



**NORTH CAROLINA
RECYCLING BUSINESS
ASSISTANCE CENTER**

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

Recycling Works

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Shimar Expands with 504 Loan from Self-Help

By Fred Broadwell, Loan Fund Specialist

Thanks to an SBA 504 loan put together by Self-Help Credit Union, Meredith Marley, owner of Shimar Recycling, now stands in her newly-purchased 22,500 square foot facility. Besides the excellent financing terms, the deal's greatest benefit for Marley may be that she at last has a roof over her head. Since the Durham-based collector/processor began operations in August 1997, Shimar had run from the small corner of a parking lot leased from a paper stock dealer. When it rained, Marley and her workers got wet, and when it was sunny, they baked.

The new facility provides much more than shelter from the elements—it fulfills Shimar's long-held dream of expansion. Marley said,

“Since we’ve purchased this building, we’ve more than tripled our capacity. Now we can look at expanding our collections, we’ve reduced processing time, and we’ve overall made our service more efficient.”

Shimar Recycling collects and processes a variety of materials — including different grades of paper, metal cans, plastic bottles and glass bottles — predominantly from Triangle offices. The company currently collects, processes and markets 75 tons of paper plus 20 tons of glass and metal per month.

Financing this significant expansion re-

(See Shimar, Page 6)



Fred Broadwell of Self Help and Meredith Marley of Shimar Recycling review loan paperwork in Shimar's new facility.

Inside

Electronics Recycling Update	2
State Awards C&D Grants	3
New Wood Waste Study for Triangle . . .	4
N.C. State's Extension Specialist	5
R24 Lumber Moves Operations	5
Business Training Scholarships	7
New Organics and Green Hotel Web Pages . .	7
Commodities Pricing Sheet	8

Electronics



Update

Electronics Recycling Conference/ Product Stewardship Initiative

Computers and other electronic scrap continue to make headlines as the waste stream grows larger and local governments struggle to develop cost-effective collection programs. While costly, collection events are taking place in North Carolina and throughout the United States to begin the process of thinning out the stockpile of computers and other electronic scrap.



The National Electronics Products Recycling and Reuse (EPR2) conference was held April 17-20 in Washington, D.C., to share information on the development of the reuse and recycling infrastructure. Federal, state and local governments,

as well as for-profit and nonprofit businesses, attended the event to learn about the latest collection events, regulations, manufacturer design issues, and recycling technologies. Summary information, including presentations made at the EPR2 conference, is available online at either <http://www.iaer.org/communications/wkshpreport.htm> or <http://www.nsc.org/ehc/epr2/2001pres.htm>.

Parallel to the EPR2 conference, a meeting was held April 20 in Washington, D.C., between government and industry representatives to develop a product stewardship initiative for electronics. The purpose of the meeting was to establish a set of guidelines for action. The group plans to meet several more times this year, and is currently establishing a set of goals that both industry and government officials will find mutually beneficial. For more information on the Product Stewardship Initiative, visit the group's Web site: http://www.turi.org/product_stewardship/.

Electronics Recycling Grants Awarded

Two grants were recently awarded by the N.C. Division of Pollution Prevention and Environmental Assistance (DPPEA) to develop the local government collection infrastructure for computers and other electronics:

- "Byte Back" is the title of a computer recycling program initiated by Voices and Choices in Char-

lotte. The program is aimed at collecting computers from a 14-county region. The group is initiating a marketing campaign to receive donations of computers, which will be sent to Computel, a Charlotte computer recycler/refurbisher. For more information, contact Cathy Sleva, assistant director for projects, Voices and Choices, (704) 376-9214 ext. 243, or e-mail CSleva@CCChoices.org.

- "Electronics Recovery" is the title of a computer recycling program initiated by Gaston County. The county will establish collection services at each of its five recycling drop-off centers. For more information, contact Ernest Britton, environmental analyst, Gaston County, (704) 922-0267.

Want More Information on Electronics?

DPPEA is updating its Web-based information on electronics recycling. A Web page has been developed for industries in the electronics manufacturing sector: <http://wrrc.p2pays.org/industry/electronics.htm>.



Also, a Web page is being developed specific to electronics recycling for governments, businesses and individuals: <http://www.p2pays.org/electronics>. For more information contact John Blaisdell or Scott Mouw at (919) 715-6500 or e-mail john.blaisdell@ncmail.net or scott.mouw@ncmail.net.

State Awards Grants for Construction and Demolition Debris Recycling

In its continuing efforts to divert waste from North Carolina landfills, the Division of Pollution Prevention and Environmental Assistance (DPPEA) will award \$120,000 to support efforts of 10 public and private sector projects to reduce one of the largest single sources of waste – construction and demolition (C&D) debris. The recipients will supplement the funding with approximately \$1.9 million in matching funds.

Funding was awarded in three different categories: mixed C&D processing, source separated recovery and market development. These projects are expected to divert approximately 110,000 tons of C&D material per year from North Carolina landfills. Debris from C&D activities represents 29 percent of the state's disposed waste stream.

Projects selected for funding include:

- **Urban Wood Waste Processing** establishes a wood waste processing facility in Wake County. Contact Franklin Bolton, B&B Companies of N.C. Inc., (919) 363-0076.



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- **Gypsum Transfer Station** establishes a transfer facility just outside of Mecklenburg County to increase the gypsum quantities recycled at its main Union County processing site. Contact Steve Davis, Union Gypsum, (704) 624-2077.
- **Miller C&D Recycling** establishes a mixed C&D processing facility in Rowan County. Contact Ken Miller, Miller C&D Recycling, (704) 633-5386.
- **Waste Carpet Collection** expands the collection capabilities of a carpet recycling company servicing the Wake County and Mecklenburg County markets. Contact Robert Gleaves, Blue Ridge Recycling, (704) 821-4482.
- **Drywall Recycling Project** establishes a transfer station for gypsum wallboard collection from construction debris in New Hanover County. Contact Mylinda Jacobsen, New Hanover County, (910) 341-4373.
- **C&D RRR (Reduce, Reuse, Recycle) Project** expands the C&D salvage program in Pasquotank County by leasing recycling trailers to contractors. Contact Michael Etheridge, solid waste director, (252) 335-4105.
- **Source Collection of Drywall Scrap** expands the collection of drywall by purchasing containers for source-separating drywall on construction sites in central North Carolina. Contact Mark Booth, Waste Reduction Products Corp., (919) 898-4105.
- **Habitat ReStore** establishes a used building materials store in Alamance County. Contact Robin Wintringham, (336) 222-8191.
- **Construction Wood Recycling** establishes a wood recycling business as part of an established construction site clean-up business. Contact Joe VanEron, Total Maintenance, (910) 395-2944.
- **Home Builders Waste Reduction Partnership** establishes an outreach program to increase the donations of used building materials to the Habitat ReStore in Wake County. Contact Ryan Jacoby, (919) 833-6768 ext. 23.

For more information about these projects, please contact Scott Mouw, DPPEA Community and Business Assistance section chief, at (919) 715-6512/6500 or scott.mouw@ncmail.net.

Wood Waste Recycling : In the

Triangle Group Focuses on Wood Waste Recycling

By John Blaisdell, Market Development Specialist

Two recently developed reports, *Scrap Wood Availability in the Triangle J Region* and *Markets for Scrap Wood in the Triangle J Region*, characterize the wood waste stream in the six county region that includes Wake, Durham, Johnston, Lee, Chatham and Orange counties. The reports were written by a team of area recycling specialists, under the auspices of N.C. State University and Triangle J Council of Governments.

The group's goals were to reduce the amount of wood residuals disposed of in landfills in the Triangle J area, quantify and locate wood residuals disposed of in landfills, show economic opportunities for entrepreneurs using these wood residuals, and support local governments' ability to make sound and timely policy decisions.

"The reports are important for both market development and waste reduction efforts in our region," according to Judy Kincaid, solid waste/materials resources program manager for Triangle J Council of Governments.

The reports show that approximately 850,000 tons of wood waste are generated in the Triangle each year from construction and demolition debris, pallets, manufacturing scrap, lumber company residuals and land-clearing debris.

"It's important to estimate the potential supply in order to determine the types and sizes of recycling businesses that can be created," said Urs Buehlmann, extension specialist with N.C. State University in Raleigh. "It's also important

for government officials to understand the situation so they can develop policies to encourage recycling."

The second report lists all the known outlets for wood in the area. "Now companies can determine where to go if and when they need to dispose of wood," said Buehlmann.

The group plans to continue its efforts to reduce the Triangle area wood waste stream by recruiting new recycling companies. Efforts will be made to solicit technologies and processes established in other markets and encourage their expansion into the Triangle area to create stronger markets for wood residuals. Some of the potential products that can be made to increase the value for wood waste include pellets (for fuel or absorbents), plastic composite lumber, medium density fiberboard (MDF), cement composite blocks or bricks, recycled pallets, recycled lumber, mulch and compost. The group will utilize the existing capabilities of the Recycling Business Assistance Center (RBAC) and the Department of Commerce for assistance with recruitment efforts, financing, site selection, market analysis and job training.

The report is available online at both N.C. State's and Triangle J Council of Government's Web pages: <http://www.ces.ncsu.edu/nreos/wood/recycling> and <http://www.tjcog.dst.nc.us/solidwst.htm>. For more information, contact Urs Buehlmann at (919) 515-5580 or e-mail: urs_buehlmann@ncsu.edu, or Judy Kincaid at (919) 558-9343 or e-mail jkincaid@tjcog.org.

	Clean Wood From C&D	Bark	Cutoffs	Pallets	Sander Dust	Sawdust	Shavings	Wood Chips	Total
county	tons/year	tons/year	tons/year	tons/year	tons/year	tons/year	tons/year	tons/year	tons/year
Chatham	349	110,971	47	137	10	45,375	1,564	170,821	329,274
Durham	4,544	0	53	2,805	69	5	5	0	7,481
Johnston	5,758	43,980	792	1,156	2,120	45,324	28,867	115,213	243,210
Lee	1,973	10	1,268	5,078	4	246	322	4,690	13,591
Orange	5,708	23,498	222	291	95	18,708	75,001	53,359	176,882
Wake	55,518	0	3,217	1,302	831	7,459	384	7,061	75,772
Total	73,850	178,459	5,599	10,768	3,130	117,117	106,143	351,144	846,210

Total wood scrap from Triangle J Counties as documented in *Scrap Wood Availability in the Triangle J Region* (results rounded).

Triangle and Across the State

N.C. State's Extension Specialist Works on Wood Waste

N.C. State University's Department of Wood and Paper Science, Wood Products Extension recently hired Dr. Urs Buehlmann to work on wood waste minimization, reuse and recycling. Buehlmann has taken on projects ranging from outreach and technical assistance for the local wood industry to researching advanced recycling technologies to recruit to North Carolina.

Buehlmann's background includes a Ph.D. in wood science and forest products and an MBA in finance and management. He previously worked in the cabinet industry in Europe, and also served as an assistant professor in the Department of Wood Science at the University of British Columbia in Vancouver, before coming to North Carolina.

According to Buehlmann, "The current objective of the extension group is to serve the wood industry. Specifically, my goal is to help conserve wood by teaching industry to use less while producing the same amount of product, and to help reuse the wood that is being discarded."

This fall, Buehlmann plans to conduct a pallet/wood waste

management workshop to show pallet and wood waste recyclers how to reduce wood disposal. He expects to attract wood products industry representatives, pallet recyclers and local government recycling and solid waste managers. The workshop will be a cooperative effort between N.C. State University, DPPEA and the U.S. Forest Service.



Dr. Urs Buehlmann inspects some bark mulch made from recycled wood debris.

Buehlmann has also established a Wood Recycling Web Page: <http://www.ces.ncsu.edu/nreos/wood/recycling> and is in the process of creating a wood waste exchange, as well as a listserv for wood waste recycling information sharing. He also co-authored the wood recycling reports referenced on the opposite page.

Buehlmann assists existing industries with their wood waste management programs and works with recyclers to match waste streams with the appropriate recycling market. For more information, contact Buehlmann at (919) 515-5580 or e-mail: urs_buehlmann@ncsu.edu or visit his Web page: <http://www.ces.ncsu.edu/nreos/wood/buehlmann.html>.

R24 Lumber Moves Operations from Charlotte to Florida



Citing a desire to be closer to R24 Lumber's major suppliers and markets, owner Bill Juhas is relocating his finger-jointing operation to the Ocala, Fla., area.

R24 has been recovering random lengths of lumber and remanufacturing them into eight and nine-foot wall studs at its Charlotte facility since 1998. "Supply of

material in North Carolina has been sporadic at best in the past year, while my Florida supply-base is stable and shows great promise for growth," said Juhas. He also notes that most of the finished product is currently shipped to construction sites in the Sunshine State.

For an in-depth description of the R24 operation, see the Fall 1999 issue of *Recycling Works*.

Shimar, from cover



A view of the baler and excess storage space at Shimar's new facility in Durham, N.C.

quired careful consideration of options by Marley, who settled on the SBA 504 program. "I chose to finance through a 504 loan because it allowed me to keep my down payment low and to stretch out payment over a longer period. I needed the long payback period to make it all happen—this program allowed me to do it."

Marley worked with Joe Osowski, one of Self-Help's 504 loan specialists, to help structure her loan deal, which is a partner loan with Central Carolina Bank. "We're pleased to make a 504 loan available for Shimar," Osowski comments. "Meredith is a very competent businesswoman who really understands her market. Her company presented a professional business plan, is profitable and needed to finance fixed assets. It was a perfect candidate for our program."

"Under the 504 program, Shimar is getting a fixed rate of interest for 20 years, which is exceptional. It's unheard of with a conventional loan," according to Osowski.

Marley is equally pleased with the deal. "For those who have a significant, long-term commitment to their business, it's an attractive alternative to a conventional loan in a lot of ways. As a small business owner, I think the 504 loan can't be beat."

In the future, Marley hopes to hire the additional staff and purchase the equipment that will help Shimar make full use of its new facility. Already thinking ahead, she turns to look at a space where she can install a new paper shredder. "Another loan, another time," she says hope-



One of Shimar's collection vehicles is parked outside the facility after offloading material.

fully. And now when it rains, that new equipment won't get wet.

For more information on 504 or other loan products, contact Fred Broadwell, N.C. Recycling Loan Fund at (800) 476-7428 or fred@self-help.org.

LOANS FOR RECYCLING COMPANIES

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RBAC Offers New Business Scholarships for SymmeTree[®]

Recycling entrepreneurs in North Carolina now have a new educational tool to assist them with growing their businesses. This tool, SymmeTree[®], is an intensive, research-based program that identifies change management skills and allows participants to experience and practice them.

The two-day course, offered by the North Carolina Small Business Technology Development Center (SBTDC), is designed for the busy entrepreneur who needs these added skills but does not have time to take a lengthy business course. Participants in the course will go beyond strategic planning and into the arena of strategic positioning – skills essential to survival in business today.

For specific details about scholarships available through the N.C. Recycling Business Assistance Center, call (919) 715-6516 (RBAC) or (919) 715-7272 (SBTDC).



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Organics Recycling and Green Hotels Info a Click Away with New Web Pages

Interested in getting into or learning more about North Carolina's composting industry? Curious about ways to cut waste while serving your customers as an owner of a hotel or motel? New Web pages developed by staff at the N.C. Division of Pollution Prevention and Environmental Assistance can assist you in answering these questions and many more.

The Organics Recycling and Composting site (www.p2pays.org/compost) has a three-pronged mission to:

- Promote and encourage the development of a viable composting and organics recycling industry in North Carolina to reduce the amount of organic wastes currently disposed in landfills
- Provide accurate technical information on how to compost biodegradable materials
- Stimulate market demand for use of top-quality composts in landscaping, gardening, horticulture, agriculture, wetlands development, and sediment and erosion control

Information available on the site includes a composting guide covering basics, backyard composting, commercial/institutional waste composting and industrial residues; publications, fact sheets, presentations and case studies; a listing of North Carolina's commercial composters; and economic development/local expert information, as well as FAQs.

Waste reduction, recycling, energy and water conservation for lodging and hotel properties are just a few of the topics that are covered by the Green Plan for Hotels site (www.p2pays.org/hospitality). Along with fact sheets and waste reduction tips, this site outlines a step-by-step planning process to assist in the development of a waste reduction program that is specifically suited to the hospitality industry.

Recycling Works is published by the N.C. Recycling Business Assistance Center (RBAC), a program of the Division of Pollution Prevention and Environmental Assistance of the N.C. Department of Environment and Natural Resources (DENR). For more information call (919) 715-6500 or (800) 763-0136, or write to DPPEA, 1639 Mail Service Center, Raleigh, NC 27699-1639.

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Reduce Reuse Recycle

The Recycling Business Assistance Center (RBAC) is a program of the North Carolina Division of Pollution Prevention and Environmental Assistance.

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



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North Carolina market prices for recyclables

Prices current as of August 15*

Item	Western Region	Central Region	Eastern Region
METALS			
Aluminum Cans, lb. baled	\$0.46	\$0.42	\$0.46
Steel cans, gross ton baled	\$9	\$4	\$3
PLASTICS			
	Central Region markets plastics together		
PETE, lb. baled	\$0.11	\$0.055	\$0.11
HDPE, lb. baled, natural	\$0.13	\$0.055	\$0.09
PAPER			
Newsprint, ton baled	\$53	\$45	\$50
Corrugated, ton baled	\$45	\$45	\$48
Office, ton baled	\$80	n/a	\$110
Magazines, ton baled	**	\$50	***
Mixed, ton baled	\$20	n/a	\$20
GLASS			
Clear, ton crushed	\$30	\$34.50	\$25
Brown, ton crushed	\$20	\$24.50	\$21
Green, ton crushed	\$10	(\$2.50)	\$0

*Central Region prices from early July.
 **Markets with 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>



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