

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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### Gallins Family Farm Grows New Niche with Composting

by Mike Greene, Recycling Business Development Specialist and Brian Rosa, Organics Recycling Specialist

As the only permitted Type 3 composting operation and Class-A compost production facility in the Piedmont Triad, Gallins Family Farm has seen incredible growth due to smart planning, a sound operation and assistance from the Recycling Business Assistance Center.

The Gallins story began in 1948 when Gus and John Gallins founded Gallins Cigarette Service after returning home from the war. Now known as Gallins Foods, the name encompasses all of the areas of success that the business has worked for the past 65 years. Gallins Foods now offers a wide range of services including vending, coffee and full-service dining facilities. As the company looks to the future, another generation of the Gallins family is moving forward in the evolution of the Gallins brand.

Graduating from the University of Wyoming with a degree in Agroecology, Peter Gallins was well prepared to take on the challenges of Gallins Family Farm. At UW, he began and managed the university's composting program, processing more than 170 tons of food waste annually. He also grew up working in restaurants and other dining facilities, where he was able to observe food waste generation first hand.



A fresh load of food residuals are dumped on the concrete pad of Gallins Family Farms' composting operations (shown above). It will be mixed with carbon material and formed into a windrow for the composting process to begin.

(GALLINS continued on page 2)

### Inside *Recycling Works*

#### <u>GALLINS</u> continued from page 1

Gallins Family Farm began collecting and composting food waste from businesses in the Piedmont Triad in May 2011. The operation began on a rented piece of farm land in Thomasville, producing and marketing the company's Carolina Dynamite Compost brand to local farmers and homeowners in the Triad.

Class-A compost certification requires that the material be separated from non-compostable materials at the point of generation, produced in a manner that reduces pathogens, and tested to make sure that it meets state and federal regulations. Gallins Family Farms produces compost using the windrow method where the food waste is piled in rows, maintained at a temperature of at least 131 degrees, and is turned several times per week with a front loader during the initial composting period.

In January 2013, Gallins moved to its own farm in Mocksville. With the help of a N.C. Recycling Business Development Grant, Gallins Family Farms was able to purchase a bucket loader, additional 64- and 96-gallon carts and a flatbed truck with lift gate used for food waste



With assistance from a grant from the N.C. Recycling Business Assistance Center, Gallins Family Farm recently purchased a flatbed truck and collection carts for use in the company's food waste collection and cart delivery.



Gallins Family Farm's service area is shown in the map above and includes the counties of the Piedmont Triad region.

collection and cart delivery. Grant funding was also used to build a 45'x105' concrete composting pad with a leachate collection basin. In addition, a cover for the composting pad was constructed to comply with state composting regulations.

With these facility and equipment improvements, the number of tons composted by Gallins has grown more than five times since September 2012. The company's growth plan continues into 2014 with another Recycling Business Development Grant to purchase additional 64-gallon carts, red wiggler worms to begin vermicomposting and the construction of another shed to increase the food waste composting capacity.

For more information, visit the Gallins Family Farm website at <u>http://www.gallins.com/</u> <u>family-farm/</u>, or contact Peter Gallins at 336-407-0961 or <u>peter@gallins.com</u>.





### Carolina Plastics Recycling Council Gains Steam

on the APR Website.

much room for improvement in collecting and

supplying recycled resins to our own plastics

industry. A copy of the fact sheet can be found

CPRC is being led by Tamsin Ettefagh with

Envision Plastics and Steve Zagorski with U.S.

Fibers. The CPRC held its most recent meeting in May 2013 at the Polymer Center for Excel-

lence in Charlotte, where participants learned

about the services of the Center, heard updates

from APR and the Institute of Scrap Recycling

Industries, and discussed issues related to the

by Scott Moun, CBAS Section Chief

The Carolinas have a particularly rich representation of plastics reclaimers that make up one of the best

plastics recycling marketplaces in the country.

Recognizing this amazing presence of resin recyclers, as well the potential to grow the supply of materials in the region, the North and South Carolina recycling programs gathered together

the first-ever focused meeting of Carolinabased reclaimers at a meeting of the Association of Post-Consumer Plastics Recyclers (APR) in October 2011.

This first meeting quickly morphed into the founding of the Carolina Plastics Recycling Council, a group of reclaimers Economic Impact Is Significant...

The Carolina plastics recycling industry:

- Employs nearly 1,350 people
- Processes more than 750 million pounds of plastic each year
- Has sales of more than \$450 million in 2012

recycling of #3 -#7 plastics.

APR has also continued to support the development of the CPRC and tentatively has agreed to host the next gathering of the group at its October 2013 meeting in Greenville, S.C.

supported by the state recycling programs who can speak for the industry and address plastic recycling issues in the Carolinas.

A preliminary survey of Carolina-based reclaimers, communicated in a fact sheet distributed to elected officials and the media, found that the industry employs nearly 1,350 people, processes more than 750 million pounds of plastics annually, and has sales of more than \$450 million in 2012. It also found that materials originating from the Carolinas make up less than 25 percent of the reclaimers' feedstocks, indicating

CPRC attendees who are not already APR members will be allowed to attend the APR event at its "tire-kicker" rate and take advantage of the wealth of technical information and networking opportunities of APR and CPRC. The CPRC event will also feature more information about technical services available to plastics recyclers in the Carolinas.

For more information on CPRC and the October 2013 meeting, please contact Scott Mouw at <u>scott.mouw@ncdenr.gov</u> or 919-707-8114.

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Citing the need to better understand the North American PET polymer supply chain and identify viable products that can be made with postconsumer PET carpet, CARE is leading efforts to research and develop significant market outlets for this growing segment of the carpet face fiber family.

Historically, the infrastructure for recycling post consumer carpet (PCC) has been based on mar-

keting nylon, and to a lesser extent, polypropylene, while other PCC materials, such as PET carpet, have become a major negative cost factor for collectors and processors.

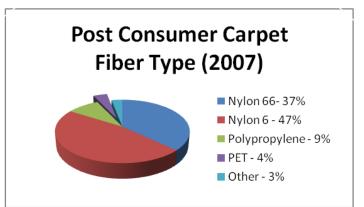
"The reason for this is simple: unlike nylon, there is no readily established high value market for recycled PET carpet in the plastics community," explained CARE Executive Director, Dr. Robert Peoples. Therefore, end uses for PET must be developed in other areas.

From a technical standpoint, PET has no "stand alone" engineered resin specifications or high volume applications due to the brittleness of the PET polymer. However, while there are a large number of other potential applications, it must be proven that PCC derived PET can meet technical and economic specifications that fit those applications.

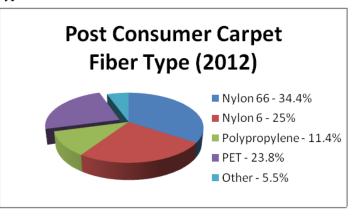
During the past decade, PCC recycling has grown and developed its own market-driven industry. With CARE's help, this industry has become sophisticated and has developed intricate processes to recycle PCC. There are four basic polymer types used to manufacture carpet (broadloom and tile): nylon 6, nylon 66, polyester (PET) and polypropylene (PP).

The national recycling infrastructure has become increasingly successful solely based on the

(<u>CARE</u> continued on page 5)



The pie charts shown here illustrate the dramatic growth of post-consumer PET fiber collected by carpet recyclers around the U.S. from 2007 (above) to 2012 (below), a strong indicator that recycling market development for that fiber type is needed.



#### <u>CARE</u> continued from page 4

value of nylon face fibers. The entire U.S. PCC recycling industry, manufacturers and entrepreneurs alike, have developed technically and financially viable businesses based on the high value of nylon-engineered resins and fibers. Nylon has always had a large and diverse base of end uses and applications from engineered plastics to fiber applications.

The only barrier in broadening the deployment of high value nylon made from PCC has been the development of technology to efficiently separate nylon from the other carpet constituents and purify the resultant nylon to levels nearly equivalent to those of post-industrial scrap. During the past 10 years, these methods have been commercialized and the result has been a robust growth in the acceptance and use of post-consumer nylon from carpet in a large variety of end uses.

PP face fiber carpets, which also contain PP backing are also being successfully recycled. Since the value of PP is much less than that of nylon, however, it cannot form the sole basis of



a successful recycling business. At best, it plays a subordinate role to PCC Nylon carpet as a contributor to any carpet recycling collector's bottom line. But, to bring PCC PET carpet recycling to the level of PP would be a step in the right the direction.

Why has PET become such a problem so quickly? Only six years ago, 2007 CARE data estimated that approximately 4 percent of the PCC stream collected was PET. In 2012, the percentage of PET in the collection stream was estimated to be 23.8 percent and CARE forecasts PET will grow to 30 percent in 2013. If no solution is found, close to half of all collected PCC will find its way back into landfills at unsustainable costs to recyclers.

For more information, contact Matt Ewadinger at <u>matt.ewadinger@ncdenr.gov</u> or 704-264-2980.



### The Affordable Care Act – What N.C. Recycling Businesses Need to Know

by Mike Greene, Recycling Business Development Specialist

The Affordable Care Act (ACA) was enacted in March 2010. While certain parts of the ACA have already gone into effect, many of the requirements will start on January 1, 2014. Pete Schantz, the vice president and Benefits Specialist for Mountcastle Insurance in Winston-Salem, recommends all business owners get ready for the new regulations and offered the following information as a starting point.

Under the ACA, an employer will have the option of providing coverage through a private insurance company or the Small Business Health Options Program (SHOP). The insurance companies participating will vary by state. At this time, Blue Cross Blue Shield of NC will be the only option for North Carolina employers under the SHOP program. Open enrollment period begins October 1, 2013, with coverage beginning January 1, 2014.

Businesses with more than 50 full-time equivalent employees have until January 2015 before it is mandatory to provide health insurance to employees or pay a penalty for not doing so. However, there are advantages for certain employers who choose to offer insurance through the SHOP program. Employers can receive a tax credit if certain criteria is met and the SHOP exchange is used.

For example, starting in 2014, businesses with less than 25 full-time equivalent employees who make an average of less than \$50,000 can earn tax credits to cover up to 50 percent of the company's health costs.

There will be no penalty for employers with fewer than 50 FTE employees that do not offer health insurance. While every situation is different, companies in this category that find it diffi-



<u>HealthCare.gov</u>, as seen in the screen shot above, is a website that provides information on the Healthcare Insurance Marketplace, including easy-tounderstand information for small businesses.

cult to provide health coverage may want to consider the Health Insurance Marketplace designed for individuals. Like the SHOP program, open enrollment for the Health Insurance Marketplace will begin in October 2013, with coverage beginning January 2014.

At this time, Blue Cross Blue Shield of NC is the only insurance company that will be available under the Health Insurance Marketplace in all 100 North Carolina counties. A small number of other insurance companies will make coverage available with limited service areas throughout the state.

Under the Health Insurance Marketplace, individuals may be eligible to receive a subsidy to help cover the cost of insurance. The amount of subsidy that an individual can receive will depend on two factors: income and the number of dependants in the household.

(<u>ACA</u> continued on page 7)

#### ACA continued from page 6

The biggest misconception of the ACA is that health insurance will be free. The only way that all insurance cost will be covered is if the individual qualifies for Medicaid. There will be some premium cost for most citizens, even with the subsidy.

Another requirement that employers should be aware of is that the company must provide employees with notification of the new health insurance marketplace and summary of benefits covered. All employers are required to notify employees of health insurance market place by September 23, 2013. Sample forms for employers to provide to employees can be found on the U.S. Department of Labor's website:

Employers that offer healthcare coverage Employers that do **not** offer healthcare coverage

PART B: Information About Health Coverage Offered by Your Employer This section contains information about any health coverage offered by your employer. If you decide to complete an application for coverage in the Marketplace, you will be asked to provide this information. This information is numbeed

3. Employer name S. Employer address 2. City		4. Employer Identification Number (EIN)     6. Employer phone number			
				8. State	9. ZIP code
		0. Who can we contact about employee health co	overage at this job?		
1. Phone number (if different from above)	e number (if different from above) 12. Email address				
<ul> <li>re is some basic information about health co</li> <li>As your employer, we offer a health pla</li> <li>All employees.</li> </ul>		oyer:			
Some employees. Eligible employe	ees are:				
With respect to dependents:     We do offer coverage. Eligible dependents are:					
We do not offer coverage.					
If checked, this coverage meets the mi be affordable, based on employee wag		the cost of this	coverage to you is intended t		
<ul> <li>Even if your employer intends your discount through the Marketplace.</li> <li>to determine whether you may be e week to week (berhap you are an employed mid-year, or if you have</li> </ul>	The Marketplace will use you ligible for a premium discou hourly employee or you work	nt. If, for examined inc	ome, along with other factors ple, your wages vary from ion basis), if you are newly		
you decide to shop for coverage in the Marke mployer information you'll enter when you visit conthly premiums.					

Sample notification forms, like the one shown above, are required to be distributed to employees and can be found at the <u>U.S. Department of Labor's website</u>. The form shown in the screen shot above is to be used by an employer that offers healthcare coverage.

A uniform summary of all benefits covered allows employees to make apples to apples insurance comparisons. This form should be given at benefits renewal time. The employer's insurance carrier or insurance agent should be able to provide this. Under the ACA, insurance will be available regardless of any preexisting conditions, a mandatory part of coverage for all insurance companies. The only exception will be if an employer has a grandfathered plan. To be grandfathered, the company must have been established before March 23, 2010, even though an employee could have signed on to the plan after that date. Most groups are not grandfathered and will lose grandfather status in the next few years.

Schantz recommends that employers should not take on the changes of the ACA without training or professional advice, as there is not a one-size-fits-all solution. Employers should talk to an insurance professional or a certified public accountant to guide the business through the process and to understand the impact to the company.

The following websites provide more resources:

<u>U.S. Department of Health and Human Services</u> <u>The Health Insurance Marketplace</u> <u>Small Business Administration - Healthcare</u>

For more information, contact Schantz at Mountcastle Insurance at 336-245-2529 or pkschantz@ebenconcepts.com.



## SRT Inc. Expands Raleigh Fluorescent Bulb Recycling Facility

by Ben Rogers, Industrial Development Specialist

On May 31, 2013, Southeast Recycling Technologies Inc. announced the opening of its most recent facility expansion in North Carolina. Located at 1100 Corporation Parkway in Raleigh, the facility is managed by Dennis Olson, a veteran recycler. The expanded fluorescent bulb recycling facility will manage logistics, material consolidation and client services for the region.

Headquartered in Johnson City, Tenn., SRT is a permitted Universal Waste Destination Facility that specializes in the end-of-life management and processing for products considered universal waste. Services offered to the public, private and business-to-business sectors include collection, storage and recycling of items such as fluorescent bulbs, CFL's, electronics, batteries and ballasts. SRT's largest processing plant is in Johnson City.

According to Steve Barnett, president of SRT, "the choice to open a facility in N.C. was driven



SRT Inc. recycles bulbs, batteries, electronics and ballasts similar to the ones shown above.



by the desire to provide excellent customer service to the increasing number of clients in the state." An approved vendor on the state recycling contract, Barnett said the expansion also demonstrates the company's "long-term commitment to service in the state by investing in a facility and creating local jobs."

As an avid sportsman, Barnett added that North Carolina's coast and many lakes were an additional benefit to investing here. "I really like North Carolina, it's a great place to do business and live," he said.

For additional information, contact Dennis Olson at dennis@recyclebulbs.com or 919-615-4251.



### Facility Upgrade Increases Capacity at Winston-Salem's Waste Management Recycle America MRF

by Ben Rogers, Industrial Development Specialist

In 2012, Waste Management made a strategic and financial investment in the upgrade and expansion of the company's Winston-Salem Recycle America material recovery facility. Located in Winston-Salem at 280 Business Park Drive, the 85,000 square-foot facility opened in November 2012 with upgraded single stream processing equipment.

The decision to invest in North Carolina's recycling infrastructure to offer single stream processing was made to increase recovery and participation rates. Richard Huckabee, Waste Management South Atlantic recycling director stated, "Singlestream processing allows residents an economically sustainable recycling option that will not only increase recycling rates, but also conserve natural resources and preserve valuable landfill space."

The facility now processes single-stream curbside collection, plastics, ferrous and non-ferrous metal, and fiber. The state supported the expansion through a Recycling Business Development Grant. According to Winston-Salem MRF manager, Dwight King, the grant was used to buy a new paper screen that has shown a 25 percent increase in material processing.



*WM Recycle America's expanded MRF in Winston-Salem (seen above) opened in November 2012.* 

Waste Management Senior Community Relations Specialist Marla Price said that in 2011 the company extracted almost 12.9 million tons of recyclables from the waste stream — 61 percent more than its baseline in 2007. The company's goal is to manage more than 20 million tons a year of recyclable materials by 2020. In addition to expanding the company's single-stream recycling capacity, Waste Management plans to build infrastructure to collect and process organic materials and will further invest in new ways to unlock more value from organic waste.

Waste Management operates 36 single-stream recycling facilities in North America.

For more information, contact Marla Prince at 404-387-4335 or mprince1@wm.com.



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### Anaerobic digester to be built in Charlotte

On July 16, international clean energy company Blue Sphere Corp. announced the construction of an anaerobic digester to be built in Charlotte. The \$17.7 million project will be funded by Cat Financial, the financial arm of construction and solid waste equipment maker, Caterpillar Inc.

The company expects to break ground on the project in the third quarter of 2013 and complete construction within 12 months.

"Our next step is to prepare and enter into final definitive agreements with Cat Financial to start the disbursement of cash and commence construction. The terms of the commitment letter give us until August 14, 2013 to close," Blue Sphere CEO Shlomi Palas said in a statement.



#### Contacts for key RBAC services:

**Recycling Markets Directory** Sherry Yarkosky 919-707-8133 sherry.yarkosky@ncdenr.gov

**Recycling Business Development Grants** Wendy Worley 919-707-8136 wendy.worley@ncdenr.gov

> Independent Collectors Network Mike Greene 919-707-8137 mike.greene@ncdenr.gov

The organics-to-energy project will provide electricity to the local grid and will retain Blue Sphere as project manager after completion.

For more information, contact Shlomi Palas at info@bluespherecorporate.com or 704-909-2806, or visit Blue Sphere Corp.

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

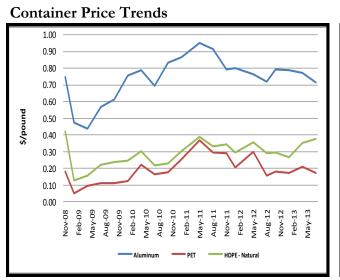
Recycling Works is published by the N.C. Recycling Business Assistance Center, a program of the Division of Environmental Assistance and Customer Service of the N.C. Department of Environment and Natural Resources. For more information, call 877-623-6748, or write to DEACS, 1639 Mail Service Center,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

Patrick McCrory, Governor, North Carolina John. E. Skvarla, III, Secretary, Department of Environment and Natural Resources

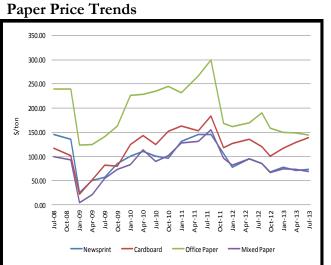
**Division of Environmental Assistance and Customer Service** Joe Harwood, NCDENR Ombudsman Ted Bush, Director, NCDEACS Scott Mouw, Chief, Community & Business Assistance Section Matt Ewadinger, RBAC Manager Wendy Worley, RBAC Market Development Specialist Sherry Yarkosky, RBAC Market Development Specialist Mike Greene, RBAC Market Development Specialist Ben Rogers, RBAC Industrial Development Specialist



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



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 Customer Service (DEACS).

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





Prices current as of July 19, 2013						
Item		Western Region	Central Region	Eastern Region		
METALS						
Aluminum Cans l	b. loose	\$0.695	\$0.710	\$0.740		
Steel Can, gross to	on baled	\$221	\$110	\$180		
PLASTICS						
PETE, lb. baled		\$0.1750	\$0.1700	\$0.1800		
HDPE, lb. baled	Natural Colored	\$0.3850 \$0.1750	\$0.3600 \$0.1600	\$0.3850 \$0.1900		
PAPER						
Newsprint, ton ba	aled	\$90	\$65	\$65 *†		
Corrugated, ton b	aled	\$140	\$130	\$146		
Office, ton baled		\$160	\$140	\$135 *†		
Magazines, ton ba	aled	\$85 *†	\$85	<b>\$</b> 90 * <b>†</b>		
Mixed, ton baled		\$65	\$60	\$81		
GLASS						
Brown, ton crush	ed delivered	\$18	\$20	\$20		
Clear, ton crushed	d delivered	\$25	\$30	\$30		
Green, ton crushe	ed delivered	\$3	\$12	\$0		
*Markets with Mi †Prices from Yell						

North Carolina Market Prices for Recyclables

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://portal.ncdenr.org/web/deao/rbac