.

The asphalt shingles recycling program began July 1, 2010, with 1,751 tons recovered in the first two months. The gypsum drywall program began in June 2008 with 1,584 tons recovered thus far. Pallets are



A worker at Mecklenburg County’s Foxhole Landfill and C&D Recycling Operation prepares the segregated gypsum wallboard for delivery to Greenway Recycling, the Griffin Brothers’ gypsum recycling facility in Kershaw, S.C.

accepted as source-separated loads and recovered by landfill personnel from the working face of the landfill. The tipping fees at the Foxhole encourage recycling by charging less for segregated recyclable loads.

For more information about C&D recycling in Mecklenburg County, contact Michael Talbert at (704) 432-0399 or [Michael.Talbert@mecklenburgcountync.org](mailto:Michael.Talbert@mecklenburgcountync.org), or visit: <http://charmeck.org/mecklenburgcounty/SolidWaste/ConstructionRecycling/Pages/Home.aspx>.

*For safety reasons, participants in both tours must wear closed-toe/closed-heel, comfortable shoes.*

To register for the tours and conference, visit: <http://www.cdrecyclingconference.com/index.htm>.



## Recycling Company Update:

### Western NC C&D Recycler Temporarily Closes

CDR LLC (Construction & Demolition Recycling) of Asheville, an emerging construction and demolition recycling company (see page 2 of the Summer 2010 issue of *Recycling Works*), has temporarily closed its doors. Reasons cited for closing are the poor economic conditions and slow construction starts in the region. The company hopes to re-open when economic conditions improve.



For more information, contact CDR owner Scott Welch at [welchscott@charter.net](mailto:welchscott@charter.net) or (828) 691-7885.

# Harnett County and Johnson Brothers Paving Pilot Asphalt Shingle Recycling

by Sherry Yarkosky, Recycling Business Development Specialist

Harnett County Solid Waste has partnered with Johnson Brother's Utility and Paving Company to recycle tear-off asphalt shingles. The pilot program began at Harnett County's Anderson-Creek Landfill on Oct. 4, 2010. Roofing contractors that bring in clean loads of tear-off asphalt shingles receive a \$20 per ton tipping fee discount for recycling the shingles. The regular fee is \$40 per ton.

Shingles are considered clean if metal, wood, insulation, flashing and other trash are removed. Felt that is attached to the shingles and small quantities of nails are acceptable.

Clean shingles are placed in a trailer at the Anderson-Creek Landfill. When the containers are full, Johnson Brother's Paving transports the shingles to its facility about 12 miles away. After the first week of the program, Johnson Brothers received 8.12 tons of shingles from Harnett County.

"The first load of shingles was remarkably clean, containing no trash or other contaminants," commented Carson Harrington, Johnson Brothers asphalt manager. At Johnson Brothers Paving, the loads of shingles are tested for asbestos prior to being ground for use in hot mix asphalt.

"We are excited about the program since it can help us get a lot more tons out of our landfill," said Jerry Blanchard, Harnett County General Services manager. "We are promoting the program by passing out an informational handout to our customers."

Blanchard estimates that there are 2,400 tons of asphalt shingles in the Harnett County waste stream. If the pilot program is successful, it will be expanded to Harnett County's Dunn-Erwin Landfill in Dunn.

For more information, contact Jerry Blanchard, Harnett County General Services manager at (910) 893-7536 or Carson Harrington, Johnson Brothers Utility

and Paving asphalt manager at (910) 893-8378 or [jchj-bros@embarqmail.com](mailto:jchj-bros@embarqmail.com).



The first loads of clean asphalt shingles from Harnett County, seen here, await asbestos testing at Johnson Brothers Utility and Paving.



SJF Ventures helps build great companies. We invest in enterprises in the eastern U.S. whose rapid growth provides quality entry-level employment.

••• [www.sjfund.com](http://www.sjfund.com)  
Durham, NC  
(919) 530-1177

Philadelphia, PA  
(215) 545-1750

# Pitt County Receives National Achievement Award for Shingle Recycling Program



by Wendy Worley, Recycling Business Development Specialist

On July 18, 2010, the National Association of Counties (NACo) awarded Pitt County a 2010 NACo Achievement Award for its Shingle Recycling Program. NACo Achievement Awards are designed to recognize and promote quality, efficient and responsive management and administration of county government programs.

This is the second award Pitt County has received for the Shingle Recycling Program. In August 2009, Pitt County received the the N.C. Association of County Commissioners 2008-2009 Productivity Award.

Pitt County was the first in the state to implement such a shingle recycling program, designed to reduce waste in the county's landfill. The program began in December 2008 with the collection of shingles at

the Pitt County Transfer Station. By June 2010, Pitt County had removed more than 4,500 tons of shingles from the waste stream and saved the county more than \$120,000 in disposal fees.

"Pitt County Government is honored to accept these awards and continues to work to find ways to be more productive and efficient in all areas of government," said Paula Clark, Pitt County's recycling coordinator.

For more information, contact Paula Clark at [ppclark@pittcountync.gov](mailto:ppclark@pittcountync.gov) or (252) 902-3353.

Also watch: <http://www.youtube.com/watch?v=N5-ijBxA1HU>

## New Exchange Service for Biomass Materials

Now joining *NCWasteTrader*, another dynamic waste marketplace...

[www.ncbiomasstrader.com](http://www.ncbiomasstrader.com)

N.C.'s Biomass Exchange

for more information, call:  
Tom Rhodes, (919) 715-6516

## LOANS FOR RECYCLING COMPANIES

A Project of the N.C. Environmental Loan Fund

Commercial & SBA Loans from \$10,000 to \$2.5 million for Collection, Processing, Composting, Reuse, Organics, Recycling Equipment & End-Use Manufacturing.

Need a loan with reasonable interest rates and flexible underwriting standards? We may have the answer! Self-Help has the expertise and programs to help recycling businesses throughout North Carolina. Call today to learn how a Self-Help loan can strengthen your enterprise.



CO-SPONSORED BY:

SELF HELP



919.956.4400

[www.self-help.org](http://www.self-help.org)

N.C. Environmental Loan Fund: Self-Help established the N.C. Environmental Loan Fund to provide financing to small businesses and other organizations that preserve our natural resources. Projects that are targeted for financing include recycling firms, land conservancies, environmental consulting and services, environmental equipment firms, and sustainable development products and services. Self-Help has extended more than \$6 million in financing to this growing and important segment of our economy.

# 2011 Recycling Business Development Grant Round Opens

by Matt Todd, Recycling Business Development Specialist

The N.C. Recycling Business Assistance Center announces the opening of the 2011 grant round. Please visit the RBAC website to download the [RFP for the 2011 Recycling Business Development Grants](#).

Applicants may request any amount of funding up to \$40,000. Applicants must provide at least a 50 percent cash match to the requested amount. RBAC has committed \$600,000 for this grant cycle.

RBAC is seeking viable, well-planned and effective proposals and encourages expanding and start-up recycling businesses to apply.

**Proposals are due by Feb. 4, 2011.**

## Grant Objectives

The purpose of this grant cycle is to reduce solid waste disposal and to encourage sustainable recovery of materials from North Carolina's waste stream.

## Who is eligible?

Private sector and nonprofit organization applicants are eligible for funding under this grant cycle. One funding request per applicant will be accepted.

## What kinds of projects are eligible?

Projects that involve the collection, processing or end use of materials in the solid waste stream are eligible for funding. Generally, the grant money is intended to fund sustainable investments in equipment and build-

ings necessary for increasing the capacity of a recycling business to divert more materials from disposal and into economic use.

## What waste materials will be considered for this grant round?

Any material that can currently be disposed in a municipal solid waste landfill, construction and demolition debris landfill or land-clearing and inert debris landfill is eligible for consideration for this grant round.

Projects that address construction and demolition waste recycling, food waste collection, electronics recycling, and recyclers providing services to under-served communities or sectors will receive special consideration.

*Recycling Works* is published by the N.C. Recycling Business Assistance Center, a program of the Division of Environmental Assistance and Outreach of the N.C. Department of Environment and Natural Resources. For more information call (877) 623-6748, or write to DEAO, 1639 Mail Service Center, Raleigh, NC 27699-1639.

Beverly Eaves Perdue, Governor, North Carolina  
Dee Freeman, Secretary, Department of Environment and Natural Resources

## Division of Environmental Assistance and Outreach

Formerly: Division of Pollution Prevention and Environmental Assistance  
Edythe McKinney, Director  
Scott Mouw, Chief, Community & Business Assistance Section  
Matt Ewadinger, RBAC Manager  
Matt Todd, RBAC Market Development Specialist  
Wendy Worley, RBAC Market Development Specialist  
Sherry Yarkosky, RBAC Market Development Specialist  
Ben Rogers, RBAC Industrial Development Specialist



# TOGETHER

Through shared effort we can provide a foundation of targeted advertising that "brands" recycling with the public in every community.

Contact Scott Mouw for sponsorship information at [Scott.Mouw@ncdenr.gov](mailto:Scott.Mouw@ncdenr.gov)

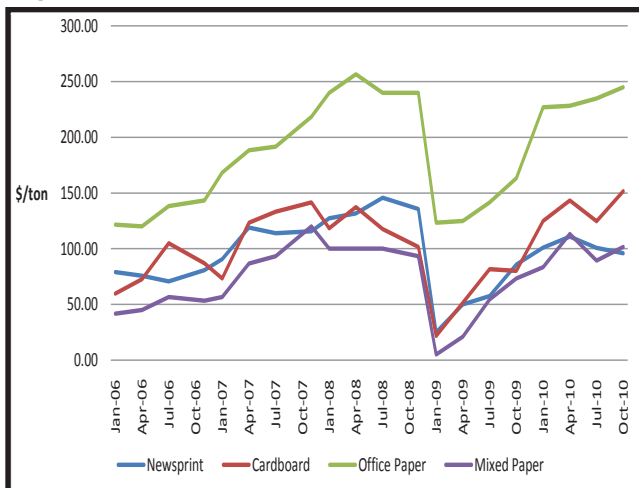


**Container Price Trends**



Quarterly prices for aluminum cans (loose), PET (baled) and HDPE natural (baled) in dollars per pound.

**Paper Price Trends**



Quarterly prices for newsprint, cardboard, office paper and mixed paper in dollars per ton, baled.



The Recycling Business Assistance Center (RBAC) is a program of the N.C. Division of Environmental Assistance and Outreach.

Call (877) 623-6748 for free technical assistance and information about preventing, reducing and recycling waste.



**North Carolina market prices for Recyclables**  
Prices current as of October 20, 2010

Item	Western Region	Central Region	Eastern Region
<b>METALS</b>			
Aluminum Cans lb. loose	\$.83	\$.83	\$.84
Steel Can, gross ton baled	\$225 gt	\$178.57	\$120.00
<b>PLASTICS</b>			
PETE, lb. baled	\$0.19	\$0.17	\$0.175
HDPE, lb. baled Natural	\$0.28	\$0.23	\$0.18
Colored	\$0.165	\$0.18	\$0.11
<b>PAPER</b>			
Newsprint, ton baled	\$100	\$90	\$97.55
Corrugated, ton baled	\$155	\$145	\$155
Office, ton baled	\$240 (SOP)	\$220 (SOP)	\$275 (white ledger)
Magazines, ton baled	*	\$110	**
Mixed, ton baled	\$100	\$100	\$105
<b>GLASS</b>			
		Eastern Region sells glass F.O.B. origin	
Brown, ton crushed delivered	\$18	\$19	\$17
Clear, ton crushed delivered	\$25	\$29	\$21
Green, ton crushed delivered	\$3	\$2	(\$7.50)
* Markets w/ Mixed paper ** Markets with Newsprint Note: Prices listed above are compiled by RBAC and are for reference only. These prices are not firm quotes. RBAC obtained pricing information from processors for each category and developed a pricing range.			

Visit RBAC online at <http://www.p2pays.org/rbac>