



**NORTH CAROLINA
RECYCLING BUSINESS
ASSISTANCE CENTER**

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

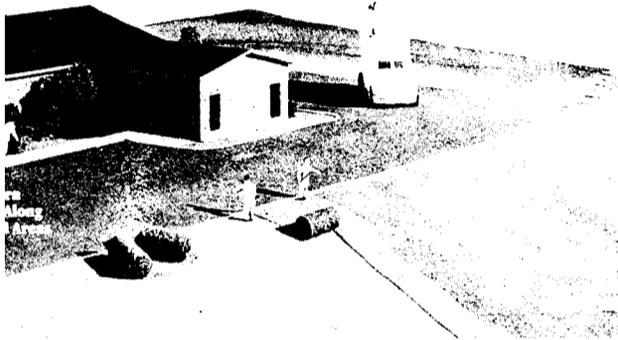
Recycling Works

Volume 3, Number 4, October 1997

Recycled Content Products: Growth Segment of NC Company's Business

By John Nelms, RBAC Market Development Specialist

Conwed Fibers, located in Conover, NC, is the largest producer of hydraulic mulch in the United States and the originator of **Hydro Mulch™**, the industry leader. With almost 100 distributors, Conwed Fibers' products are used worldwide. The company's success in large part is due to the success of its 90/10 hydraulic mulch product. Recycled wood (50%) from local furniture manufacturers is 90/10's primary component. It



also contains 1% ONP (old newsprint). In 1996, Conwed Fibers recycled over **5500** tons of wood waste into hydraulic mulch.

Conwed Fibers has created a new hydraulic mulch product called

Enviroblend™. **Enviroblend™** is similar to 90/10, but has a higher waste paper concentration. **Enviroblend™** contains between 10% and 30% waste paper content depending on market conditions and availability of paper. The value priced product contains a non-binding additive that improves in-machine performance by minimizing clogging. Michael Hargett, Plant Manager of Conwed Fibers' Conover facility says, "**Enviroblend™** provides better application performance. The higher paper content allows the product to be utilized by the smaller application equipment and thus, gives us a broader market to serve. It is already our number one selling product."

Conwed Fibers was awarded a 1997 Paper Waste Reduction Grant through the North

Carolina Division of Pollution Prevention and Environmental Assistance. The grant allowed Conwed Fibers to automate the **Enviroblend™** production line, including the purchase of an automatic bale breaker to open bales of waste paper. A cover has been constructed for the operation and duct work has been installed to allow the paper to be blown into a cyclone. This project will allow over 3,000 additional tons of waste paper to be recycled annually by Conwed Fibers.

The success of Conwed Fibers' recycled products has proven to be the growth segment of their market. In 1994, Conwed Fiber started incorporating recycled feedstock into its

(See Conwed on page 6)

inside

North Carolina Builds on Other States' Experience	2
Self-Help Approves Over \$1.6 Million in Recycling Loans	3
Establishing a Buy-Recycled Procurement Program	4
Best Practices in Scrap Tires and Rubber Recycling	5
The Financial Resource Corner	6
Upcoming Events	7
Current Market Prices	8

North Carolina Builds on Other States' Experience

By Camille Heaton, RBAC Waste Reduction Associate

In the 1997 legislative session, the Scrap Tire Tax was extended, and a portion of the proceeds were earmarked for market development for scrap tires. Grants will be offered to end-users in North Carolina to promote a sustainable market for past and current generations of waste tires. In preparation for making the grants, the NC Division of Pollution Prevention and Environmental Assistance conducted research on other grant cycles in California, Florida, Illinois, Michigan, Minnesota, South Carolina, Virginia, and Vermont.

Illinois has such healthy markets for tire-derived products, that it requires imports from surrounding states. Florida markets are so strong, tires are supplied from old tire stockpiles, prompting stockpile clean-up without regulation. States like California, Minnesota, and Wisconsin have markets for all the scrap tires they generate annually.

Interviews with state officials highlighted several recommendations for effective implementation of grant programs. These recommendations represent years of experience in assisting industries and local governments to identify methods to produce, market, or purchase products with recycled tire content. The following eight recommendations are successful characteristics of existing state tire grant programs.

Recommendations for Grant Programs

1. Stay abreast of national and regional market trends.

Understanding national and regional market trends for tire-derived products can greatly enhance the ability to determine which projects may succeed. Nationally, tire derived fuel (TDF) continues to be the most significant market, followed by size reduced rubber products (which include bound products, new tires, asphalt, tracks, and molded/extruded products) and civil engineering applications.

2. Choose the types of grants to offer.

There are five types of grants offered by other states: Manufacturing/Processing Grants, Procurement/Demonstration Grants, Research and Development Grants, Marketing Grants and Thematic Manufacturing Grants. A state can choose one type of grant to administer, or request proposals for a number of grant types simultaneously.

3. Determine grant amounts, including the maximum and required applicant match.

Grant maximums vary from state to state. Michigan offers grants up to \$5 million, while most states offer a range between \$30,000 to \$100,000. Grant amounts will depend on a state's budget and goals in implementing the program. Most states require businesses to invest between 10 to 25% of the total project cost.

4. Choose evaluation criteria.

States use the following three ways to establish criteria:

- Set a hierarchy of preferred manufacturing options to guide decision making.
- Choose important criteria which reflect specific goals of the grant cycle.
- Consider evaluation criteria for each application portion: company profile, business plan, budget, marketing strategy, competitive environment, and environmental considerations.

5. Select a grant review committee to evaluate applications and make final award decisions.

Grant review committees usually include an individual who is familiar with current tire generation and markets in the state, an individual with business and financial expertise, and an individual who can evaluate the technical feasibility of proposed projects.

(See Grants on page 5)

Self-Help Approves Over \$1.6 Million in Recycling Loans



By Robert Schall, President, Self-Help Ventures Fund and Matt Ewadinger, RBAC Manager

Over the past twelve months, Self-Help, North Carolina's community development bank, has been carrying out a range of activities directed at building its capacity to serve the recycling industry and increase the capital available to firms in that industry. Those activities, referred to collectively as the North Carolina Recycling Finance Project, were developed under a contract with the Division of Pollution Prevention and Environmental Assistance.

The most significant result of the project is that Self-Help approved **more than \$1.6 million in direct financing and leveraged another \$2.6 million in private capital to recycling oriented businesses**. The six recycling/reuse firms that were provided these loans will create 92 new jobs, retain an additional 121 jobs, and divert approximately 328,000 tons of material from the waste stream annually. The total capital investment involved in these projects is \$4,235,000.

Other Loans Still Under Consideration

Since March 1996, Self-Help has reviewed 45 inquiries from recycling companies requesting approximately \$5.6 million in funding. Twenty-one of these companies were start-ups (producing a product or service for less than six months). Many of the proposals received under the project are still under consideration (many loans take anywhere from 6 to 24 months from application to disbursement of funds). Only four formal applications have been denied financing by Self-Help, mostly due to lack of ability to meet repayment terms.

In addition to the financing provided to recycling firms, the project has had four other major objectives:

Marketing and Outreach

Self-Help officials made presentations to 15 referral groups during the project including: the NC Small Business & Technology Development Center (SBTDC), the Institute for Minority Development, North Carolina Recycling Association and affiliated councils, officials from the US Small Business Administration, and the US Department of Agriculture's Business & Industry Program. The most significant sources of business referrals were RBAC and SBTDC.

Advertising and Promotion

Self-Help used a combination of advertising, mailings, and individual calls to publicize its services to recycling companies. Those efforts included placing advertisements and articles in newsletters of major NC trade associations, direct calls to approximately 75 recycling firms, direct mailings to over 100 recycling contacts, and attendance at numerous conferences. Results, however, were disappointing. Self-Help received only three calls from fifteen advertisements placed over nine months and no responses from direct mailings or unsolicited telephone calls.

Training and Research

Two training sessions were held for Self-Help's 15 loan officers and 4 administrative staff members. Self-Help developed a "Lender's Guide to Recycling Companies" that provides a variety of print and organizational resources. Staff training activities represented one of the more promising results of the project. Loan officers became more aware of the opportunities for lending in the recycling industry. The Lender's Guide helped in assessing the risks involved with potential lending projects.

Specialized Loan Fund Feasibility Study

This study reviews the critical issues surrounding a possible dedicated loan fund for recycling businesses, and describes the experiences of similar loan funds in other parts of the country. The study is still under development and will be the subject of a future article in this publication.

Note: For more information on the North Carolina Recycling Finance Project, contact Robert Schall of Self-Help Ventures Fund at (919) 956-4400 or Matt Ewadinger of RBAC at (919) 715-6504. ❖

Establishing A Buy Recycled Program



By Glenda B. Durell, C. P. M. *The Southern Purchaser* and Diane Minor, RBAC Engineer

What is the North Carolina Buy Recycled Business Alliance?

The Buy Recycled Business Alliance, formed in 1982 by the National Recycling Coalition and 25 charter business members, has blossomed into over 1,600 business members committed to increasing the procurement of recycled content products. In May 1995, the North Carolina Recycling Association (NCRA) initiated the North Carolina Buy Recycled Business Alliance (NCBRBA), an affiliate of the national Alliance, to educate local businesses and organizations about the procurement of recycled products. Financial support for NCBRBA has been received from Proctor & Gamble Manufacturing Company of North Carolina, First Union National Bank of North Carolina, Duke Energy, Full Circle Paper Outlet, Carolina PR/Marketing, Inc., Minorities in Recycling and Environmental Management, and the NC Division of Pollution Prevention and Environmental Assistance (DPPEA). NCBRBA received a grant from the DPPEA to develop the *NC Recycled Products Directory* which will be accessible through the NCBRBA web site.

Membership in NCBRBA is free. The only requirement is the commitment to increase purchases of recycled-content products. Member benefits include a free buy-recycled guidebook to help companies evaluate recycled-content products and establish a program, plus a free quarterly newsletter with information on recycled products and tips on buying recycled.

Why Buy Recycled Products?

Recycling is a full circle, three step-process: collection of the recyclable material; manufacture of new products using those materials; and the purchase of the new products. Until these products are purchased, the recycling process is not complete. If recycling is to succeed over the long term, businesses must commit to the purchase of recycled-content products. Increased market demand for recycled content products results in higher quality, lower cost products, reduces resources incinerated or landfilled, and conserves virgin raw materials and energy.

How to Establish a Buy Recycled Program

A successful buy recycled program may require a change in company policy. Therefore, the first step involves enlisting senior management support for the program and a firm commitment to the purchase of recycled products. Businesses are increasingly being held accountable for their actions by their customers, employees and investors. Civic responsibility as well as environmental stewardship are areas where actions are highly visible. Any approach that stresses public image accompanied by the many other benefits of buying recycled should be effective.

Membership in the North Carolina Buy Recycled Business Alliance is an excellent way to learn more about the opportunities and benefits associated with purchasing recycled-content products. For additional information, contact Craig Barry at (919) 851-8444.

Recycling Works is published by the NC Recycling Business Assistance Center (RBAC), a program of the Division of Pollution Prevention and Environmental Assistance of the NC Department of Environment and Natural Resources (DENR). For more information call 919/715-6500 or 800/763-0136 or write to P.O. Box 29569, Raleigh, NC 27626-9569.

James B. Hunt, Jr., Governor
 R. Wayne McDevitt, Secretary, DENR
Division of Pollution Prevention and Environmental Assistance
 Gary Hunt, Director
 Scott Mouw, Chief, Community & Business Assistance Section
 Matt Ewadinger, RBAC Manager
 Diane Minor, RBAC Environmental Engineer
 John Nelms, RBAC Market Development Specialist
 Jay Tilley, RBAC Industrial Development Specialist



Best Practices in Scrap Tires and Rubber Recycling Workshop

By Camille Heaton, Waste Reduction Associate

In June of 1997, the RBAC hosted a workshop in Charlotte to discuss best practices for scrap tires and rubber recycling. Attendees included tire processors, end-users, consultants, tire manufacturers, government employees, and representatives from financial institutions. Over fifty participants attended, mostly from North Carolina and surrounding states such as South Carolina, Virginia, Florida and Maryland, and others from as far as Canada and New York.

Best management practices for quality assurance, testing, production, and marketing were the main topics of discussion. Other topics included proven methods for processing, granulation, manufacturing and compounding. The workshop was rounded out with a panel discussion featuring NC tire recyclers.

The workshop manual, which also includes new ASTM standards for recycled rubber, is available from the Clean Washington Center at (206) 587-5520. ❖



(Grants from page 2)

6. Outline the process to receive pre-proposals and applications.

Knowing each step in the evaluation process helps state officials and companies set schedules and deadlines. The main steps in the evaluation process will be: request for pre-proposals, pre-proposal screening, request for formal proposals, and application review.

7. Negotiate contracts carefully by including definitive grant requirements and allowing for legal review of the document.

Definitive grant requirements and corresponding contract language should map out how grant funds will be dispersed for different case scenarios. Contracts that address what will happen if projects succeed, as well as if they fail, can protect both parties' interests. Review of the contract by a lawyer or department attorney can be helpful.

8. Review quarterly and final reports to evaluate the success of projects.

Requiring and examining quarterly reports is a good way to evaluate progress of the project, while final reports will allow industry and state representatives to evaluate which projects tend to succeed. ❖

PRODUCTS MADE FROM SCRAP TIRES



- wheels, mats, and hoses
- horse arenas, running tracks, and playground surfaces
- lumber, blocks, decking, and flooring
- tires--remanufactured, retreads, and new
- soil amendments for golf and sport fields
- backpacks, purses, and suspenders
- railroad crossings and ties
- traffic barricades, control devices, and safety cones
- bumpers and fenders
- rubber asphalt
- tire-derived fuel

he Financial Resource Corner

By Matt Ewadinger, RBAC Manager

One of the most significant barriers to growth for new and expanding recycling enterprises is access to capital. As the recycling industry matures, so does the assortment of financial resources available to assist it. The following briefly describes some of those resources.



◆ **CapCo, LLC. - Brian Bond - (703) 847-8281**

CapCo is a financial service and investment banking firm that offers a variety of financial instruments to companies, banks, credit unions, and government entities in the environmental and recycling field.

7799 Leesburg Pike, Suite 900, Falls Church, VA 22043

◆ **Charlotte Certified Development Corporation (CCDC) - Frederick Miller - (704) 373-0160**

The CCDC has helped to finance several recycling operations in and around Mecklenburg County. CCDC can provide long-term, fixed rate financing for plants and equipment to companies involved in the business of recycling.

112 South Tryon Street, Suite 1770, Charlotte, NC 28242

◆ **Environmental Capital Network - Loch McCabe - (313) 996-8387**

The Environmental Capital Network is a non-profit service that links companies in the process of commercializing environmental and "green" technologies, products, and services with potential investors through capital investment forums and a monthly news bulletin.

416 Longshore Dr., Ann Arbor, MI 48105

◆ **North Carolina Investment Network (NCIN) - (919) 981-4310**

The NCIN uses the Internet, CD-ROM's, and videotape to bring together entrepreneurs and investors in an efficient and cost-effective manner. It is sponsored by the Council for Entrepreneurial Development in Research Triangle Park. Web site is <http://ncin.i40.com.ncin>

P.O. Box 20161, Raleigh, NC 27619-0161

◆ **Self-Help Ventures Fund - Robert Schall - (919) 956-4400**

Self-Help is the nation's largest and oldest Community Development Financial Institution. Self-Help offers financing to small businesses and homeowners in North Carolina. It also provides a range of commercial loan products and specializes in environmental and recycling industries. Web site <http://www.self-help.org>

301 West Main Street, Durham, NC 27701

For a more in-depth look at financial resources available to North Carolina businesses and entrepreneurs, request a copy of the *Capital Opportunities Report* published by the North Carolina Small Business and Technology Development Center (704-548-1090) (see *Recycling Works*, August 1997). For a complete list of commercial banks operating in North Carolina, contact the NC Bankers Association at (919) 782-6960.

Note: This is not meant to be a comprehensive list of all the financial resource providers available. If you know of others, please share that information with an RBAC staff member at (919) 715-6500 or 800-763-0136. ❖

(Conwed from page 1)

manufacturing operation. At that time, recycled products amounted to approximately 5% of its sales. Today, recycled products amount to over 50% of their total sales. This success translates into approximately 10,000 tons of material (wood waste and ONP) being diverted from our landfills.

For information call John Nelms at 919-715-6500 or contact Conwed Fibers at 704-327-4165. ❖

Upcoming Events

RECYCLING and ENVIRONMENTAL EXPORTS WORKSHOP

Tuesday, November 18, 1-4 PM

Center for Community Self-Help, 301 West Main St., Durham, NC

Who: Recycling and environmental businesses interested in increasing their sales through international exports.

What: International trade, recycling and finance experts from:

- * US Dept. of Commerce Export Assistance Center
- * NC Dept. of Commerce International Trade Division
- * World Trade Center North Carolina
- * NC Small Business and Technology Development Center
- * NC Environmental Technologies Consortium
- * Self-Help Ventures Fund
- * NC Recycling Business Assistance Center
- * Panel of NC recycling business owners who are successfully exporting commodities and equipment



Registration: The workshop is **free**, but pre-registration is required with KirkWorks at 919/220-8065 or email david@kirkworks.com.

The Recycling Exports Project is an initiative of the NC Recycling Business Assistance Center in conjunction with Self-Help, the state's community development lender and KirkWorks, a recycling economic development firm. Funding for this project was provided through a grant from the Division of Pollution Prevention and Environmental Assistance, NC Department of Environment and Natural Resources. ❖

Scrap Tire Market Development Grants Meeting

An interagency task force representing the North Carolina Division of Pollution Prevention and Environmental Assistance, the Department of Commerce, and the Division of Waste Management will conduct a meeting to discuss the new scrap tire market development grants program (approximately \$1 million per year for the next five years). The program is designed to encourage and support recycling market development for processed scrap tire materials (see "Scrap Tire Disposal Act Slated for Change," *Recycling Works*, May 1997). **The meeting will be held in the Ground Floor Hearing Room of the Archdale Building at 200 Salisbury Street in Raleigh from 2:00 to 3:30 PM on November 20, 1997.** Anyone interested in having input into the process is encouraged to attend. If you have any questions, call Paul Crissman, Division of Waste Management, at (919) 733-0692, ext. 269. ❖

WANTED North Carolina Recycling Companies Entrepreneurs

Would you like to present your business plan for expansion of your successful operations or for start-up of a new recycling company to potential investors, lenders, and economic developers?

Then submit that plan and application form by December 1, 1997 for consideration to present at:

**The Third Annual Southeastern Recycling Investment Forum,
February 23, 1998, Charleston, South Carolina.**

To obtain an application form, contact Ted Campbell, Manager, South Carolina Recycling Market Development Council at (803) 737-0477 or Matt Ewadinger, RBAC Manager, at (919) 715-6504. ❖

"I urge all of my fellow North Carolina recyclers who are looking for investment in their companies to participate in next year's Recycling Investment Forum."

- C.H. Lee, President, Resource Recycling, Inc. (now FCR Plastics), Reidsville, NC and presenter at 1997 Forum



Reduce Reuse Recycle

**The RBAC is a
program of the NC
Division of
Pollution
Prevention and
Environmental
Assistance**

Call (919) 715-6500 or
1-800-763-0136 for free
technical assistance
and information about
preventing, reducing,
and recycling waste.

If you do NOT wish to
RECEIVE THIS NEWSLETTER,
PLEASE GIVE US A CALL
TO REMOVE YOUR NAME
FROM OUR MAILING LIST.
Thanks!

North Carolina Market Prices for Recyclables

Prices current as of October 9, 1997

Item	Western Region	Central Region	Eastern Region
Metals			
Aluminum Cans, lb loose	\$0.54	\$0.53	\$0.61 lb/baled
Steel Cans, gross ton baled	\$73	\$50	\$67
Plastics			
PETE, lb baled	\$0.08	\$0.06	\$0.08
HDPE, lb baled	\$0.22	\$0.20	\$0.24
Paper			
Newsprint, ton baled	\$35	\$20	\$30
Corrugated, ton baled	\$80	\$40	\$75
Office, ton baled	\$145	\$20	\$145
Magazines, ton baled	\$45	\$0	**
Mixed, ton baled	\$10	\$0	\$5
Glass			
Clear, ton crushed	\$42	\$40	\$25
Brown, ton crushed	\$24	\$32	\$21
Green, ton crushed	\$15	\$8	\$2
**Facility sells magazines with newsprint. Note: the prices listed above are compiled by the RBAC and are for reference only. These prices are not firm quotes. RBAC obtained pricing information from buyers within each category and developed a pricing range.			

RBAC IS ON THE NET!!!

The RBAC can be accessed through the Internet. Visit us at
<http://www.owr.ehnr.state.nc.us/rbac1.htm>



NC Recycling Business Assistance Center

Division of Pollution Prevention
and Environmental Assistance
PO Box 29569
Raleigh, NC 27626-9569

Bulk Rate
U.S. Postage
PAID
Permit No. 1422
Raleigh, NC

FORWARD AND ADDRESS CORRECTION

2,500 copies of
this public
document were
printed on
recycled paper at
a cost of \$863 or
\$0.35 per copy.