



# Recycling Works

Volume 18, Number 4

Fall 2012

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

## Conference To Tackle the Next Frontier of Waste Diversion: Food Waste

by Scott Mow, Chief, Community and Business Assistance Section

On Nov. 12-13, 2012, the 2012 Southeast Food Waste Reduction Conference will gather a wide spectrum of food waste generators, composters, local and state agencies, nonprofits, haulers, equipment vendors and leading trade associations to address opportunities for diverting food waste from landfills.

At more than a million tons per year, food waste in North Carolina represents the new frontier of waste diversion and an opportunity to grow yet one more important part of the North Carolina recycling economy.



Approximately 1.1 million tons of food waste are generated in North Carolina each year.



### Program:

The conference program will explore the many angles of the issue. Plenary sessions will describe the dimensions of the food waste challenge and share exciting new initiatives by national organizations to address it. Two breakout sessions will look at commercial collection of food waste from both the generator's and collector's perspective.

Three other sessions will discuss the main kinds of outlets for collected food waste, featuring highly successful examples of food donation, best management practices in commercial food waste composting, and the rising technology of anaerobic digestion.

*(Food Waste Conference continued on page 2)*

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Two sessions will address how communities can plan for food waste diversion programs and what is involved in starting a residential collection program. The conference will close with an interactive panel and audience discussion on 'where we go from here' to build a strong and dynamic food waste reduction infrastructure in North Carolina and the Southeast.

**Tours:**

The conference will also include tours of active food waste diversion operations at Wallace Farm, a



Tours of compost operations, similar to that shown here, will illustrate active food waste composting programs.

**Exhibit Hall:**

The conference exhibit hall will offer attendees a first-hand opportunity to learn about equipment and other products and services critical to capturing food waste from disposal.

**Become an Exhibitor and/or Sponsor:**

Join the conference as an exhibitor for direct networking opportunities with potential clients and showcase your services, products and equipment to conference attendees. Sponsorship opportunities also offer a valuable combination of direct benefits during the conference including name recognition, exhibit booths and complimentary registrations.

For more information, please visit: <http://www.cra-recycle.org/foodwasteconference/>

*The conference is presented by the Carolina Recycling Association, North Carolina Composting Council, the N.C. Department of Environment and Natural Resources, the S.C. Department of Health and Environmental Control and the U.S. Environmental Protection Agency Region 4, and it is endorsed by the Southeast Recycling Development Council and the U.S. Composting Council.*

## Agency Resources for the Biofuels and Composting Industries

**US EPA Region 4**

<http://www.epa.gov/aboutepa/region4.html>

800-241-1754 / 404-562-9900

Sam Nunn Atlanta Federal Center (SNAFC)

61 Forsyth Street SW, Atlanta, GA 30303-8960

**US Department of Energy, Energy Efficiency & Renewable Energy**

<http://www.afdc.energy.gov/>

800-254-6735

Steven Richardson, Southeast Region Manager

NETL, Morgantown, WV

304-285-4185

**NCDENR**

**Division of Waste Management**

<http://portal.ncdenr.org/web/wm/home>

919-707-9300

217 West Jones Street, Raleigh, NC 27603

**NCDENR**

**Division of Environmental Asst. & Outreach**

<http://portal.ncdenr.org/web/deao/>

877-623-6748

217 West Jones Street, Raleigh, NC 27603

**U.S. Compost Council**

<http://compostingcouncil.org/>

301-897-2715

5400 Grosvenor Lane, Bethesda, MD 20814

**N.C. Compost Council**

<http://www.carolinacompost.com/>

919-494-3489

PO Box 24961, Raleigh, NC 27611

**N.C. Septic Tank Association**

<http://www.ncsta.net/>

336-416-3564

1426 Peter Mabe Road, Danbury, NC 27016

**N.C. Biofuels Center**

<http://www.biofuelscenter.org/>

919-696-3000

901 Hillsboro Street, Oxford, NC 27565

**North Carolina Biodiesel Association**

<http://biodieselncc.org/>

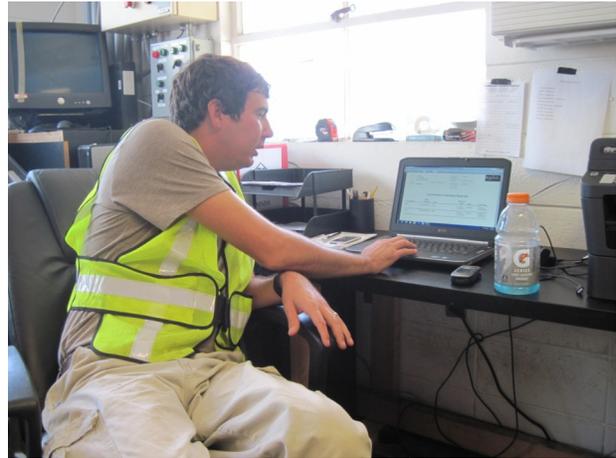
# Shingle Recycler R2R Opens New Facility in North Carolina

by Sherry Yarkosky, Recycling Business Development Specialist

On May 1, 2012, R2R LLC opened a shingle recycling collection center in Greensboro. R2R targets customers such as roofing contractors, subcontractors and waste disposal companies to recycle residential, tear-off asphalt shingles previously destined for the landfill.

The facility has a solid waste permit with the state and can sort mixed loads of re-roofing waste. However, R2R offers a reduced tip fee for clean loads of shingles. To further incentivize receiving clean shingles, R2R offers free, heavy-duty, 60-gallon trash bags to roofers to put shingle wrappers, tar paper and other non-recycled materials when cleaning up at the jobsite. The non-recyclable bagged items are placed in R2R's courtesy trash container for disposal.

Operations Manager Nick Mull said that roofing contractors are starting to warm up to the idea of recycling instead of landfill disposal. "The hardest part is getting roofers and haulers to break the habit of going to a waste disposal facility and instead go to our recycling facility," explains Nick. "Once roof-



**Nick Mull shows negative asbestos test results for shingles brought to R2R. If a shingle load tests positive for asbestos, the shingles will not be recycled and will be taken instead to the landfill for disposal.**

ers figure out that they can save \$10-\$15 per ton on disposal fees, they realize that the landfill disposal savings offsets the cost of gas money spent for the week."

R2R follows a testing protocol to ensure shingles are free from asbestos. After 2,000 tons of shingles are accumulated, the shingles are ground and sold to a local paver to offset a percentage of the virgin liquid asphalt used in hot mix asphalt production. In addition to shingles, metal and pallets are also recycled by R2R.

R2R is located at 6311 Burnt Poplar Road in Greensboro. R2R Corporate Offices are located in Kansas City, Mo. In addition to the new North Carolina recycling facility, R2R has shingle recycling locations in Iowa, Nebraska, Kansas, Missouri and Texas.

For more information about R2R-Greensboro, go to <http://www.r2ronline.net/ncarolina.html> or contact Nick Mull, facility manager, at [greensboro@r2ronline.net](mailto:greensboro@r2ronline.net) or 336-500-1357.



**Nick Mull, R2R facility manager, explains the process of quarantining shingles while waiting for asbestos test results before adding the shingles to the large asbestos-free shingle pile located in the rear of picture.**

# Growth of Shingle Markets in N.C.

by Sherry Yarkosky, Recycling Business Development Specialist

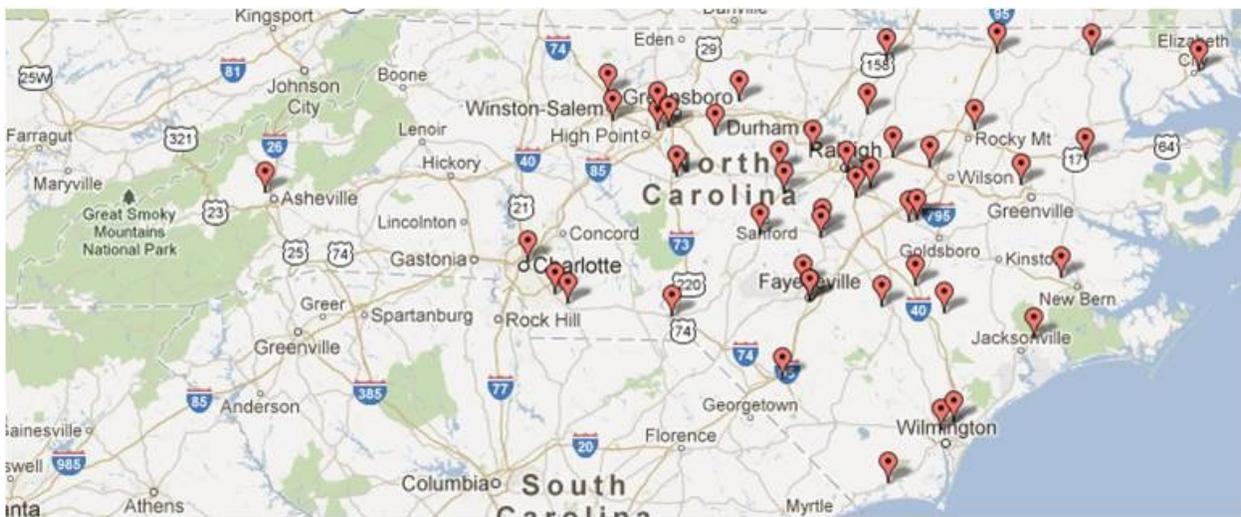
Shingle recycling has increased dramatically in the last year. In 2011, only four markets existed for tear-off shingles.



2011 Shingle Recycling Markets in North Carolina.

In 2012, 46 paving companies and third-party shingle processors collect shingles for recycling. Driving the rapid expansion was a specification released in October 2011 by the N.C. Department of Transportation, allowing post-consumer reclaimed asphalt shingles (PRAS) to be used on DOT projects and the publication of a [Best Practices Guide](#) for using post-consumer shingles in asphalt pavement.

To see a complete listing of shingles recycler in the N.C. Recycling Markets Directory, click on <http://www.p2pays.org/dmrm/start.aspx?id=273>.



2012 Shingle Recycling Markets in North Carolina.

# Hickory-based Roll-Tech Adds 100 Percent Recycled-Content Wheels to Its Product Line

by Matt Ewadinger, RBAC Manager

Roll-Tech Molding Products LLC, a manufacturer of rubber wheels on molded plastic hubs, has recently created a new wheel design made with 100 percent post-consumer HDPE plastic.

“The uniqueness of this wheel is in the materials. To our knowledge, there is not another wheel like it in the world today,” said Roll-Tech President & CEO, Patrice Bertrand. The company’s core wheel products are used primarily for residential recycling and trash collection roll carts.

In November 2011, after much effort refining the wheel design, the new wheel design passed the American National Standards Institute (ANSI) test for acceptance into the marketplace. With the introduction of the new type of wheel, Roll-Tech expects to produce approximately one million wheels per year, which would result in the recycling of more than 1.5 million pounds of plastics. When the production line is fully operational, it is expected that four additional jobs will be created.

Roll-Tech was founded in 1995 and is the former U.S. subsidiary of Guitel S.A. The company currently employs 32 people in its 50,000-square-foot facility and manufactures a variety of rubber wheels



**Roll-Tech’s 50,000-square-foot wheel manufacturing facility is located in Hickory.**

for uses such as safety wheels for garbage containers, wheels for hand-trucks, high-pressure cleaners, material handling equipments and other heavy-duty applications. The property also has an additional 75,000 square feet of outside storage capacity.

Roll-Tech’s current manufacturing process starts with one-ton sacks of crumb rubber being loaded into the mixing hopper. The crumb rubber moves through a series of conveyors, is dispensed into pots and then loaded into tire compression molds. After

a curing period, the tires come out of the mold and go through the first of several inspections.

Meanwhile, in another area of the plant, the hubs for the



**Roll-Tech’s newly designed all-HDPE wheel (left) and a variety of current rubber wheels with plastic hubs (right) expands the plastic recycling markets in North Carolina.**

*(Roll-Tech continued on page 6)*

*Roll-Tech continued from page 5*

wheels are being made. They are injection molded from recycled plastic materials. Tires and hubs come together in the assembly operation where the snap-lock wheels have their tires mounted on the hubs and the snap-lock pins are inserted in a single, automated operation. The finished wheels are palletized per customer order and are ready for shipping.

North Carolina curbside recycling programs are a significant source of the HDPE that goes into making these wheel hubs. In addition, a significant number of the wheels manufactured by Roll-Tech end up on roll out carts used in many of those same North Carolina curbside recycling programs. So, if your community recently switched to the larger roll cart method of collection, keep in mind that the HDPE plastic bottles that you carried to the curbside previously may be the main ingredient in the hubs of the carts that you are using today.



**Roll-Tech employee readies pallets of rubber wheels with plastic hubs for market.**

To learn more about Roll-Tech, contact Patrice Bertrand at (828) 431-4515 or [pbertrand@rolltech.net](mailto:pbertrand@rolltech.net). Also, visit the Roll-Tech website at: <http://www.rolltech.net>.



### Natural Capital Investment Fund

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

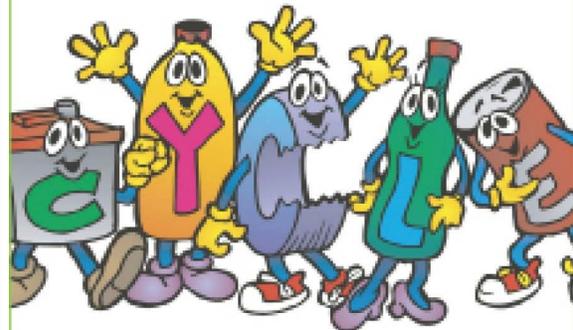
**Recycling businesses interested in NCIF funding should contact Rick Larson at [rlarson@conservationfund.org](mailto:rlarson@conservationfund.org) or by phone at (919) 967-2223.**

*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.*



## TOGETHER

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



Contact Heather Cashwell for sponsorship information at [heather.cashwell@ncdenr.gov](mailto:heather.cashwell@ncdenr.gov)



# 2013 Recycling Business Grant Round Opens

by Wendy Worley, Recycling Business Development Specialist

The N.C. Recycling Business Assistance Center (RBAC) announces the opening of the 2013 grant round. The 2013 request for proposals can be downloaded as a [Word](#) or [PDF](#) document.

Applicants may request any amount of funding up to a maximum of **\$40,000**. Applicants must provide at least a **50 percent cash match** to the requested amount. RBAC has committed **\$800,000** for this grant cycle.

Private sector and nonprofit organization applicants are eligible for funding under this grant cycle. RBAC is seeking viable, well-planned and effective proposals and encourages you to consider applying for this grant if you are a N.C. recycling business seeking to start-up or expand your recovery efforts. **Proposals are due by 5:00 p.m. on Feb. 1, 2013.**

### What?

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 buildings 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 & demolition debris landfill, or land-clearing and inert debris

landfill is eligible for consideration for this grant round.

Projects that address construction & demolition waste recycling or food waste collection will receive special consideration.

For more information, contact Wendy Worley at 919-707-8136, or [wendy.worley@ncdenr.gov](mailto:wendy.worley@ncdenr.gov).

**IMPORTANT DATES:**

*Grant Proposals Due:*  
Feb. 1, 2013

*Target Project Dates:*  
June 1, 2013 — May 31, 2014



**GREEN FINANCING**

♻️ GREEN SAVINGS ♻️

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# RBAC Says Farewell to a Respected Colleague and Friend

by Matt Ewadinger, RBAC Manager

Matt Todd, former Recycling Business Development Specialist with RBAC, has accepted a position with Resource Recovery Systems of Ann Arbor, Mich.

During his stint with RBAC, Matt managed the Recycling Markets Directory, the Recycling Business Development Grant Program and the Independent (Recycling) Collectors Network.

We have been quite fortunate to have had Matt as part of our team for the past nine years. I am sure that those of you who represent the many recycling businesses that Matt has worked with

over the years join us in wishing him a fond farewell and great success in his new endeavor.



Former RBAC employee, Matt Todd, takes a new position with Resource Recovery Systems.



## Recyclers in the News

On Aug. 29, 2012, Mahoney Environmental, an oil recycling company, hosted a grand opening and ribbon cutting celebration for the company's new recycling facility in Wendell. The new facility will hire 10 new employees when operations begin. For more information, see the [Summer 2012 issue of Recycling Works](#).



Employees and dignitaries cut the ribbon at the grand opening of Mahoney Environmental's new Wendell recycling facility.

*New contacts for  
key RBAC services are:*

### Recycling Markets Directory

Sherry Yarkosky  
919-707-8133

[sherry.yarkosky@ncdenr.gov](mailto:sherry.yarkosky@ncdenr.gov)

### Recycling Business Development Grants

Wendy Worley  
919-707-8136

[wendy.worley@ncdenr.gov](mailto:wendy.worley@ncdenr.gov)

*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**  
Edythe Mckinney, Director  
Scott Mouw, Chief, Community & Business Assistance Section  
Matt Ewadinger, RBAC Manager  
Wendy Worley, RBAC Market Development Specialist  
Sherry Yarkosky, RBAC Market Development Specialist  
Ben Rogers, RBAC Industrial Development Specialist



