

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 3

Summer 2010

C&D Recycling Conference Slated for Charlotte in December 2010

by Matt Todd, Recycling Business Development Specialist

The Southeast Construction and Demolition Recycling Conference will be held Dec. 7-9, 2010, at the Sheraton Charlotte Airport Hotel in Charlotte. The C&D conference is presented by the Carolina Recycling Association (CRA). Please visit the C&D conference website for more details and to register for this great event:www.cdrecyclingconference.com.

C&D recycling is a growing movement and an essential element in green construction. Join us as we explore the impacts and opportunities with this dynamic topic.

OPPORTUNITIES in GREENER BUILDING December 7-9, 2010 CHARLOTTE, NORTH CAROLINA

Contractors/Architects/Developers:

Learn what can be recycled, and how to recycle at residential and commercial construction sites – from high-rises to single-family homes. Also learn about building products made from recycled content material.

Local Governments:

Learn what other communities are doing, how they're doing it and what you can do to facilitate more C&D recycling in your community.

Recycling Service Providers:

Promote your services to the building community; learn what others are doing and where the industry is headed.

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Recycling Works Summer 2010

C&D Facilities Grow Across NC

by Matt Todd, Recycling Business Development Specialist

CDR LLC (Construction & Demolition Recycling)—Asheville

CDR LLC is a C&D materials recycling facility located in Asheville. This facility accepts mixed and clean loads of C&D material from all waste haulers and the general public. Material accepted includes mixed and clean loads of C&D material. CDR LLC was permitted as a C&D transfer station in May 2010 and includes 40,000 square feet of processing area, all under roof. Scales and the tipping area are also located inside the building.

CDR is targeting a wide range of materials for diversion, including scrap metal, brick and block, cardboard, plastics 1-7, plastic wrap, carpet padding, carpet tile, sheetrock, clean wood (not treated or painted), pallets and any type of mixed paper. For more information, contact David Newell with CDR LLC at (828) 259-3535, or dbnewell@bellsouth.net.



CDR location in Asheville.

Handle Safe Systems Inc. - Asheville

Handle Safe Systems Inc. is a newly permitted C&D transfer station located in Asheville, specializing in the collection and processing of recycled asphalt shingles (RAS). In addition, the company will accept clean wood and brick/block/concrete. The facility received the necessary permits to operate and expects to open by late summer 2010.

Handle Safe is currently purchasing and installing equipment and firming up the final details of its supply ar-

rangement with a large paving contractor in the region. The paving contractor has recycled asphalt pavement collars on its feed mills that insert recovered material into the asphalt plant for production of a finished asphalt product. The RAS will feed into the plant in the same fashion.

This allowance will help determine the specification required for delivery of a recycled product to the paving contractor. For more information, contact Mike Griffin with Handle Safe Systems Inc. at (828) 285-9544, or mike@griffinwaste.com.



Handle Safe will process recycled asphalt shingles, similar to the ones shown here, to make of a finished asphalt product.

Abby Green - Winston-Salem

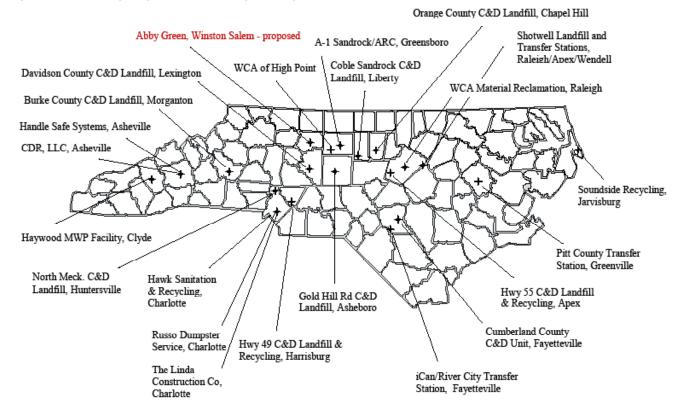
Abby Green is a proposed C&D recycling facility in the final stages of receiving a permit to construct and operate a C&D transfer facility in Winston-Salem. Its plans call for haulers to dump in a covered area that includes a 150-foot clear-span and 30-foot high clearance. The processing line will be covered separately. This project is partially financed with an SBA 504 loan through Self-Help, one of RBAC's financing partners.

In addition to providing recycling processing for C&D material, Abby Green has a social aspect to its business. The company will work through a placement organization to provide gap employment to those

(See C&D, page 4)

Permitted C&D Facilities in NC

by Matt Todd, Recycling Business Development Specialist



Permitted C&D facilities (landfill/transfer station) with documented diversion

The map above shows the location of the various permitted construction and demolition facilities (disposal, processing or transfer) with documented diversion in North Carolina. There are 24 permitted facilities in the state and at least one other that is proposed.

In addition, there are a few permitted municipal solid waste landfills that also accept and divert C&D waste, including those operated by Mecklenburg County, New Hanover County and Camp Lejeune Marine Base.

Diversion in 2008 was about 398,000 tons. This tonnage figure includes C&D material recovered from various permitted solid waste facilities - C&D landfills, C&D transfer stations, MSW landfills, as well as land clearing and inert debris treatment & processing sites.

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N.C.'s Industrial Waste Exchange

Have Your Waste Ready!

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



C&D, from Page 2

recently released from prison. Abby Green hopes to obtain a temporary operating permit by October and use this time to provide 2-3 weeks of training to site personnel. This training would allow the company to be fully operational by early November 2010 and provide jobs for 27 employees. For more information, contact Jim Bryan with Abby Green at (336) 345-7793, or bryanli@myway.com.

Gold Hill Rd. C&D Landfill - Asheboro

Gold Hill Rd. recently upgraded its status from an land clearing and inert debris landfill, to a C&D landfill. With this upgrade in classification, it also upgraded its recycling and diversion ability. Gold Hill Rd. accepts clean wood, pallets, metal, concrete, and land clearing debris for recycling. Gold Hill will also accept household containers such as aluminum cans, plastic bottles, steel cans, and glass bottles for recycling.

For more information or to purchase some of the many finished landscape products prepared on-site, contact Al Morton with Gold Hill Rd. C&D Landfill at (336) 629-7175 or goldhill@embarqmail.com.



Al Morton, owner of Goldhill Road Landscape Supply and C&D Landfill, stands in front of samples of landscape supplies that they sell.



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

Chatham County's New Construction and Demolition Ordinance

by Sherry Yarkosky, Recycling Business Development Specialist



In May 2010, Chatham County Commissioners adopted a Construction and Demolition Ordinance requiring the waste generated from all construction and demolition projects greater than 1,000 square feet to be recycled. The ordinance applies to all C&D sites located in the unincorporated areas of the county.

For projects commingling C&D debris, the ordinance requires a licensed C&D waste hauler to transport the materials to a licensed C&D facility that will sort and process the material for recycling end-markets. Licensed C&D facilities must demonstrate an overall minimum recycling rate of 30 percent excluding inert debris (brick, concrete, rock and clean soil).

The ordinance also enables affected parties to separate recyclables on the job site and market the materials directly to end-markets instead of sending the materials commingled to a licensed C&D facility. Persons choosing to separate recyclables on site are not required to obtain a C&D hauling license nor hire a licensed C&D hauler. However, they are required to complete a preproject and a post-project waste estimate.

To read the ordinance, go to http://www.chathamnc.org/Index.aspx?page=1372. For questions about the ordinance, contact Dan Lamontague, Chatham County Solid Waste Director, at dan.lamontagne@chathamnc.org or call (919) 542-0945.



Chatham County Court House in Pittsboro.

Let's work together to increase recycling throughout N.C.



We invite you to sponsor the Recycle Guys, RE3.org and Recycle More NC recycling campaigns.

For more info, contact Kelley Dennings at Kelley.Dennings@ncdenr.gov

Fiberon Composite Decking Helps North Carolinians "Think Globally, Act Locally"

by Matt Ewadinger, RBAC Manager

The next time that you browse through the building materials department at Home Depot, you may see composite decking products containing a recycled milk jug that you set out for curbside collection. That Veranda line of decking is made right here in New London, N.C., by Fiberon® LLC, a manufacturer of composite decking, deck railing and fencing products. Fiberon is a supplier to both Home Depot and Lowe's Home Improvement, and uses recycled HDPE from milk jugs, and shampoo and laundry detergent bottles in its manufacturing process.

But, Fiberon's recycled content does not end with HDPE. In the manufacturing process, HDPE is combined with reclaimed wood flour acquired from window trim, door frames, lumber and cabinet waste, resulting in a product line made with significant recycled content. In fact, two of its products, HorizonTM Decking and EnclaveTM Fencing, are manufactured with a recycled content of 74 percent and 84 percent respectively. Overall, the company's total product line recycled content is approximately 70



The silos shown behind Fiberon's New London manufacturing facility contain recovered wood flour and recycled HDPE.



The Horizon[™] line of decking product depicted above is manufactured with a recycled content of 74 percent.

percent, resulting in the use of more than 33,800 tons of recycled HDPE and wood flour per year.

"Not only do we use recycled content from outside sources, our manufacturing process allows us to reintroduce our trim waste and product discards back into our system resulting in the recovery of 98.5 percent of all material waste," explained Edie Kello, director of Marketing at Fiberon.

Fiberon's New London manufacturing and warehouse facilities encompass 390,000 square feet and employs approximately 200 full-time workers. Fiberon has an additional 185,000 square foot facility in Meridian, Idaho. "At a time when many manufacturing operations are closing their doors or moving out of the United States, we are proud that Fiberon remains a significant and stable employer both here in North Carolina and in Idaho," said Doug Mancosh, CEO and owner of Fiberon.

(See FIBERON, Page 8)

Southland Electrical Supply: Connecting the Past to the Future

by Sherry Yarkosky, Recycling Business Development Specialist



Southland Electrical Supply storefront in downtown Burlington.

When you think of demolition recycling, the typical picture that comes to mind are wrecking balls and roll-off containers filled with concrete, clean wood and scrap metal. Before a building is demolished, however, the electrical components are typically recovered for reuse. Southland Electrical Supply is one such North Carolina-based company whose business model depends on the recovery and redeployment of industrial electrical equipment.

For more than 30 years, Southland Electrical Supply has been refurbishing, reconditioning and retrofitting all types of motor control and electrical apparatus from every major manufacturer. Southland also specializes in obsolete, hard-to-find parts and references for aging electrical systems such as motor control centers transformers, magnetic motor starters, molded case, insulated case & air / power circuit breakers.

Southland Electrical Supply, located in Burlington, maintains a modern 5,000 square feet

shop and more than 100,000 square feet of warehouse. More than 80 full-time employees work at Southland as design engineers, electrical technicians, quality control, sales professionals and logistics personnel. Southland Electrical Supply's motto is tying the "old to the new." Older equipment can be made safer, more efficient and dependable by skilled staff at Southland Electrical Supply. The technicians can upgrade motor control buckets and panels to include new components while keeping the original controls. AutoCAD drawings of upgraded equipment are generated for the customer. Every reconditioned component is rigorously tested for quality and is backed by a one - year warranty. Southland Electrical Supply has clients all over the world, shipping to 100 countries worldwide.

Walking through the inventory warehouses at Southland Electrical Supply is a cross between visiting a museum and a hardware store. Spare parts and components date back to the 1950s. Many of these components are no longer manufactured by the original equipment manufacturer. Therefore, Southland Electrical Supply is a vital link for maintaining industrial electrical applications in many sectors of

(See SOUTHLAND, Page 8)

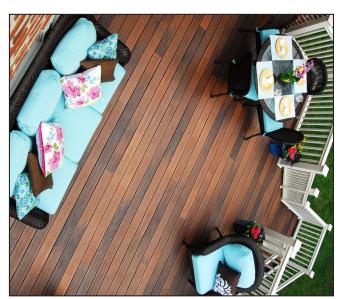


Professionally reconditioned, custom-configured, motor controls and power distribution equipment.

FIBERON, from Page 6 _____

Not resting on its current level of recycled content use, Fiberon earlier this year introduced the use of post-consumer recycled carpet into its manufacturing process. Mancosh said, "We are aware that there has been significant interest in increasing the development of markets for recyclable carpet in the U.S. It is our hope that the carpet recycling effort that we have started will continue to grow and that in the next few years Fiberon will be a major consumer of post-consumer carpet waste."

Fiberon's website also states that all recycled material used in its manufacturing process is sourced within 500 miles of its facilities. So the next time that you travel to your local building materials store, it is not too far-fetched to assume that the composite lumber products that you see may include the HDPE milk jugs that you set out to be recycled at home, giving new meaning to the phrase "Think Globally, Act Locally."



For more information about Fiberon's HorizonTM line of decking shown above, visit http://www.fiberondecking.com/products/horizonDecking.

SOUTHLAND, from page 7 _



Electrical technicians and quality control specialists at work in Southland's workshop.

the economy such as the automotive industry, mining, concrete and aggregate sectors, and higher education.

About 70 percent of Southland Electrical Supply's products are recovered. The remaining 30 percent are new "green products" such as reduced voltage starters, variable frequency drives and energy-efficient transformers and sub-metering products used as replacement parts for conventional motor control and power distribution.

Southland also buys used electrical equipment and pays competitive prices. In addition, the company buys new surplus (in original factory packaging) and unused surplus (may or may not be in original factory packaging) in small lot purchases.

To view the current inventory list or learn more about Southland Electrical Supply, go to http://www.southlandelectrical.com/index.asp or contact; Ron Fuhrman, marketing and operations manager, at rfuhrman@southlandelectrical.com, or (800) 476-1486.

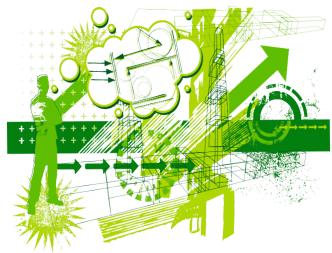
Green Construction Council of the Carolinas

by Matt Ewadinger, RBAC Manager

The recently formed Green Construction Council of the Carolinas is made up of contractors, consultants, suppliers, government agencies and recyclers involved in the construction and demolition industry in both North and South Carolina.

GCCC's mission is to be recognized as the unbiased clearing house of information in the sustainable construction industry and to promote the truth about green construction. The council provides education and resources for all parties involved in the construction industry.

The organization provides users top-10 lists of best management practices that require either little or modest investment, as well as information about green certification and council members.



For information, contact Jane Freeman, chairwoman of the Green Construction Council of the Carolinas, at (704)-335-0231 or jfreeman@rodgersbuilders.com.



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To apply for your scholarship, call: (919) 715-6516 (RBAC), or (919) 715-7373, ext. SBTDC

Natural Capital Investment Fund

NCIF makes loans and investments in the \$35,000 to \$250,000 range, primarily to expanding businesses.

NCIF targets recycling businesses

in NCIF funding should contact

Recycling

businesses interested

Rick Larson at rlarson@conservationfund.org or by phone at (919) 967-2223.

NCIF is an affiliate of The Conservation Fund, a national nonprofit with a unique commitment to balanced land and water conservation solutions that emphasize the integration of economic and environmental goals.



NAHB National Green Building Program Grows in NC



by Wendy Worley, Recycling Business Development Specialist

From the mountains to the coast, green building is in demand. In fact, the tagline for the NAHB's (National Association of Home Builders) National Green Building Program is "Residential green building is no longer a trend — it is the future of building." There are increasing signs that residential green building and remodeling are quickly becoming mainstream.

For example, more than 5,200 builders, remodelers and other industry professionals have achieved the Certified Green Professional educational designation. It is NAHB's fastest growing professional designation, and demand for advanced education and professional credentials is strong. To meet that demand, NAHB recently introduced an Advanced Green Building Science class in Raleigh for the Master Green Professional designation.

Another key element of the national program is NAHB Green, a green home certification program that is administered by the NAHB Research Center. Local affiliates utilize the NAHB's Green Home Building Guidelines and/or the National Green Building Standard. Accredited third-party certification of green homes, in conjunction with the NAHB Research Center, provides builders and home owners flexibility in making green choices. More than 1,000 homes, remodeling projects and residential developments now have National Green Building Certification from the NAHB Research Center verifying that they have met rigorous benchmarks in energy, water and materials efficiency, indoor environmental quality and other green categories.

To meet benchmarks in resource efficiency, homes are evaluated on use of recycled materials, waste management and durable construction. Products made from recycled materials must be certified by the NAHB Research Center as "Green Approved." For more information about products currently approved or for information about how to get a new product

certified, consult with the <u>NAHB Research Center's</u> guidance document.

"Our pioneering green builder members led us here, but green is being embraced by more and more home buyers as we begin to move out of this serious recession," said NAHB Chairman Bob Jones. "I'm very proud of our association and the important role we are playing in moving the market toward a greener future."

NAHB has many regional affiliate Green Building Councils across North Carolina that serve as the local industry resource for green building. Below is a short sampling of regional affiliates in NC:



triad green building council

Triad Green Building Council

The <u>Triad Green Building Council</u> represents building industry professionals in Alamance, Forsyth and Guilford counties committed to the construction of sustainable quality-build homes. Members include builders, remodelers, developers, suppliers, subcontractors and service providers. The council provides educational programs for building professionals and consumers regarding the latest in green building techniques, products and services.

Green Home Builders of the Triangle

The Green Home Builders of the Triangle is a joint

program of the HBA of Durham, Orange and Chatham Counties and the HBA of Raleigh-Wake County. In addition to providing guidance on the Green Home certification Program, the GHBT sponsors an annual Green Home



Tour to promote green home building in the Triangle.

(SEE NAHB, Page 11)



Anchorage Building Corporation used a strict no-Dumpster policy in the construction of this Raleigh home to earn its GHBT certification. Source sep-

aration of materials (clean wood, cardboard, metal) allows the no-Dumpster policy to be a practical solution.

Wilmington-Cape Fear Home Builders Association Green Building Council

The Wilmington-Cape Fear Home Builders Association Green Building Council strives to promote voluntary, market-driven green building standards and practices to the residential and commercial development communities in the region. The council encourages members to participate in green building by offering educational opportunities on green building practices and providing a venue for networking and marketing for WCFHBA Green Building Council members.

Other Green Building Organizations in N.C.

Western North Carolina Green Building Council

WNCGBC is a regional, independent nonprofit organization whose mission is to promote environmentally sustainable and health conscious building practices through community education throughout western NC.



is a national nonprofit organization working to promote sustainable building and community design, construction and operations. The USGBC administers the well-known LEED green building certification program.

US Green Building Council

USGBC - Triangle Chapter

<u>USGBC - Charlotte Region Chapter</u> USGBC - Piedmont Triad Chapter

CONSTRUCTION RECYCLING

a growing movement and an essential element in green construction. The CRA continues its tradition of providing outstanding training and networking opportunities for everyone interested in reducing waste and increasing recycling throughout the Carolinas and beyond. Join us as we explore the impacts and opportunities with this dynamic topic.

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Learn what can be recycled, and how to recycle at residential and commercial construction sites – from high-rises to single-family homes. Also learn about building products made from recycled content material.

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— Recycling Service Providers ———

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Recycled Carpet Product Aids

Oil Spill Clean Up

by Matt Ewadinger, RBAC Manager

According to a May 4, 2010, press release from the Walton County (Fl) Sheriff's Office, GeoHay, a product made with recycled post-consumer carpet fiber, is being used in tandem with concrete jersey walls and silt retention fencing to protect Walton County's Coastal Dune Lakes. These are a series of 15 lakes located along the county's 26 miles of coastline.

GeoHay acts as a filter and is highly absorbent, as well as non-biodegradable, strong and durable. GeoHay is manufactured in Inman, S.C., just outside of Spartanburg. Visit the GeoHay website at www.geohay.com.



Pictured above is Camp Creek Dune Lake, one of the 15 coastal lakes of Walton County, Fla. Picture from: http://www.waltonoutdoors.com/great-photos-of-folks-and-places-in-walton-county-florida/

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 (919) 715-6500 or (800) 763-0136, 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





Rolls of GeoHay arrive at the Santa Rosa Beach Sheriff's Substation for deployment at Walton County's Fla. 15 Coastal Dune Lakes.

LOANS FOR RECYCLING COMPANIES

Project of the N.C. Environmental LoanFund

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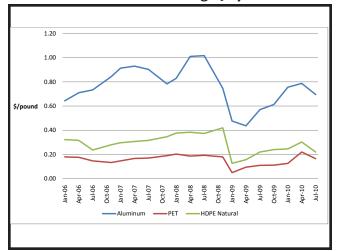


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www.self-help.org

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 arowing and important seament of our economy.

Container Price Trends through July 2010



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

Paper Price Trends through July 2010



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



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

Call (919) 715-6500 or (800) 763-0136 for free technical assistance and information about preventing, reducing and recycling waste.



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

| Item | Western | Central | Eastern | | |
|------------------------------------|----------------------------|--------------------|------------------|--|--|
| NATTALO | Region | Region | Region | | |
| METALS | | | | | |
| Aluminum Cans lb. loose | \$.70 | \$.695 | \$.69 | | |
| Steel Can, gross ton baled | \$225 gt | \$158.00 | \$180.00 | | |
| PLASTICS | | | | | |
| PETE, lb. baled | \$0.17 | \$0.165 | \$0.165 | | |
| HDPE, lb. baled Natural Colored | \$0.22 \$0.195 | \$0.215 \$0.175 | \$0.22 \$0.12 | | |
| PAPER | | | | | |
| Newsprint, ton baled | \$105 | \$95 | \$102.55 | | |
| Corrugated, ton baled | \$130 | \$120 | \$124 | | |
| Office, ton baled | \$225 (SOP) | \$205 (SOP) | \$275 | | |
| Magazines, ton baled | * | \$115 | (white ledger) | | |
| Mixed, ton baled | \$105 | \$95 | \$68 | | |
| GLASS | Eastern Region sells glass | | | | |
| 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

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

^{**} Markets with Newsprint