

Resource Guide

FOR COMMERCIAL RECYCLING AND WASTE REDUCTION

F E B R U A R Y 2 0 0 9



Catawba County
Utilities and Engineering Department
SOLID WASTE DIVISION

Printed on recycled paper

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Introduction

This Commercial Waste Reduction and Recycling Resource Guide is designed to provide members of the commercial sector with information regarding the benefits that a Waste Reduction and Recycling Program can provide to their business and the community; and with practical detailed information to assist a business in starting or enhancing a current waste reduction program.

Why should businesses be interested in Reducing Waste and Recycling?

There are numerous sound business reasons to reduce waste such as:

Corporate Leadership Through Sustainability Initiatives

- Sustainability for business means making responsible decisions today that will have positive effects for the future allowing future generations to have access to the same resources and environmental benefits that we enjoy today.
- Reducing waste and recycling is good for the environment and is a prime example of corporate leadership and environmental stewardship.

Instills Employee Pride

- Employees feel good about having a positive impact on the environment, being recognized and rewarded for their cost reduction and waste reduction efforts, and working for a socially responsible company.
- Attract the best of the best! Many employees who are knowledgeable and experts in their fields are also socially responsible and want to work for companies which demonstrate the same values.

North Carolinians throw away enough trash to fill 2,555 miles of dumpsters each year, enough dumpsters to line the length of N.C.'s Interstate 40 more than six times.

Economic Reasons

- A waste reduction and recycling program saves money through cost avoidance.
- It can turn Trash into Cash!
- Operational costs are reduced by implementing proper waste management throughout the business process.
- It can increase your customer base—the public patronizes businesses that make efforts to protect the environment.
- Recycling creates jobs, and that is a boost for the local and state economy.

It's the Law

- The state of North Carolina currently bans several items from landfills, and in October 2009 and January 2011, additional items generated by businesses will be banned from landfills and must be recycled.



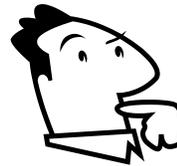
What is Waste Reduction?

Any action you take to reduce the amount and/or toxicity of waste. It includes waste prevention, recycling and composting, as well as purchasing and manufacturing goods that have recycled content or produce less waste.

It doesn't have to be complicated. You don't have to get bogged down in a comprehensive plan. A complex approach to developing a waste reduction program would be to review all business operations to identify and implement as many opportunities for reducing waste as possible. However, the implementation of any strategy, regardless of its complexity, will result in economic and environmental benefits for a business. You don't have to construct an expensive waste management facility. Just start somewhere.

Make a plan to lower waste removal costs. Decide to lower expenditures on raw materials, office supplies, and equipment. Streamline your operations to

reduce waste AND reduce operational costs. Just deciding to make informed choices about source reduction, waste reuse and recycling strategies is a great start!



Did You Know?

With a 64 percent national recycling rate, nearly all the steel made in the United States and in the world is made from scrap.

Many steel products are recycled at a high rate in North Carolina, though less than 20 percent of steel cans were recovered in 2001.

Look at Appendix E "Recycling A-Z" to see what can be recycled.

Ways to reduce waste include:

Reduce

Do anything you can to prevent waste generation from the source. Source reduction should be your first strategy before recycling, since it will save you the most money and have the greatest positive effect on the environment.

For example, you can:

- Purchase or produce items in just the quantity needed
- Choose items that use less packaging
- Avoid using a material altogether
- Choose items that have a longer life and can be readily recycled

Reuse

Focus on reusing materials again in their original forms. Many reuse options eliminate the transportation, energy and resource requirements associated with recycling alternatives.

It's easy to:

- Reuse office furniture
- Re-label file folders
- Remanufacture toner cartridges

Recycle

Use a material again to make another product.

- Turn recycled tires into materials for cushioning playgrounds
- Turn plastic bottles into clothing or plastic lumber
- Turn newspapers into insulation

Step One - Obtain Management Support and Involvement

Unless management is behind it, it won't happen. Your managers must endorse your company's waste reduction program from Day One. Their support can take the form of an informal endorsement, or better yet, they can implement a formal waste reduction and recycling company policy. Management must support the waste reduction team by endorsing program goals and implementation, communicating the importance of reducing waste within the company, setting an example, guiding and sustaining the program, and encouraging employee commitment and participation through rewards and incentives.

Step Two - Establish A Waste Reduction Team

A team approach to planning, designing, implementing and maintaining your program allows tasks to be distributed among several employees from different departments within the company. It also establishes essential communication links.

Team members should meet regularly to develop a plan and begin program implementation. How long will it take? Generally, large facilities incorporating many different options will need several months to start up a program. Department-specific or more modest programs might be implemented in less than a month. Some businesses might even be able to implement simple options within a matter of days. Regardless, time and resources invested will undoubtedly be returned by the savings a successful waste reduction program generates year after year.

Waste Reduction Team Responsibilities

- Works with management to set preliminary and long-term goals and plans for waste reduction efforts.
- Conducts a waste assessment by gathering and analyzing information on processes, procedures, and the company waste stream.
- Plans for implementation of waste reduction efforts.
- Educates employees and promotes participation.
- Monitors the progress of the program.
- Provides management with program status report.



Size and Composition of Team - What size team do you need?

It depends on the size of your company, and should represent as many departments or operations as possible. For a one-person team, choose someone who can wear many hats and is familiar with the overall operations of your company. Likely candidates for a two-person team would be a company manager and an administrative or technical support person.

Larger businesses should create a team of employees from different departments to encourage widespread input and support. Environmental managers, building supervisors, technical, operational, administrative, maintenance or purchasing staff members, and other employees interested in waste reduction make good team members.

Company management, or the team itself, should appoint a knowledgeable and motivated team leader. Depending on the size of the company and type of program, the position can require a significant amount of time and energy. The leader must be capable of directing team efforts; administering the planning, implementation and operation of the waste reduction program; and acting as a liaison between management and the team. You might choose a facilities manager, an environmental manager, or an employee who has championed waste reduction in the company. If possible, the task should be incorporated into the person's job description.



Step Three - Set Preliminary Goals

The team's first task is to work with management to establish and record specific preliminary goals for the program. The amount of waste that can be reduced will depend on the level of effort the company is willing to dedicate to the task. Remember that goals provide a framework, but should be flexible - you may need to reexamine and adjust them as the program proceeds.

Step Four - Get Participation From the Whole Company

Once you've established the general direction of the waste reduction program, you'll want to present the program to the rest of the company. Now's the time to get employees in the loop and give the team momentum! Start with a direct announcement by the president or representative of upper management, demonstrating that the program has full management support and is a high priority for the company. The announcement should:

- Introduce employees to waste reduction
- Explain how waste reduction will benefit both the company and the environment
- Outline program design and implementation stages
- Publish the team leader's name and contact information



Do!

Solicit suggestions from employees.

Post announcements in a prominent place or distribute them through electronic or voice mail to save paper.



Do!

Communicate regularly to maintain employee support.

And don't forget that employees will appreciate being asked to join in the company's waste reduction efforts - find ways to ask them for help.

Step Five - Look at Your Waste - Assess the Waste Stream

What kind of wastes are you generating? How much of each type of waste is going into the dumpster? The data you collect in your waste assessment can be used to identify and evaluate potential waste reducing options, including alternative purchasing practices, reuse, material exchanges, recycling, and composting. If time or resources prevent conducting a waste assessment, you can approximate your waste generated by using industry averages of the amount of waste generated by companies in your related field.

Many effective waste reduction and recycling measures can be adopted without the help of a formal waste assessment. For small businesses or businesses with very few items in the waste stream, a complex waste assessment may be unnecessary. Larger companies will find it helpful to determine the types and amounts of waste generated. Refer to Section V, "Find the Cash in Your Trash," of this guide for help in conducting your own waste assessment!

Step Six - Select Ways to Reduce and Recycle

This is where the most satisfying work begins! Use the following information to list, analyze, and choose appropriate waste reduction measures for your company.

A. Compile and Screen Your Options

Use the results of your waste assessment as a tool to aid the team in listing all possible waste prevention, recycling, composting, materials exchange, and purchasing measures that might be effective. Consider program goals as you compile your list.

B. Analyze and Select Your Options

Strive to consider all three types of options: source reduction and reuse, procurement, and recycling.

Source Reduction and Reuse Options

Think waste prevention first - it delivers the most bang for the buck! You'll find that just one source reduction option can result in savings in purchasing, storage, materials handling, removal costs and other areas. Make sure your analysis is comprehensive and take into account savings in all related areas.

Source Reduction and Reuse Strategies are located on pages 10 and 11.



Procurement Options

Commit to new purchasing strategies and establish new habits in which procurement with waste reduction in mind becomes the norm rather than the exception.

Ideas:

- Buy supplies with reduced packaging.
- Beef up inventory control to avoid over ordering and possibly throwing away perishable items.
- Use the company's buying power to reduce waste and encourage growth of recycling markets.
- Contact your suppliers and discuss alternative products that would meet new purchasing criteria.

Procurement Strategies are located on page 11.

Recycling Options

Do you have waste that cannot be prevented? Evaluate recycling options. Determine the marketability of the materials to be collected, and weigh the cost effectiveness and potential operational effects of recycling options. Your team should also consider whether the new recycling program will affect current purchasing practices. For instance, the company might want to buy exclusively aluminum cans for vending areas instead of glass and plastic containers to take advantage of strong markets for aluminum.

Appendix E, "Recycling A-Z," lists markets for recycling.



Step Seven - Plan Your Program

Now that you've decided to adopt specific waste reduction options, your team is ready to forge into planning and implementation. This is not a race. Plan to build your program slowly, especially if your waste reduction program is complex. Implement a few options at a time, so employees are not overwhelmed by changes in procedure. In addition to making the program manageable, your efforts to carefully phase in options will give time to identify, assess, and solve any operational problems in the early stages.

If your program involves only a few simple measures, it might be possible to implement all options at once. Give it a shot!

Remember that cost-effectiveness may not always be the overriding criteria for selecting options. Other criteria, such as improved environmental awareness, employee morale, community relations and legal requirements, may be equally important.

If your company is most focused on cost-effectiveness, don't automatically disregard options that have large start-up costs. When the long-term feasibility of such options are considered, they may show impressive multi-year savings that make them viable.

In selecting your options, you should also review the long-term feasibility of the program as a whole. Successful programs can be designed around complementary options that take advantage of their different strengths. Don't remove an option from consideration until you consider whether it may, over time, save enough money to pay for other waste reduction activities that improve environmental awareness, employee morale, or community and customer relations.

Tip: Section VI contains great education ideas.

Keep in Mind!

Some options do not require extensive analysis.

For example, a facility that already has a copy machine that can make two-sided copies efficiently, easily adapts to a policy mandating double-sided copying.

Step Eight - Roll Out Your Program

You've gotten great input from employees, Your teams have proved their analytic skills. Now it's time to kick the program into high gear. Set a date for the kickoff of the program and make it fun, creative and exciting. Your team can decide the best way to motivate and educate your staff, considering a wide range of communication media including:

- Newsletters
- Electronic mail
- Training sessions
- Posters
- Employee orientation
- Special events - Slogan contests, cash awards, or other recognition for waste reduction activities.

Management should ensure that waste reduction training and education become part of every employee's job. Incorporating waste reduction responsibilities into employee job descriptions works well.

Note:

Implementing a Recycling Program requires a somewhat different approach and is covered in Section III.



Step Nine - Reward Employees and Publicize Results

Let your company bask in the glow of its success. Publicize waste reduction results so everyone knows they are making a difference. Monitor the program and make improvements or modifications as needed. Respond to employee questions with enthusiasm and retrain employees when necessary. Incentives, prizes and awards keep people pumped up and eager to participate.

Your success makes great press internally and externally. Waste reduction and recycling can boost your company's image. Let your customers and your community know that you are taking positive steps to manage waste and protect the environment.

Tip!

Tip: Read Section VII, "Recognition Ideas," for effective ways to recognize and reward employees and great education ideas.

Join Catawba County's Commercial Recycling and Waste Reduction Partnership Program and enjoy the public recognition you deserve!



Step Ten - Monitor and Evaluate Your Waste Reduction Program

Once your program is underway, your team should judge results against goals. As the potential for reducing waste in the company becomes better understood, consider establishing long-term goals for the program. It is important to evaluate the program periodically to:

- Keep track of overall program success and to build on that success
- Identify new ideas for waste reduction
- Identify improvement areas
- Document compliance with any regulations
- Determine the effect of any new additions to the program
- Keep employees informed and motivated

The best way to assess and monitor program operations is through continued documentation. Perform your first evaluation after the program has been in place long enough to have an effect on the company's waste generation rate, usually about one year after roll-out. You may find that conducting additional periodic waste assessments to determine further changes in the company's waste output is worthwhile as well. Data and procedures from the initial assessment make subsequent assessment much faster and easier.



Source Reduction and Reuse Strategies and Ideas

In Office Areas

- Use e-mail and maintain electronic (instead of paper) files
- Establish a company website instead of printing brochures
- Print on an as-needed basis, instead of mass producing documents and forms, to avoid extra copies
- Receive faxes through computers and print only as needed
- Make double-sided copies whenever possible
- Set up computer software to default two-sided printing
- Reduce size and double-side standard forms
- Eliminate unnecessary reports
- Maintain central files instead of filing in multiple files
- Proof documents on the computer screen before printing
- Update mailing lists to avoid duplication and returned mail
- Route magazines, reports, and other documents so one copy is read by multiple employees
- Install computer-based training for new employees instead of printing training manuals
- Participate in a commercial mail reduction program (see Appendix I)
- Convert scrap paper, outdated forms, and letterhead into memo pads
- Use non-toxic fluids and art supplies
- Reuse office supplies, such as file folders and manila envelopes, when possible; collect and store excess reusable items in a central location for future use
- Use outdated letterhead for in-house memos
- Sell or donate used equipment and furniture
- Provide reusable cups for staff use, instead of disposables, and reduce use of other disposable items where possible
- Donate old magazines and journals to clinics and shelters
- Reuse cardboard boxes

Equipment

- Practice preventive maintenance on equipment to prolong service life
- Consider:
 - * Renting equipment that is used infrequently
 - * Using repaired or remanufactured office equipment
 - * Using rechargeable batteries
 - * Installing reusable furnace and air conditioner filters
- Invest in equipment that facilitates waste reduction, where feasible, such as:
 - * High quality, durable, repairable equipment
 - * Copiers that make two-sided copies
- Reclaim usable parts from old equipment
- Rotate tires on company vehicles on a regular basis to prolong tire life. Keep tires properly inflated
- Find uses for worn out tires (e.g. landscaping or swings)
- Recharge fax and printer cartridges

Coordinate efforts within your company

- Can waste produced by your company in its manufacturing process be used as raw material in one of your suppliers' products? If so, make this part of your bid evaluation
- Develop a review and approval procedure for all raw materials and supplies purchased. The purchasing agent can regulate the quantity of materials ordered to reduce excess and out-of-date inventory
- Inspect materials before acceptance; do not accept incorrect orders, off-specification materials, impure feeds, etc
- Have an inventory control system in place, so on-hand quantities and expiration dates are easily identified; this will prevent over-purchasing that leads to excess and out-of date inventory
- Find uses or markets for off-specification material that would otherwise be disposed
- Arrange storage so materials can be easily accessed and handled to prevent spills and breakage
- Purchase more efficient and durable equipment
- Prevent poor operating practices or carelessness by properly training forklift drivers to prevent damages to materials and products
- Repair rather than replace. Return, reuse, and repair wooden pallets



Food service areas

- Donate surplus, edible produce and food to food banks
- Consider using durable towels, tablecloth, napkins, dishes, flatware, cup and glasses rather than disposable items
- Offer smaller portions to reduce food scraps
- Use unbleached coffee filters
- Encourage customers to take home their extra food
- Buy sugar, cream and condiments in bulk and use reusable serving containers instead of packets

Retail Areas

- Let your customers know you are environmentally responsible
- Encourage customers to use their own reusable bags, mugs, or cups
- Encourage customers to return their metal hangers at dry cleaners
- Promote items that are refillable, reusable and recyclable
- Offer customers waste-reducing choices such as:
 - * Items in bulk or concentrate
 - * Solar powered items—watches, calculators, batteries
 - * Recycled content items—paper, plastic
 - * Rechargeable batteries
 - * Razors with replaceable blades
 - * Durable merchandise
 - * Repairable merchandise

Landscaping

- Use a mulching lawn mower on grounds - time savings should reduce cost of lawn maintenance and reduce need for fertilizers
- Compost grass clippings and leaves or request that contractor compost these items
- Use compost as a top dressing or soil amendment
- Ensure that yard trims are sent to the Blackburn Landfill or chipped into mulch to be used on company property to reduce weeds and conserve moisture around plantings
- Choose a landscape design that needs low maintenance
 - * Slow-growing species and evergreen trees do not generally create large amounts of debris
 - * Xeriscaping is a water-conservative approach to landscaping. Plants whose natural requirements are appropriate to the local climate are emphasized, and care is taken to avoid losing water to evaporation and run-off

Procurement Source Reduction and Reuse Strategies and Ideas

- Order items in bulk quantities to reduce packaging
- Purchase material in appropriate-sized containers; for example, if used in bulk, buy in bulk; if used by the can, buy by the can
- Purchase copiers and printers that are designed for high volume double-sided copying
- Purchase supplies with minimal or reusable packaging
- Purchase multi-purpose and concentrated products, such as cleaning supplies
- Purchase non-toxic or less toxic materials when possible
- Purchase supplies with minimal or reusable packaging
- Ask suppliers to take back unwanted packaging and to minimize packaging on orders
- Request that deliveries be shipped in reusable returnable containers
- Reuse newspaper and shredded paper for packaging
- Reuse foam 'peanuts' and 'bubble wrap' and cardboard boxes or find someone who can reuse them. Or set up a system to return them to the distributor for reuse
- Use just-in-time
 - * ordering to eliminate inventory by moving raw materials from the receiving dock to the production area for immediate use
 - * delivery on low-use materials to minimize spoilage
- Purchase energy efficient products where available and practical
- Require longer warranties
- Review and/or revise current packaging standards
- When renovating, purchase building materials made from recycled-content, such as ceiling tiles, carpets, floor tiles, and wallboard
- Negotiate with suppliers up front
 - * for return of leftover/unused product or material on which shelf life has expired
 - * for return of scrap material for recycling in manufacture of new product
- Purchase recycled products when economically feasible
- Develop life cycle costs for the products you purchase
- Keep records on suppliers' capabilities
- Find out costs involved in maintaining various levels of inventory
- Learn what raw materials comprise the products that you purchase
- Determine which products contain recycled materials

In Section II, you evaluated your waste stream and now know what recyclables are in your trash. The key to getting them recycled is using a team, following a plan and generating excitement for workplace recycling!

Step One: Obtain Management Support

To make recycling a success, you will need staff time for planning, implementation and oversight. You may need to make changes to janitorial or waste hauling contracts. You may need capital or operational expenditures, as well as purchasing or process changes to improve material recovery and decrease material contamination. Section IV of this guide, Why Recycle, provides reasons for starting a program. It's helpful in gaining management support for a workplace recycling program.



Did You Know???

Remember to target office paper and cardboard!

As much as seventy percent of office waste is paper. More than 10 percent of waste in the typical office is corrugated cardboard.

Each week, N.C. workplaces throw away enough potentially recyclable office paper to fill two soccer fields three feet deep.



Step Two: Designate A Recycling Program Coordinator

The program needs to be “somebody’s baby.” The designated recycling coordinator will plan and implement the recycling program and act as a liaison among management, employees, maintenance staff, outside vendors, and customers. This individual will monitor and publicize the program to keep participation rates up and contamination rates down. In larger offices, a team of program monitors are made up of employees representing different work areas or different work shifts can work with the program coordinator to help keep employees educated and enthused about recycling.

How much time will it take? Your recycling coordinator may need to dedicate about one day per week to initial planning and implementation. Once the program is underway, he or she will only need a few hours a week to maintain the program.

In multi-tenant buildings, the property manager should coordinate the building’s recycling efforts. Each tenant can choose a monitor to assist with the program.



Step Three: Find A Market For The Materials

Finding a market for the recyclables and understanding just how that market accepts the materials is an important part of the recycling coordinator's job. An extensive list of potential markets can be found in this guide.

See Appendix E - Recycling A-Z: Markets for Recyclable Materials.

Many vendors can offer assistance in setting up your recycling program. Some offer collection services and will help you decide if you are generating enough materials to support pick up. Some private recyclers will provide containers. For a detailed list of paper and cardboard vendors you can access Appendix E of this resource guide.

Tip:

Your paper recycling vendor may be able to provide a container for cardboard. For most containers, except compactor boxes, the corrugated cardboard boxes must be flattened for collection. Employees can place the corrugated boxes in a central location; custodial staff or designated employees flatten and stack the boxes in the recycling container.

See Appendix D for detailed information.

Industrial Waste Recycling

Finding markets for industrial waste that cannot be reduced or reused is not as simple as plugging into your local community recycling program. But, if you are producing large enough quantities of homogeneous waste, the potential reduction in disposal fees make working to find a market worth the effort.

Today, local industries are recycling a variety of items in their waste streams; cardboard, chemicals, fiber drums, metals, plastic film, and other plastics and packaging, petroleum products, textiles, and wood pallets.

Resources for finding additional industrial markets can be found in the Appendix J of this guide, "Resources and Links".

You can also call the Catawba County Utilities and Engineering Recycling and Waste Reduction office for assistance at 828-465-8217.

Get Your Stuff Together

When you contact a private recycling vendor, you'll need to have a description of your wastes and an estimate of how much of each your business generates. Typically, an office generates 1/2-to-one pound of paper waste per person per day. Ask the recycling vendor these questions:

- (1) What containers and educational support can you provide?
- (2) What do you charge for pick up?
- (3) Do you pay for our materials? How much?
- (4) What happens if we have a contaminated load?
- (5) How do you handle billing, payment, and tonnage reports?
- (6) Do you require a contract? How long?



Did You Know?

Aluminum and glass companies rely heavily on secondary materials for their product, and many plastics manufacturers also depend on recovered materials. Only half of NC's aluminum cans are recycled despite a statewide disposal ban on the material.

Step Four: Design The Program

After you have determined what materials you can market, your recycling coordinator will plan exactly how you will separate, collect, store and transport recyclable materials.

The coordinator will need to determine answers to these questions:

- Who will handle the recycling collection within the facility?
- Can the cleaning crews collect recyclables at each workstation or only at centralized locations?
- Will the cleaning contract need to be renegotiated?
- Is there adequate storage space for recyclables? Where?
- What containers will be used to collect and store the materials?
- Will the recyclables be stored near the final pickup location? If not, how will the containers be moved to the loading area?
- Will the loading area be clear at the scheduled pickup time or will the recyclable collection be competing with customer needs?

Container Considerations

Container size will depend on where containers are located and how often they will be emptied. Desktop or desk side containers serve individual employees at their workstations and are either emptied by a custodial staff or by the employee into a larger centralized container. Centralized containers can be located in well-traveled hallways, the mailroom or copier room, and any other areas where large quantities of paper are generated. These centralized containers can be large enough to serve as final storage containers and moved to the loading dock for pickup. They may alternately be emptied into larger storage containers.

It's smart to run a pilot collection program in one department or work area to determine if the containers, collection, and separation methods you've chosen are convenient for employees and custodial staff. If you purchase large quantities of containers and later find out they don't meet the needs of your program, you may be faced with a restocking fee to return them.

Safety Considerations

Use common sense when storing paper or other flammable recyclables. Do not block passages, keep paper away from heat sources, and post no smoking signs. A covered storage container is preferable. If you have any questions about fire safety contact the Catawba County Fire Marshall's office at 828-465-8232.



Good Idea!

Use the company mailroom as the cardboard box collection area. Anyone in need of boxes can take what they need and then flatten the remaining boxes and put into a container on the loading dock where a recycling vendor can collect them.



Think Ahead!

Ask your recycling vendor what container they can provide.

If you don't have money to purchase containers, think about labeling existing cardboard boxes, trash cans or other suitable containers for recycling collection.

**Need to purchase containers:
Refer to Appendix F, "Sources for
Recycling Containers".**

Step Five: Educate Your Employees

It's the single most important variable in making a recycling program work - employee education. What should you cover? The program's purpose, its method of operation, and the importance of each employee to the program's success.

Spell it all out in memos posted on bulletin boards. Reiterate it in the in-house newsletter. Say it again in training sessions. Emphasize the new collection, introduce the new collection containers, and explain the collection methods. New employees should be trained as part of their orientation.

Keeping contaminants out of the recycling stream is very important to maintain the value of your commodities and to retain your reliable recycling companies. Reminding employees about contamination prevention will be an on-going education process. See Section VI of this guide, "Education Ideas."

Step Six: Kick Off The Program

Set a date for kickoff. Announce it in a memo or in-house publication. Recruit and train program monitors. Schedule all employees for a recycling training session. Check with your recycling vendor, container vendor, and janitorial staff or building manager to be sure everything is in place for the kickoff date.

Make sure everyone knows their role. Position the labeled recycling containers the night before the kickoff; distribute desk containers at the training sessions. Hit the ground recycling!

Step Seven: Employee Recognition and Company Recognition

A workplace recycling program gets employees involved in a common project. It also gives employees who recycle at home the satisfaction of bringing their environmental ethic to work. Section VII of this guide, Recognition Ideas, will inspire you with ways to recognize and reward employees.



Don't Forget!

**Recycling saves natural resources,
can lessen air and water pollution,
and creates jobs within the recycling
infrastructure.**

**Join Catawba County's Commercial
Recycling and Waste Reduction
Partnership Program to get well-
deserved public recognition for your
company's efforts.**



Recycling Ideas and Strategies For Small Business

- In a small office there may not be enough materials generated to warrant pickup by a vendor. One solution is to combine recyclables with those of neighboring offices. Or you may want to deliver materials to a private recycler.
- If you are a tenant, check with your property manager about the recycling services they provide. The property manager may provide tenants with recycling options.
- Check with other businesses in your building, complex, or block. Coordinated efforts can raise recyclable volumes enough to make recycling services more affordable.
- Ask trucks that bring supplies to your business if they would be available to back-haul clean recyclables to a recycling vendor.



Tip:

Many items are easily recycled within Catawba County and the Catawba Valley Region. Look at Appendix E, "Recycling A-Z, Markets for Recyclable Materials," to see what can be recycled.

What's Right For Your Business?

While the basic practices of commercial recycling and waste reduction are common to all businesses, your company's size, type and location can impact your program choice. Catawba County offers many recycling opportunities for different types of businesses, including banking/finance, hotel/motel, industry, places of worship, property management, restaurants, small business and construction and demolition.

Please contact Amanda Kain, Waste Reduction Coordinator at 828-465-8217 for more information.

Keep In Mind...

Although your Municipality may provide trash collection service to your small business, does NOT mean they also provide recycling services.

Reason to Recycle #1: It's The Law!

The State of North Carolina currently bans the following materials from landfills: whole tires, used oil, yard waste, aluminum cans, white goods (large appliances), antifreeze and lead acid batteries.

Recent State Requirements

House Bill 1518, effective January 1, 2008: North Carolina ABC Law

"Holders of on-premises malt beverage permits, on-premises unfortified wine permits, on-premises fortified wine permits, and mixed beverages permits shall separate, store, and provide for the collection for recycling of all recyclable beverage containers of all beverages sold at retail on the premises." This is to include aluminum, plastic and glass beverage containers. Go to www.partnership4recycling.org for more information.

Future State Requirements

Disposal bans effective:

October 1, 2009 - Motor vehicle oil filters, plastic bottles, and wooden pallets

January 1, 2011 - Televisions

January 1, 2011 - Computers

Did You Know?

In 1994, North Carolina had 306 recycling companies. In 2004, there were 532, a 74 percent rise in only 10 years. Translation? More recovered materials. More jobs. More money flowing through our economy - all because of recycling!

FACT: A 20 percent increase in recycling would create as many as 500 new jobs.

~From the North Carolina Department of Environment and Natural Resources

Reason to Recycle #2: It Saves Money

Waste reduction programs are designed to provide economic benefits through the reduction of operational costs by implementing proper waste management throughout the business process. Conducting a waste assessment allows a business to discover the "Cash In Its Trash." Through assessment, employees become aware of what waste is created and how it is managed. Staff can then target opportunities for waste reduction and recycling.

Waste reduction and recycling reduce the demand on our natural resources, save valuable landfill space, save energy, provide materials for new products and create opportunities for new industries.



Reason to Recycle #3: It Creates Jobs

Consider these fast facts from the North Carolina Department of Environment and Natural Resources:

- Recycling employs more than 14,000 North Carolinians and recycling jobs have increased about 48 percent in the last 10 years
- The United States' major industrial sectors need recycled materials now more than ever and are counting on expansion
- There are around 530 recycling businesses in North Carolina employing more than 14,000 people
- Recycling businesses make at least \$25,000/year creating a \$325 million annual payroll, which is plowed back into the economy through purchasing, home buying, savings in local banks and property and income tax payments
- A 20 percent increase in recycling would create as many as 500 new jobs in the state creating a stronger economy
- Almost 80 percent of U.S. paper mills rely on recovered recycled paper. In fact it supplies 37 percent of their material
- Ultimately, the major industrial sectors would suffer severe difficulties if the supply of recycled materials suddenly disappeared

Reason to Recycle #4: It Reduces Business Operating Costs

Part of the cost of running a business is waste disposal. Some costs, such as the rental, tipping and disposal fees paid for waste hauling services, are obvious. Recycling can save money now by reducing disposal costs for your business. Effectively managing waste can help local government hold down future costs for waste processing and disposal.

Have you ever researched what your company currently pays for waste disposal? Recycling saves your company money if the cost of waste handling and recycling is less than current waste handling costs.

If your business is located in an office park or rents a portion of a larger building, the costs for waste disposal may be paid indirectly through your lease payment. Make sure your building manager is aware of how recycling can positively affect the building's waste disposal cost. If you are a small company that doesn't generate enough recyclables to warrant collection by a private vendor, pooling recyclables from the entire building or office park can make collection cost effective.

Be sure to restructure your waste hauling contracts after you have implemented a recycling program. You may be paying for more service than you need if waste containers are being emptied before they are full.

Did You Know?

Creating jobs: Recycling is an increasingly important part of our state's economy. A recent study shows more than 14,000 recycling jobs exist in North Carolina, an increase of 12 percent in the last five years. Many small businesses have been created in our state to recycle discarded materials and products.



Reason to Recycle #5: Tax Incentives

If your company purchases equipment or constructs facilities used exclusively for recycling, you may benefit from special recycling tax provisions provided by North Carolina. North Carolina offers a tax exemption on equipment and facilities used exclusively for recycling and resource recovery. If you are interested in finding out how to apply for a Tax Certification, it is first advisable that you refer to the North Carolina Solid Waste Management Rules regarding the standards for special tax treatment. If you are not sure if the equipment or facility you own qualifies, there are resources available to help you determine your eligibility. You can also access examples of qualifying equipment and facilities as well as additional tax provision information. Information on Tax Incentives can be found at <http://www.p2pays.org/ref/26/25939.htm>

Resource Saving Facts

- One ton of uncoated virgin (non-recycled) printing and office paper uses 24 trees.
- Every ton of steel recycled saves 2,500 pounds of iron ore, 1,400 pounds of coal and 120 pounds of limestone.
- Producing recycled paper causes 74 percent less air pollution and 35 percent less water pollution than producing virgin paper.
- The pollutants created in producing one ton of aluminum include 3,290 pounds of red mud, 2,900 pounds of carbon dioxide (a greenhouse gas), 81 pounds of air pollutants and 789 pounds of solid wastes.
- Recycling one ton of steel reduces air pollution by 86 percent and water pollution by 76 percent, and saves 74 percent of the energy and 40 percent of the water that would have otherwise been used.

(NCDENR)

Energy Saving Facts

- Recycling an aluminum can saves 95 percent of the energy required to make the same amount of aluminum from virgin materials.
- Producing new plastic from recycled material uses only two-thirds of the energy required to manufacture it from raw materials.
- Producing glass from virgin materials requires 30 percent more energy than producing it from crushed, used glass.
- Producing recycled paper requires about 60 percent of the energy used to make paper from virgin wood pulp.

(NCDENR)

Reason to Recycle #6: Corporate Leadership through Environmental Sustainability

Sustainability for business means making responsible decisions today that will have positive effects for the future. It entails being thoughtful in our actions and careful enough to allow future generations to have access to the same resources and environmental benefits that we enjoy today.

Reducing wastes and recycling are prime examples of corporate leadership and environmental stewardship. The public appreciates and patronizes businesses that make efforts to protect the environment and reduce waste.

Businesses that have implemented a waste reduction and recycling program are eligible to join the Catawba County Commercial Recycling and Waste Reduction Partnership Program which recognizes County businesses that have made efforts in the workplace to reduce and recycle waste and to buy recycled products.

Find The Cash In Your Trash: Conducting A Waste Assessment

Conducting a waste assessment involves determining what wastes you generate and how much of each, which can be prevented, which can be reduced, and which can be recycled.

1. Determining The Approach

Planning and executing an appropriate waste assessment involves determining its scope, scheduling the different assessment activities, communicating the necessary information to employees, and performing the actual assessment. Depending on the objective of your waste reduction program, a waste assessment can involve examining facility records, conducting a facility walk-through, performing a waste sort or a combination of the three.

The assessment team should determine what type of assessment is most suited for the company based on such factors as the type and size of the facility, the complexity of the waste stream, the resources (money, time, labor, equipment) available to implement the waste reduction program and the goals of the program.

In a facility generating only a few types of waste materials, the team might only need to review company records and briefly inspect facility operations. If the company generates diverse types of waste and has established a goal to cut waste disposal by 50 percent, the team will need to thoroughly examine and quantify the waste generated in most company operations by performing a waste sort.

A. Examining Company Records

Examining company records can provide insight into the company's waste generation and removal patterns. The type of records you might find useful include:

- Purchasing, inventory, maintenance and operating logs
- Supply, equipment, and raw material invoices
- Equipment service contracts
- Repair invoices
- Waste hauling and disposal records and contracts
- Contracts with recycling facilities and records of earned revenues from recycling

Did You Know?

Saving energy: Enormous amounts of energy are required to make products and materials worldwide. Energy is saved by not using products and materials when at all possible, or by reusing products in their current form.

Tremendous energy savings come from using recycled instead of virgin materials in manufacturing.





B. Conducting a Facility Walk-Through

A walk-through involves a complete tour of the facility and its grounds, observing the activities of the different departments and talking with employees about waste-producing activities and equipment. Include all departments and shifts. A walk-through is a relatively quick way to examine a facility's waste-generating activities and processes. Specifically, it will enable the team to:

- Observe types and amount of waste produced.
- Identify waste-producing activities and equipment.
- Detect inefficiencies in operations or in the way waste moves through the organization.
- Observe the layout and operations of various departments and shifts.
- Assess existing space and equipment that can be used for storage, processing recyclables, and other activities.
- Assess current waste reduction efforts.
- Collect additional information through interviews with supervisors and employees.

The team should be careful during the walk-through not only to record the types of waste observed and the ways in which waste is generated, but also to consider the potential waste reduction opportunities that lie in increasing the efficiency of these operations.

Before conducting the walk-through, check with the managers of the departments that will be toured to avoid disrupting special deliveries, rush orders, or other department functions. Request that the supervisor and employees of each department be available during the walk-through to answer questions or describe operations. These interviews can offer important additional detail on waste generation and removal practices. Interviews also help keep employees informed and interested in the evolving waste reduction program, and offers an opportunity for them to ask questions. Employees are a valuable source of ideas for reducing waste.



C. Conducting a Waste Sort

Should more data be required than company records or a facility walk-through can provide, you may want to do a waste sort. A waste sort involves the physical collection, sorting and weighing of a representative sample of the company's waste. The goal of the sort is to identify each waste component and calculate as precisely as possible its percentage of the total waste the company generates. A waste sort can focus on the entire company's waste or target certain work areas. If the team believes one or more specific functional areas are responsible for much of the facilities waste, it may chose to concentrate its waste sort accordingly.

It may be feasible for some companies to assemble and measure one day's worth of waste. In larger firms where this is impractical, the team might choose instead to assemble a portion of the waste from each department for measuring. Regardless of the approach taken to structure the waste sort, consideration must be given as to whether waste generation at the company varies significantly enough from one day to the next to distort results. Seasonal and periodic variations in waste generation are also common.

The assessment team might want to sort samples on more than one day. Multi-day sampling might provide a more accurate representation of the waste generated at the company. Since the data gathered in the waste sort will be used as the basis for key waste reduction and recycling program decisions, it is important that you obtain a truly representative sample of the company's waste. If a representative sample is not obtained, calculations on waste generation, waste composition, and waste removal costs can be skewed significantly.

If your company has an active recycling program in place, the assessment team will need to decide whether the waste sort should measure all materials, or target just the portion of the waste streams not currently being recycling. For a complete assessment of the types and amounts of waste being generated, the waste reduction team should locate all recycling collection areas and measure the contents.

If your focus is on ways to reduce just the materials that are not being recycled, you can exclusively target waste collected in company dumpsters. This will also help identify the amount of materials that could have been recycled under the current program, but ended up being thrown away.

In organizing a waste sort, you must determine which waste categories to quantify. The major components of a businesses' waste include paper, plastic, glass, metal, and organic material such as wood, yard trimmings and food scraps.

The team needs to decide whether to limit the waste sort to identifying and measuring only the major waste component categories or to sort the waste into subcategories (such as breaking down paper into newsprint, corrugated cardboard, magazines, and other). Precise measurements are important because they will be useful later when determining which materials can be exchanged, reused, sold or recycled.





2. Documenting The Waste Assessment

Documenting all information gained through the waste assessment is important. Worksheets guide the waste assessment process, and function as a record of your waste assessment activities and data. Worksheets recorded during your waste assessment should be part of your company's permanent records. Documenting your findings serves several purposes, including:

- Providing a record of the company's efforts to reduce waste.
- Developing a record-keeping system that tracks costs, savings, and waste reduction quantities.
- Obtaining baseline data to use for investigating the economic and technical feasibility of waste reduction options and to evaluate the impact of these options once implemented.

Waste Assessment Approaches www.epa.gov/osw/partnerships/wastewise/approach.htm

Methods	Waste Sort: Facility Wide	Waste Sort: Specific Functional Areas	Facility Walkthrough	Records Examination (Purchasing Records)	Records Examination (Hauler Records)
Strengths	<ul style="list-style-type: none"> • Provides waste generation estimates for the entire facility. • Provides quantitative information on each waste component. 	<ul style="list-style-type: none"> • Provides quantitative information about specific types of waste and functional areas; appropriate if targeting specific types of waste. 	<ul style="list-style-type: none"> • Can require less time and effort than waste sorts. • Allows first hand examination of facility operations. • Can provide qualitative information about major waste components and waste generating processes. • Allows interviews with workplace personnel. 	<ul style="list-style-type: none"> • Can provide data on waste generation of specific materials or products. • Tracks major potential waste from the point of origin. • Can require less time and effort the facility walkthroughs or waste sorts. • Can be more accurate than waste sorts of tracking small items, low volume waste materials, and occasional or seasonal waste materials. 	<ul style="list-style-type: none"> • May provide accurate data on the weight or volume of waste generated at the facility. • Can require less time and effort than a facility walk-through or waste sorts.
Limitations	<ul style="list-style-type: none"> • Requires significant time and effort to conduct. • Might not be representative if only conducted once. • Does not provide qualitative information on how or why wastes are generated. 	<ul style="list-style-type: none"> • Does not provide data on waste generated facility-wide. • Might omit major components of the facility's waste. • Might not be representative of the waste in the specific area if only conducted once. 	<ul style="list-style-type: none"> • Might not identify all waste generated. • Might not be representative if only conducted once. • Does not provide precise information about the quantity of waste generated. 	<ul style="list-style-type: none"> • Not likely to provide a full picture on waste generation. • If company purchasing is not centralized, can be incomplete or require substantial effort to collect and analyze. 	<ul style="list-style-type: none"> • Might not provide adequate data, if accurate waste hauling records do not exist. • Not likely to provide information about specific waste components. • Can be difficult to use if more than one business shares a dumpster.

For a sample waste assessment form go to www.earth911.org/library/brrc/pdf/wasteassform.pdf

Some companies can effectively reach all their employees by circulating memos or holding information meetings. Others might need to conduct a full-scale education or training campaign to be sure the entire company is aware of and involved in the program. Either way, employees appreciate feedback and frequent updates on the success of the program. Employee interest may increase if the team encourages them to submit new ideas for increasing the efficiency of company operations.

Other ways to “educate” your employees:

- Integrate waste reduction and recycling into normal work routine.
- Place waste reduction and recycling information on the employee webpage.
- Send out periodic emails with information about the program and successes as well as issues.
- Sort recyclables the first time they are handled - If you are going to keep cans separate from bottles, then have one bin for cans and one bin for bottles and make sure they are clearly labeled.
- Place signs near recycling (or reuse) containers that clearly show what materials can be recycled/reused and, if necessary, what items must stay out of the bin.
- Place recycling containers in all meeting and employee dining rooms.
- Make sure every office staff person has a desk-side bin and a recycling guide.
- Make announcements at conferences, company events, picnic, etc., to please remember to recycle.

FUN FACTS FOR NEWSLETTERS, BULLETIN BOARDS, E-MAILS, ETC.

If one-third of North Carolina's households sent junk mail reduction cards to the Mail Preference Association, it would save North Carolina local governments almost \$1.3 million in disposal fees per year.

Making products from recovered materials instead of virgin materials saves energy. For aluminum cans, the energy saved is more than 90 percent, for newspaper 40 percent and for steel 60 percent.

North Carolinians recycle 68 pounds of materials a second. That's impressive! But we throw away 679 pounds of trash a second. That's almost 10 times what we recycle.

Each month, North Carolinians throw out glass that would fill up more than 13 miles worth of tractor-trailers lined up end-to-end. That's a half marathon of tractor-trailers each month!

Glass bottles can be used hundreds of times over to make new bottles. North Carolina has three glass plants capable of consuming thousands of tons of “cullet” or recovered glass.

Newspaper and corrugated cardboard are the highest recycled types of paper - in North Carolina, we recycle 57 percent of all newspaper and 50 percent of all cardboard.

North Carolinians throw away more than \$20 million in aluminum cans each year.

Every 43 days, North Carolinians throw away enough trash to fill Dumpsters lining the entire North Carolina coastline.

The amount of trash North Carolinians throw away in just five and a half days would fill Dumpsters that reach as high as Mount Mitchell. That's 6,684 feet!

The amount of waste disposed in North Carolina has increased from 6.8 million tons in 1991 to 10.23 million tons in 2003.

The state picked up more than one pound of litter for each of the state's 8.4 million citizens in 2003, according to figures released by the state Department of Transportation. You can help report litterbugs by reporting the license plate of a car and the date and location of an incident to the DOT. Forms can be obtained by calling (800) 331-5864 or reports can be made online at www.ncdot.org/doh/operations/dp_chief_eng/roadside/beautification/litterbug

In 1994, our state had 306 recycling companies. In 2004, we had 532 recycling businesses in North Carolina, a 74 percent rise in only 10 years. That means more materials are being recovered, more jobs are being created, and more money is flowing through our economy - all because of recycling!

A 20 percent increase in recycling would create as many as 500 new jobs, according to information from the 1994 study.

North Carolina recycles 26 percent of its waste stream, composts 6 percent, sends 67 percent to landfills and incinerates 1 percent.

North Carolinians throw away enough trash to fill Dumpsters from Boone to Bald Head every 47 days.

When considering a recognition program, keep these ideas in mind.

- Keep the program simple, with categories that are easily measurable.
- Consider funding for the recognition and award program from site of facilities management, or from the revenues from the recycling program itself.
- Make regular program reports to both participants and site management.
- Highlight program success (either financial or otherwise) to all employees. Since each and every member of your company has participated in the success of your program, it is important that all employees receive recognition of their involvement through regular reporting on the quantity of material reduced through the source separation, reuse and recycling elements of your program. This may be done via bulletin boards, newsletters, or memos to building occupants. To demonstrate source reduction, e-mail should be used where feasible. If your results are particularly good, you may wish to involve the public relations staff to give your program more visibility.

Group recognition

- A surprise break with snacks for the most recyclables collected .

Department recognition

- Lunch paid for by the company for the department that collects the most recycled (paper for instance).
- Recycled content mugs, hats, or team t-shirts for the department with the largest reduction in paper usage due to double-sided use of paper.

Entire company recognition

- Money saved in the total program is placed in the company benefits fund or donated to a charity on behalf of each employee.

Consider rewards for the employee.

- Who makes the most contributions to the program; offers suggestions or assists in the program concept. Recognize the employee at a staff meeting or through interoffice e-mail or create a Thank You poster.
- Who collects the most cans and bottles during a specific time frame. Award a gift certificate.
- Who makes a suggestion to save the company money through waste reduction efforts. Award a bonus (commensurate with the amount of money saved).
- With the most recyclables in their bin, during an on-the-spot inspection. Award a small gift (recycled content) on the spot.

Individual recognition

- Certificates of appreciation. If you would like an electronic copy of a certificate call 828-465-8217.
- Recycled content gifts (it always helps to walk the walk).
- Gift certificates for local restaurants or local health food stores.
- TIME OFF - this is always a favorite with staff. An extra hour for lunch or leaving early on a Friday afternoon can make anyone feel appreciated.

Thank You

Eυχαριστώ

Merci



Dank

Gracias

JOIN THE GREEN REVOLUTION

The Catawba County Commercial Recycling and Waste Reduction Partnership Program

About The Program

The Commercial Recycling and Waste Reduction Partnership Program recognizes Catawba County businesses that have made efforts in the workplace to reduce and recycle waste and to buy recycled products. Sponsored by Catawba County Utilities and Engineering, the program is free and voluntary. Any business in Catawba County that practices the 4R's (reduce, reuse, recycle, rebuy) and has a waste reduction program can join.

Rewards For Joining

- Access to networking with other businesses.
- Receive a Partnership Certificate.
- Technical assistance from the Catawba County Utilities and Engineering Department.
- Publicity in local media and Catawba County's website. www.catawbacountync.gov/depts/u&e
- Access to recycling and waste reduction information for promotional materials.
- Publicity through recycling educational events, presentations and forums.



Vendors can also be recognized for outstanding accomplishment, innovation, or contribution.

Here's how to join

It's easy!

- Partners must agree to make a three-year commitment to recycling and waste reduction.
- Implement a comprehensive recycling and waste reduction program in your business.
- Provide Catawba County Utilities and Engineering Department proof of the comprehensive program.
- Submit a Catawba County Business Recycling Annual Report. The purpose of the Annual Report is to capture recycling data that is not already being reported to Garbage Disposal Service (GDS), the State of North Carolina Division of Waste Management, or the Blackburn Landfill. Completion and submission of this report will assist Catawba County in reflecting the true recycling efforts of businesses within the County. This report is furnished to you by the Catawba County Utilities and Engineering Department at the end of each fiscal year.
- Sign a Partnership Agreement with Catawba County and return to Amanda Kain, Waste Reduction Coordinator. A sample Partnership Agreement is located on the last page of this Resource Guide.
- (Optional) Agree to act as a mentor to another business, offering information and technical assistance including over the phone assistance, facility tours, etc.
- JOIN NOW!

What is Catawba County Government doing to be GREEN?

All County Buildings Recycle:

Mixed Paper, Corrugated Cardboard, Plastic bottles, Aluminum cans, Cell phones, Ink/toner cartridges and Batteries

Catawba County's Green Initiatives

The following is a list of Catawba County's Green Initiatives. The list is organized with different activities completed by either the entire county or different county departments.

Catawba County

- Ranked in the top five counties within North Carolina for recycled materials for the last six years. The County is currently ranked second.
- Created a buy recycled policy for all departments, employees, and buyers.
- Tracks the annual recycled purchases. In FY07/08 County staff purchased a total of \$190,399.26 recycled content goods and products.
- Asks all staff to turn off their electronic equipment when they leave work.
- Operates 13 hybrid vehicles.

Catawba County Schools

- Will be constructing Snow Creek Elementary with new energy efficient materials. These materials will allow Snow Creek to operate 40 to 45 percent cheaper than the last elementary school that was constructed, which was built in 2006.

Finance Department

Purchasing Division

- Process electronic purchase orders to reduce printing and mailing costs.
- Purchase office supplies and products from a vendor that offers a green catalog.
- Request that all contractors and vendors within the County use materials that are environmentally friendly and dispose all of their unused materials in accordance with the regulations of the EPA or DEHR.
- Scan all county contracts into an imaging system to reduce printing costs.

Maintenance Division

- Replacing all T-12 light fixtures with T-8 fixtures (documentation shows the T-8 fixture is 40 percent more efficient) over several years.
- As incandescent light bulbs burn out, the division replaces them with the newer fluorescent energy saving light bulbs.
- Schedule with all departments a time during the day when air conditioning units can be turned off to conserve energy.
- Work with the North Carolina Cooperative Extension to assure that the County continues to use environmentally friendly mulch, herbicides, and pesticides for all county facilities.
- Continue to use B-20 diesel fuel while trying to investigate the use of ethanol to replace unleaded gas the County currently uses.
- Implemented a new work order tracking program that has reduced the department's use of paper and gas.

Catawba County's Green Initiatives

North Carolina Cooperative Extension

Conducts workshops that increase knowledge and awareness of energy conservation and improving environmental stewardship. The Cooperative Extension has conducted the following workshops:

- Household Hazardous Products and Furnishings – This was conducted for homeowners, school employees, and day care centers.
- Saving Energy in Your Home – This was conducted for homeowners, potential Habitat for Humanity homeowners, older adults, single adults, and students.
- Saving Money at the Gas Pump – This was conducted for community associations and older adult groups.
- 4-H2O- Water Conservation Education – This was conducted for the Interactive Knowledge and Awareness Program for Youth.
- Stormwater (Phase 2) – This was conducted for a working group, which resulted in mailers being sent to 18,000 water consumers.
- Developing Community Gardens – This was conducted for homeowners' associations.
- Appeared on local television and radio shows providing energy conservation information.
- Dispensed and presented information at events throughout the county. The following is an example of some of the events, newspapers, and newsletters where the Cooperative Extension dispersed information:
 1. Home and Garden Show at the Metro Center
 2. Hickory American Legion Fair
 3. River Fest
 4. County Employees Benefits Fair
 5. Senior Health Fair
 6. Soldiers Reunion
 7. Area schools
 8. Catawba Valley Neighbors
 9. Claremont Courier
 10. Hickory Daily Record
 11. Observer News Enterprise
 12. Outlook
 13. Family and Consumer Sciences Newsletter
 14. Catawba Spirit
- Created Catawba Green Team blog on the Catawba County website. The website provides tips for home and workplace energy efficiency.
- Collaborated with the City of Hickory to develop an Adopt a Street program.
- Donated trees to fire departments to encourage tree planting.
- Implemented the Carolina Yards and Neighborhoods program to educate homeowners about stormwater, landscape design, plant selection and, appropriate use of pesticides and fertilizer.

Planning & Development Department

- Requires new subdivisions set aside open space or pay a fee which will help fund parks in the County.

Parks Division

- Host and sponsor a litter sweep team of volunteers twice a year which cleans up over 1.5 miles of shoreline at Oxford Dam and Riverbend Park.
- Host environment education and stewardship programs for over 5,000 participants per year.
- Manage over 600 acres of natural habitat. Within the 600 acres are wildlife food plots, riparian buffers, and managed forest areas that protect soil from erosion, and improve air and water quality.
- Administer pesticide and inorganic fertilizer free landscapes and facilities.
- Catawba Valley Community College and Lenoir Rhyne College use Riverbend and Bakers Mountain Parks for environmental research.
- Many parks materials were developed from recycled materials (e.g. picnic tables are made from recycled plastic lumber).

Catawba County's Green Initiatives

Public Health Department

- Perform environmental awareness contests. The following are few of the contests:
 1. Ozone Contest – Promotes air quality friendly practices for Catawba County employees.
 2. Air quality question of the month – Heighten awareness of air quality issues for Catawba County employees.
 3. Leadership Catawba Contest – Encourages Catawba County leaders to adopt environmentally friendly practices.
- Organize Early Action Compact program, which addresses air quality issues in Catawba County.
- Perform tours for second graders from around the County in the Public Health Department offices. During the tour, air quality awareness is discussed with the children.
- Put into operation an air quality committee that educates the public on air quality issues through press releases, community presentations, and the Catawba County e-newsletter.

Technology Department

- Donate old functional computers to school children that do not have home computers.
- Send old computer equipment to a company that recycles electronic devices.
- Exchange CRT computer monitors with LCD monitors when computers are replaced.
- Provide computer applications at employees' homes, so they can complete required paperwork without having to drive to their office.

Utilities & Engineering Department

- Conducts recycling assessments on Catawba County Schools, county buildings, and businesses as needed.
- Funds environmental education programs throughout the county (EcoComplex/Landfill tours, the environmental play "The Queen of Green" and school presentations).

Building Services Division

- Mobile technology has allowed the Building Services Division to go nearly paperless.
- Implement Green Building incentive program.

Solid Waste Division

- EcoComplex and Resource Recovery Facility
 1. Turns bi-products into electricity.
 2. Turns bi-products into compost so that it can be used by the public.
- The Blackburn Landfill recycles all used motor oil, transmission fluid, and antifreeze from heavy equipment and engines.
- Extensive recycling program which includes residential curbside service, county residential convenience centers (five locations), bi-annual residential household hazardous waste pick-up, and one-day collection events.
- Recycle incentives for business and Municipalities.



APPENDIX B

Exclusive 10-year Solid Waste Management Franchise Contract

Catawba County Solid Waste Management

Municipal solid waste landfills such as Catawba County's Blackburn Landfill are a critical part of governmental infrastructure just like good roads, good schools, and adequate water and sewer facilities. Owning and operating a landfill allows Catawba County to set reasonable tipping fees without its citizens and businesses being forced to pay rates set by third parties outside of Catawba County. Owning and operating a landfill allows Catawba County to ensure that it will have future landfill capacity available as needed. Effective solid waste management planning is an economic development tool: available and affordable garbage disposal is important to existing and potential industry and business.

By its very nature, planning for garbage disposal must be long term. With the assurance of a given waste stream, control over rates, and sound partnerships, Catawba County can maintain the level of strategic planning that it has enjoyed and improve service to its citizens.

10-year Exclusive Franchise with Garbage Disposal Service

Having a 10-year exclusive franchise contract with GDS allows the County to provide comprehensive waste disposal services at affordable rates. It ensures uniform residential and commercial rates throughout Catawba County regardless of distance from landfill and it allows the County to maintain control over the flow of waste to its landfill.

Rates

- Catawba County does not use property tax revenue to support its solid waste program. The County has not employed any property tax funds in providing solid waste services in 15 years.
- Catawba County does not charge an annual residential fee to support its solid waste program.
- All Catawba County citizens pay the same waste disposal rates regardless of distance from the landfill, excluding roll-offs.
- Catawba County has not borrowed money for providing solid waste services or landfill operations.



FY07/08, the County's
Landfill disposed of
189,752 tons of garbage.

Services Included in Franchise Contract

- Curbside collection of residential waste.
- Curbside collection of residential recyclables.
- Commercial and industrial waste collection.
- Building construction and demolition waste collection.
- Roll off boxes provided at reasonable rates (choice of either a flat or variable rate for building construction waste).
- Recycling containers offered to construction sites.
- Operation of a Materials Recovery Facility.
- Operation of five convenience centers.
- Household Hazardous Waste Annual Collection Event (s) donation of actual cost of event but not to exceed \$25,000 annually.

Services Included in Franchise Contract

- Donation of equipment during County sanctioned events where the County has agreed to waive tipping fees.
- Debris collection and waste management assistance following a FEMA declared disaster.
- Electronic waste collection offered bi-annually.
- Curbside collection of white goods; free residential pickup during Litter Sweep.
- Operation of paint collection, storage and disposal facility at Blackburn Convenience Center.
- Free Government document shredding at all County offices.
- All waste collected in Catawba County will be hauled to the County landfill.

Catawba County's EcoComplex is an innovative resource recovery system designed so that its business and research partners can reuse the waste byproducts of other EcoComplex partners. Catawba County is building a pathway to move environmental, or "green", science and products from the lab to the real world! The EcoComplex won the national 2007 Thomas H. Muehlenback Award for Excellence in Local Government and was named best in its category in the 2008 National Association of Counties Achievement Award Program.



Landfill

The EcoComplex is centered in and around the **Blackburn Resource Recovery Facility** which receives around 680 tons of municipal and construction waste daily. **A Landfill Gas to Energy Electricity Generating Facility** which currently operates three engine/generator sets that have the capacity of generate approximately 3 Megawatts of electricity per hour. The engines burn the methane that is produced naturally in the landfill, generating enough electricity to power approximately 1,400 average sized homes.

Gregory Wood Products is a high-tech dimensional lumber facility employing 115 people. Its byproducts are used by another business, Pallet One, Inc. Gregory Wood Products is the largest producer of sawdust, wood shavings, bark, and other wood wastes used in a Bio-Energy Facility.

Pallet One, Inc. is the largest new pallet manufacturer in the United States and began recycling used pallets in 2008. Employing 29 people at the Catawba County location, Pallet One uses wood slats from Gregory Wood Product's waste stream as a raw material for constructing new wooden pallets. Because Pallet One is located next to Gregory Wood Products, it is able to use Gregory's waste stream as raw material with almost no transportation cost.



Co-Generation Facility

A Bio-Energy Facility will use sawdust, ground wood particle byproducts, and biomaterials from Gregory Wood Products, Pallet One, and the County to generate electricity, steam and heat energy. The Bio-Energy Facility will house a newly constructed wood-fired gasifier and steam production plant that is expected to produce 3 megawatt hours of electricity and 15,000 pounds of steam per hour gross. A natural gas fired boiler, with similar steam output, will serve as a backup to the main wood-fired steam production plant.

A Bio-Solids (Sludge) Processing Facility will replace the existing Regional Sludge Management Facility currently located in the Fairgrove Business Park. The new facility will have the capacity to serve the wastewater sludge management needs of Catawba County and the Unifour region for approximately twenty years.

University Research Facilities– Catawba County has partnered with Appalachian State University (ASU) to create a center for biodiesel research and production. ASU’s research will include the testing of biodiesel fuel being produced by several companies in the region and the growing of crops around the landfill to test which grow best in our climate while producing the best oils for biodiesel. Currently, canola and sunflowers are being tested. A partnership with the University of North Carolina at Charlotte will result in algae-to-biofuel research, with carbon dioxide produced by the Gas to Energy Facility used to grow algae.



A Composting/Soils Amendment Facility– Catawba County is talking with several composting and soil amendment companies that could become EcoComplex partners, and with a local retailer about bagging and selling a compost/soil amendment product and, possibly, bagged mulch.

A Brick Specialties Company has verbally agreed to locate in the EcoComplex to produce specialty brick shapes and art once the expected waste streams necessary for this work are created by other EcoComplex partners. Kiln space for local potters’ use may also be added, as well as classroom type space for a community educational component.

A Greenhouse Facility– Discussions have been held with several companies considering the EcoComplex as a location for 25 to 100 acres of greenhouse space for growing vegetables and/or flowering plants once the expected waste streams are created.

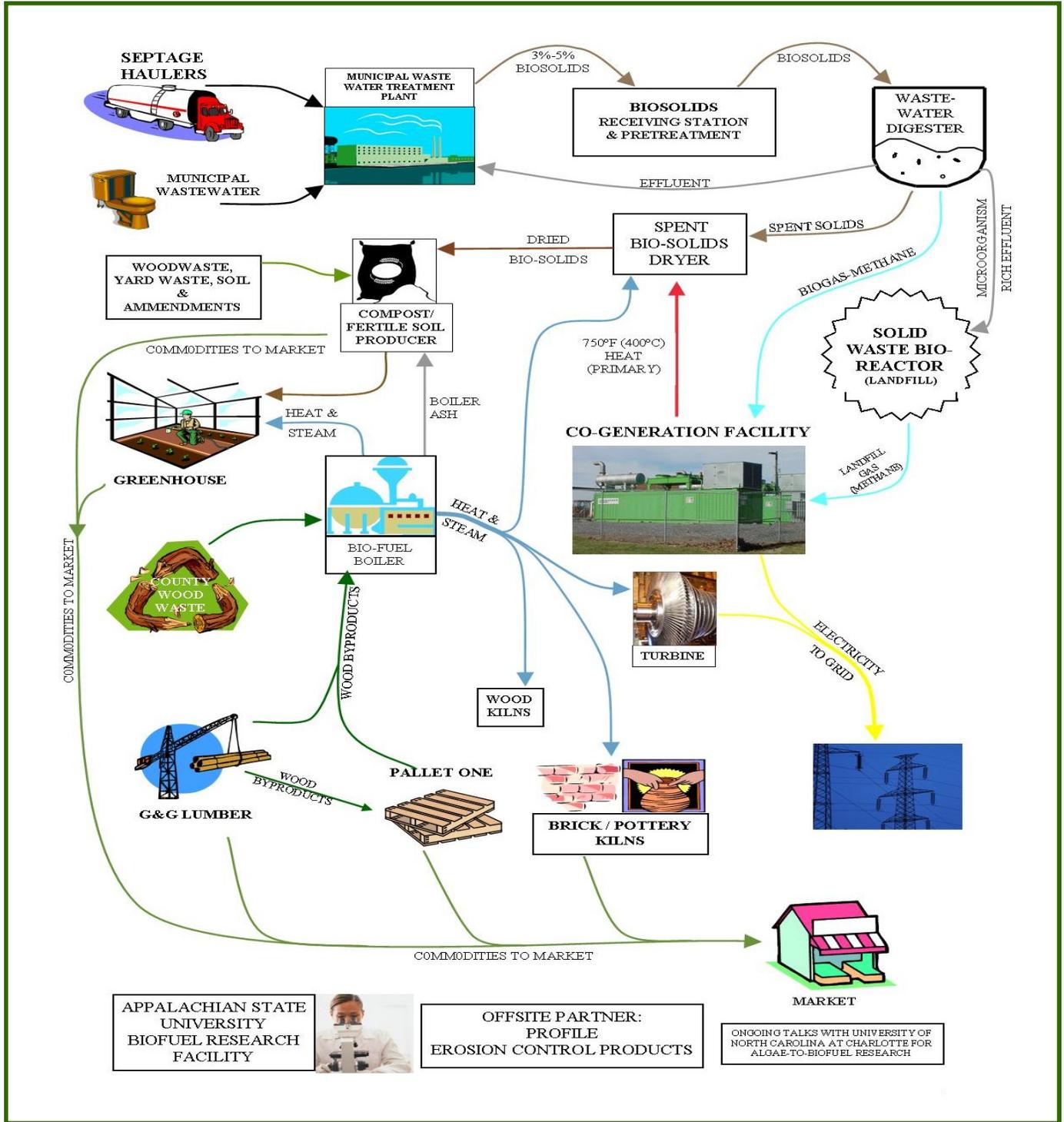
Recycled Ceramic and Glass– Preliminary discussions have been held with a company considering the EcoComplex as a location for a ceramic and glass recycling facility.

Recycled Plastic Pelletization Facility—Preliminary discussions have been held with a company considering the EcoComplex as a location for a plastics pelletization facility.



Canola and Sunflower crops
grown by local farmer in
Catawba County

Regional EcoComplex and Resource Recovery Facility



Each of the arrows in this diagram represent a shared relationship between EcoComplex components or partners.

APPENDIX D

How To Choose A Recycling Service Provider

Consideration

- Size of your business and number of employees
- Person(s) in or at your business responsible for contracting for recycling collection
- Type(s) of recyclables and estimated quantities
- How materials are collected inside and outside your business
- Available storage space inside and outside your business
- Size of current container(s) and number of pickups per week
- Container accessibility for pick up vehicles

Questions To Ask A Recycling Service Provider

- What will be the schedule for collections?
- How much notice is required for unscheduled pickups?
- How will missed pickups be handled?
- What is the fee for pickup?
- Does the vendor provide recycling containers?
- Who is responsible for repairs to containers?
- How often are the containers cleaned?
- Where is the final destination of the recyclables?



Tips on How to Get a Competitive Bid

Competitive bids for services require a clear definition of the services you require. Most recyclers will quote services over the phone. The challenge is to get at least two bids for the same services. The following tips should assist in obtaining competitive recycling service bids.

- Save time by identifying potentially suitable vendors by phone before requesting a bid.
- Define your required services in writing to the vendors (use a bid form).
- Specify the duration of service required (6 months, 1 year, etc.).
- State estimated volume of recyclables and frequency of service required; ask for costs of service on various size units or container configurations. Request the vendor to provide a per unit or per item bid and a total. Include information on when and where to return the bid.
- State in the bid required that alternative approaches can be proposed by vendors in addition to the original bid request.
- Evaluate the bids with prospective vendors to make sure there are no hidden charges or misunderstandings.

A Final Note - Monitor Service

After you award a contract and service begins, monitor the service. Often a vendor will have a change in drivers or a routing change, disrupting your service. However, the vendor's accounting department is not aware of the disruption and will continue to charge you for the contracted services. As the customer you must alert the company, if there is any disruption in your service. Be sure your contract allows for modification of your service frequency. As you begin to recycle more, there should be a drop in the trash hauling services required.

Recycling A-Z: Local Markets For Recyclable Materials

Service Providers

Recycling Service Providers are the connection between those who generate waste materials and those who turn these materials into new products. The services you can expect depend on the type of materials generated, the condition of the materials, and most importantly, the quantity of materials available. For example, a company might provide a container and pick-up your recyclable materials if you generate a large quantity, but require delivery for small amounts.

All of the following commodities are reusable or recyclable within our region along with UP TO DATE contact information for vendors.

REUSEABLE DONATIONS

Appliances Donation

(Must be in working order)

Habitat for Humanity

772 4th St SW
Hickory, NC 28602
828-328-4663

Salvation Army (No gas appliances)

248 Lenoir Rhyne Blvd SE
Hickory, NC 28602
828-324-2219

118 West A St
Newton, NC 28658
828-465-2776

1206 East Main St
Maiden, NC 28650
828-428-8752

The Greater Hickory Cooperative Christian Ministry

31 1st Ave SE
Hickory, NC 28602
828-327-0979

Cell Phone Donation

Family Guidance Center, Inc.

Thrift Store
360 Hwy 70 SW
Hickory, NC 28602

Construction Materials Donation

Habitat for Humanity

772 4th St SW
Hickory, NC 28602
828-328-4663

Computer, Electronics & Accessories Donation

Before donating please remove all personal information from computer hard drives.

Goodwill Industries

1172 Lenoir Rhyne Blvd SE
Hickory, NC 28602
828-327-3273

1877 North Center St

Hickory, NC 28601
828-322-6711

Salvation Army

248 Lenoir Rhyne Blvd SE
Hickory, NC 28602
828-324-2219

118 West A St
Newton, NC 28658
828-465-2776

1206 East Main St
Maiden, NC 28650
828-428-8752

The Greater Hickory Cooperative Christian Ministry

31 1st Ave SE
Hickory, NC 28602
828-327-0979

Eye Glass Donation

The Greater Hickory Cooperative Christian Ministry

31 1st Ave SE
Hickory, NC 28602
828-327-0979

Food Donation

(Non-perishable food items only)

Catawba County DSS

3030 11th Ave Dr SE
Hickory, NC 28602
828-695-5651

Salvation Army (please call)

248 Lenoir Rhyne Blvd SE
Hickory, NC 28602
828-324-2219

118 West A St
Newton, NC 28658
828-465-2776

1206 East Main St
Maiden, NC 28650
828-428-8752

**The Greater Hickory Cooperative
Christian Ministry**

31 1st Ave SE
Hickory, NC 28602
828-327-0979

Household/Furniture Donations**Family Guidance Center, Inc.**

Thrift Store
360 Hwy 70 SW
Hickory, NC 28602

Goodwill Industries

1172 Lenoir Rhyne Blvd SE
Hickory, NC 28602
828-327-3273

1877 North Center St

Hickory, NC 28601
828-322-6711

Habitat for Humanity

772 4th St SW
Hickory, NC 28602
828-328-4663

National Kidney Foundation

704-393-5780

Salvation Army

248 Lenoir Rhyne Blvd SE
Hickory, NC 28602
828-324-2219

118 West A St
Newton, NC 28658
828-465-2776

1206 East Main St
Maiden, NC 28650
828-428-8752

**The Greater Hickory Cooperative
Christian Ministry**

31 1st Ave SE
Hickory, NC 28602
828-327-0979

Medical Supplies Donation**The Greater Hickory Cooperative
Christian Ministry**

31 1st Ave SE
Hickory, NC 28602
828-327-0979

Paint Donations

(Must be new and unopened)

Habitat for Humanity

772 4th St SW
Hickory, NC 28602
828-328-4663

Pet Supply Donations**Catawba County Animal Services**

100 SW Blvd Bldg C
Newton, NC 28658
828-464-7686

Humane Society of Catawba County

PO Box 63
Hickory, NC 28603
828-464-8878

Vehicle Donations**Catawba County DSS**

3030 11th Ave Dr SE
Hickory, NC 28602
828-695-5625

Goodwill Industries

1172 Lenoir Rhyne Blvd SE
Hickory, NC 28602
828-327-3273

National Kidney Foundation

800-488-CARS

Salvation Army

248 Lenoir Rhyne Blvd SE
Hickory, NC 28602
828-322-8061

**The Greater Hickory Cooperative
Christian Ministry**

31 1st Ave SE
Hickory, NC 28602
828-327-0979

RECYCLING

ABS Recycling

(Acrylonitrile Butadiene Styrene)

Commercial Plastics Recycling Inc

721 Shea Rd
Newton, NC 28658
828-466-2711

Aluminum/Steel Recycling

(Scrap)

Mountain Recycling Inc

1065 3rd Ave NW
Hickory, NC 28601
828-327-4311

Stateline Scrap Metal

5401 South York Hwy
Gastonia, NC 28052
704-864-9001

C&L Scrap Metal Inc

1581 US 70
Connelly Springs, NC 28612
828-397-7493

Gordon Iron & Metal Company

1300 Salisbury Rd
Statesville, NC 28687
704-873-9004

(Cans)

GDS Conover MRF

130 Somerset Dr Ext
Conover, NC 28613
828-327-3119

Mountain Recycling Inc

1065 3rd Ave NW
Hickory, NC 28601
828-327-4311

Stateline Scrap Metal

5401 South York Hwy
Gastonia, NC 28052
704-864-9001

C&L Scrap Metal Inc

1581 US 70
Connelly Springs, NC 28612
828-397-7493

Gordon Iron & Metal Company

1300 Salisbury Rd
Statesville, NC 28687
704-873-9004

Think Green Recycling Services

185 Poplar Grove Rd
Mooresville, NC 28117
704-701-6922

Appliances Recycling

Appliances may contain hazardous materials such as mercury, PCBs (polychlorinated biphenyls), CFCs (chlorofluorocarbons), fluorescent tubes, rechargeable back-up batteries and oils that must be properly removed before the appliance can be recycled or disposed.

Catawba County Blackburn Landfill

3993 Rocky Ford Rd
Newton, NC 28658
704-462-1348

Asphalt Recycling

Catawba County Blackburn Landfill

3993 Rocky Ford Rd
Newton, NC 28658
704-462-1348

Auto Parts Recycling

Max's Used Auto Parts

3967 Hwy 70 W
Hickory, NC 28601
828-324-7906

C&L Scrap Metal Inc

1581 US 70
Connelly Springs, NC 28612
828-397-7493

Gaston Used Auto Parts Inc

305 Dogwood St
Gastonia, NC 28056
704-827-9468

Gordon Iron & Metal Company

1300 Salisbury Rd
Statesville, NC 28687
704-873-9004

Battery Recycling

(Household Batteries)

Ecotech Inc

336 Hwy 16 N Suite B
Denver, NC 28037
704-489-8703

IBS Environmental Services Inc

6005 Spartan Dr
Lenoir, NC 28645
828-396-4319

(Rechargeable Batteries)

Best Buy

Office Depot

Radio Shack

Staples

Please check the telephone directory for a location near you.

RBRC

Rechargeable Battery Recycling Corp
1-800-8-BATTERY
www.rbrc.org

(Lead Acid Batteries)

Interstate Batteries

PO Box 580
Hudson, NC 28638
828-496-1026

Ecotech Inc

336 Hwy 16 N Suite B
Denver, NC 28037
704-489-8703

Battery Recycling, continued

(Lead Acid Batteries)

IBS Environmental Services Inc
6005 Spartan Dr
Lenoir, NC 28645
828-396-4319

Advanced Auto Parts
Auto Zone
Sam's Club

Wal-mart Supercenter
Please check the telephone directory for a location near you.

Block Recycling

Catawba County Blackburn Landfill
3993 Rocky Ford Rd
Newton, NC 28658
704-462-1348

Brass Recycling

Mountain Recycling Inc
1065 3rd Ave NW
Hickory, NC 28601
828-327-4311

Stateline Scrap Metal
5401 South York Hwy
Gastonia, NC 28052
704-864-9001

C&L Scrap Metal Inc
1581 US 70
Connelly Springs, NC 28612
828-397-7493

Gordon Iron & Metal Company
1300 Salisbury Rd
Statesville, NC 28687
704-873-9004

Brick Recycling

Catawba County Blackburn Landfill
3993 Rocky Ford Rd
Newton, NC 28658
704-462-1348

Bronze Recycling

Mountain Recycling Inc
1065 3rd Ave NW
Hickory, NC 28601
828-327-4311

Stateline Scrap Metal
5401 South York Hwy
Gastonia, NC 28052
704-864-9001

Gordon Iron & Metal Company
1300 Salisbury Rd
Statesville, NC 28687
704-873-9004

Cell Phone Recycling

Catawba County U&E Dept
100 A SW Blvd
Newton, NC 28658
828-465-8217

Chemicals

There are markets for several categories of chemical waste. Refer to the website www.p2pays.org for a comprehensive list of chemicals.

BioTech Industries
3261 Plateau Rd
Newton, NC 28658
704-462-0075

Compact Discs (CD's & DVD's)

Best Buy
248 Lenior Rhyne Blvd
Hickory, NC 28602
828-324-2219

Computer Recycling

Before recycling please remove all personal information from computer hard drives.

Synergy Recycling LLC
ISO14001 Certified
PO Box 117
Mayodan, NC 27027
919-619-4856

Ecotech Inc
336 Hwy 16 N Suite B
Denver, NC 28037
704-489-8703

IBS Environmental Services Inc
6005 Spartan Dr
Lenoir, NC 28645
828-396-4319

Southeast Computer Recycling
505 Creekway Dr
Lenoir, NC 28645
828-759-1010

Office Depot
Staples
Please check the telephone directory for a location near you. (Programs are limited)

Concrete Recycling

Catawba County Blackburn Landfill
3993 Rocky Ford Rd
Newton, NC 28658
704-462-1348

Cooking Oil Recycling

BioTech Industries
3261 Plateau Rd
Newton, NC 28658
704-462-0075

Carolina Bi-Products
533 South York Rd
Gastonia, NC 28052
800-849-2254

Copper Recycling

Mountain Recycling Inc

1065 3rd Ave NW
Hickory, NC 28601
828-327-4311

Stateline Scrap Metal

5401 South York Hwy
Gastonia, NC 28052
704-864-9001

C&L Scrap Metal Inc

1581 US 70
Connelly Springs, NC 28612
828-397-7493

Gaston Used Auto Parts Inc

305 Dogwood St
Gastonia, NC 28056
704-827-9468

Gordon Iron & Metal Company

1300 Salisbury Rd
Statesville, NC 28687
704-873-9004

Corrugated Cardboard

GDS Conover MRF

130 Somerset Dr Ext
Conover, NC 28613
828-327-3119

Recycling Unlimited

620 Reese Drive SW
Conover, NC 28613
828-345-5223 / 612-8646

Sonoco Recycling

261 10th St PI NW
Hickory, NC 28601
828-327-5701

Think Green Recycling Services

185 Poplar Grove Rd
Mooresville, NC 28117
704-701-6922

TRG (The Recycling Group)

1581 US 70
Connelly Springs, NC 28612
828-397-2717

Diesel Recycling

Ecotech Inc

336 Hwy 16 N Suite B
Denver, NC 28037
704-489-8703

Electronics Recycling

Synergy Recycling LLC

PO Box 117
Mayodan, NC 27027
919-619-4856

Gordon Iron & Metal Company

1300 Salisbury Rd
Statesville, NC 28687
704-873-9004

Best Buy

Office Depot

Staples

Please check the telephone directory for a location near you. (Programs are limited)

Fabric/Upholstery Scraps

GDS Conover MRF

130 Somerset Dr Ext
Conover, NC 28613
828-327-3119

Fluorescent Lights Recycling

Ecotech Inc

336 Hwy 16 N Suite B
Denver, NC 28037
704-489-8703

IBS Environmental Services Inc

6005 Spartan Dr
Lenoir, NC 28645
828-396-4319

Home Depot

Please check the telephone directory for a location near you. (Program is limited to compact fluorescent light bulbs only, no tubes).

Foam Recycling

Iredell Fibers

124 Fanjoy Rd
Statesville, NC 28625
704-878-0884

Garbage Collection & Hauling

Catawba County has a franchise agreement with Garbage Disposal Service Inc. granting them an exclusive license to transport and dispose of all solid waste.

GDS Inc

PO Box 1097
Conover, NC 28613
828-256-2158

Glass Recycling

GDS Conover MRF

130 Somerset Dr Ext
Conover, NC 28613
828-327-3119

Think Green Recycling Services

185 Poplar Grove Rd
Mooresville, NC 28117
704-701-6922

Hazardous Waste

Clean Harbors Environmental Services

208 Watlington Industrial Drive
Reidsville, NC 27320
336-342-6106

Ecoflo Inc

2750 Patterson St
Greensboro, NC 27407
800-999-6510

Ink Cartridge Recycling

Cartridge World

2109 Catawba Valley Blvd
Hickory, NC 28602
828-322-1001

IBS Environmental Services Inc

6005 Spartan Dr
Lenoir, NC 28645
828-396-4319

Best Buy

Office Depot

Office Max

Staples

Walgreens

Please check the telephone directory for a location near you. (Programs are limited)

Iron Recycling

Mountain Recycling Inc

1065 3rd Ave NW
Hickory, NC 28601
828-327-4311

Stateline Scrap Metal

5401 South York Hwy
Gastonia, NC 28052
704-864-9001

Gordon Iron & Metal Company

1300 Salisbury Rd
Statesville, NC 28687
704-873-9004

Lead Recycling

C&L Scrap Metal Inc

1581 US 70
Connelly Springs, NC 28612
828-397-7493

Gordon Iron & Metal Company

1300 Salisbury Rd
Statesville, NC 28687
704-873-9004

Mercury Containing Material

IBS Environmental Services Inc

6005 Spartan Dr
Lenoir, NC 28645
828-396-4319

Oil & Oil Filters Recycling

Ecotech Inc

336 Hwy 16 N Suite B
Denver, NC 28037
704-489-8703

FCC Environmental

2115 Speedrail Ct
Concord, NC 28025
704-201-2053

Advance Auto Parts

Auto Zone

Tractor Supply

Wal-mart Tire & Lube Express Center

Please check the telephone directory for a location near you. (Limited to 5 gallons per customer)

Packing Material

(Packing peanuts)

Advantage Copies & Signs

2725-H Northwest Blvd (Bus 321)
Newton, NC 28658
828-466-1995

Recycling Unlimited

620 Reese Drive SW
Conover, NC 28613
828-345-5223 / 612-8646

Parcel Plus

3020 North Center St
Hickory, NC 28601
828-328-9929

Plastic Materials, LLC.

301 Eagle Rd, Suite 8
Belmont, NC 28012
707-813-0501

Paint

Clean Harbors Environmental Services

208 Watlington Industrial Drive
Reidsville, NC 27320
336-342-6106

Ecoflo Inc

2750 Patterson St
Greensboro, NC 27407
800-999-6510

Environmental Recycling Services

Alternative (Recycle & Disposal)

116 Maywood Dr
High Point, NC 27265
336-869-8785

Pallets

Catawba County Blackburn Landfill

3993 Rocky Ford Rd
Newton, NC 28658
704-462-1348

Pallet One

2815 Woodtech Dr
Newton, NC 28658
704-462-1882

Paper Recycling

Paper may include office paper, colored paper, computer paper, envelopes, manila file folders, newspaper, magazines, phone books, corrugated cardboard, etc. Some companies require separation and some companies will take a mixed blend of all paper types. Each recycling company will explain their requirements and costs.

GDS Conover MRF

130 Somerset Dr Ext
Conover, NC 28613
828-327-3119

Sonoco Recycling

261 10th St Pl NW
Hickory, NC 28601
828-327-5701

Think Green Recycling Services

185 Poplar Grove Rd
Mooresville, NC 28117
704-701-6922

(Paper Shredding/Destruction)

GDS Conover MRF

130 Somerset Dr Ext
Conover, NC 28613
828-327-3119

Shred-it

1859 Lindbergh St Suite 200
Charlotte, NC 28208
704-424-5997

Shred-South

126N Elm St
Statesville, NC 28677
704-838-6148

(Paper Tubes)

GDS Conover MRF

130 Somerset Dr Ext
Conover, NC 28613
828-327-3119

Sonoco Recycling

261 10th St Pl NW
Hickory, NC 28601
828-327-5701

Plastics Recycling

Plastics take many forms, from rigid bottles to flexible stretch wrap. Only #1 and #2 plastic bottles, cones, film and rolls can be recycled at the GDS Materials Recovery Facility in Conover.

Identify the various types of plastic by locating the coding imprint on either the bottoms or the side of the container. The recycling triangle with a number in the center is the imprint to locate.

GDS Conover MRF

130 Somerset Dr Ext
Conover, NC 28613
828-327-3119

Commercial Plastics Recycling Inc

721 Shea Rd
Newton, NC 28658
828-466-2711

Greenwire Plastics

820 North Ashe Ave
Newton, NC 28658
828-368-8573

Think Green Recycling Services

185 Poplar Grove Rd
Mooresville, NC 28117
704-701-6922

Harmony Industry Inc

1411 Progress Ave
High Point, NC 27260
336-886-7225

Ecotech Inc

336 Hwy 16 N Suite B
Denver, NC 28037
704-489-8703

Reuse It Plastics Inc

119 Emerald Point Lane
Mooresville, NC 28117
704-799-6730

(Plastic Agricultural Pesticide Containers)

Catawba County Convenience Centers

Accepted from areas farmers and turf businesses

Blackburn location

3864 Rocky Ford Rd
Newton, NC 28658
704-462-2496
(Mon-Sat 8am-6pm)

Newton location

2436 Bethany Church Rd
Newton, NC 28658
828-465-4635
(Tues-Sat 10am-6pm)

Oxford location

4637 Lookout Dam Rd
Catawba, NC 28609
828-241-3774
(Wed-Sun 10am-6pm)

(Plastic Bags)

Wal-mart Supercenter**Winn Dixie**

Please check the telephone directory for a location near you.

(Plastic Bubble Wrap, Film, Shrink Wrap, Mattress/Furniture Bags, Packaging)

Recycling Unlimited

620 Reese Drive SW
Conover, NC 28613
828-345-5223 / 612-8646

Plastic Materials, LLC.

301 Eagle Rd, Suite 8
Belmont, NC 28012
704-813-0501

Rubber Recycling

Rubber Mulch Unlimited

313 Hogan St
Morganton, NC 28680
704-650-9015

Harmony Industry Inc

1411 Progress Ave
High Point, NC 27260
336-886-7225

Styrofoam Recycling

Recycling Unlimited

620 Reese Drive SW
Conover, NC 28613
828-345-5223 / 612-8646

Modern Polymers Inc

904 West Academy
Cherryville, NC 28201
704-435-5825

Tires Recycling

Rubber Mulch Unlimited

313 Hogan St
Morganton, NC 28680
704-650-9015

Transmission Fluid

Bernhardt Seagle True Value

117 Main St NW
Lenoir, NC 28645
828-754-3456
(Limited to 5 gallons per customer)

Tractor Supply

Please check the telephone directory for a location near you. (Limited to 5 gallons per customer)

Vinyl Recycling

Commercial Plastics Recycling Inc

721 Shea Rd
Newton, NC 28658
828-466-2711

Harmony Industry Inc

1411 Progress Ave
High Point, NC 27260
336-886-7225

Yard Waste

Catawba County Blackburn Landfill

3993 Rocky Ford Rd
Newton, NC 28658
704-462-1348

Plastics Coding System



PETE

Polyethylene terephthalate



HDPE

High-density Polyethylene



PVC

Vinyl/Polyvinyl Chloride



LDPE

Low-density Polyethylene



PP

Polypropylene



PS

Polystyrene



OTHER

All Other Resins

Sources and Kinds of Recycling Containers

A recycling service provider may furnish external storage for collected recyclables. Depending on the size of the business and the possibilities for commingling, a business could use anything from a small dumpster to large rolling carts to simple small trash cans.

For rolling carts or recycling bins, you may have to work directly with a cart vendor - a few of the major ones are listed below. Local janitorial supply companies may also be able to provide collection containers, especially in smaller quantities. Note that a simple websearch may be the best way to find a wide array of different cart and bin products.

Name	Phone	Website
Amick Equipment	800-922-3795	www.amickequipment.biz/diakon1.asp
Bush Systems	800-565-9931	www.buschsystems.com
Mid-Point Intl	888-646-4246	www.midpoint-int.com
Otto	800-227-5885	www.otto-usa.com
Recycling Products	800-875-1735	www.recyclingproducts.com
Rehrig Pacific	800-421-6244	www.rehrigpacific.com
Rubbermaid	800-347-9800	www.rubbermaidcommercial.com
Schaefer Systems Intl	704-944-4500	www.ssi.schaefer-us.com
Toter Inc	800-772-0071	www.toter.com

Local hardware, home improvement, and office supply stores also have recycling containers. If you do not need to order large quantities, they may offer the simplest way to acquire bins and carts.



Good Idea!

Use five gallon buckets for internal handling in certain key locations inside. Businesses that serve food may have ready access to these buckets from incoming food shipments or janitorial supplies, they can also be purchased. Non-returnable shipping crates, boxes or other types of packaging can also be used for internal storage of recyclables.

NC Division of Pollution Prevention and Environmental Assistance

**ABC Permit Recycling
A Guide for Permit Holders**

Background

During the 2005 legislative session, the North Carolina General Assembly passed House Bill 1518 (Session Law 2005-348) requiring holders of certain Alcoholic Beverage Control permits to separate, store and recycle all recyclable beverage containers. The bill affects only holders of on-premises malt beverage, on-premises unfortified wine, on-premises fortified wine and mixed beverages permits. Furthermore, recycling is only required for those containers that are sold at retail for on-premises consumption. House Bill 1518 becomes effective January 1 2008. The legislation directs the ABC Commission to work with the Department of Environment and Natural Resources to develop a “model recycling program” to guide permit holders in implementing recycling. This fact sheet describes the basic components of a model program to help permit holders begin recycling efforts.

Provisions of the Law and Materials Affected

As stated in H1518, effective January 1 2008: “Holders of on-premises malt beverage permits, on-premises unfortified wine permits, on-premises fortified wine permits, and mixed beverages permits shall separate, store, and provide for the collection for recycling of all recyclable beverage containers of all beverages sold at retail on the premises.” The bill then further bans the containers from disposal effective on the same date. H1518 is viewable at www.p2pays.org/ref/38/37334.pdf.

In effect, the main types of containers affected by the legislation are glass bottles, aluminum cans and plastic bottles. Through previous legislation, aluminum cans were banned from disposal in North Carolina, and House Bill 1465, also enacted in 2005, bans the disposal of plastic bottles by October 2009. For most ABC permit holders, glass bottles will be the majority of the materials generated for recycling, especially by weight, followed by aluminum and then plastic. Recycling markets exist for all of these materials. Making new containers and other products from used materials saves energy and resources, creates jobs and provides valuable feed stocks to North Carolina manufacturers.

Most, if not all, ABC permit holders who initiate container collection efforts will access markets through one or more of three types of collection service providers: a solid waste hauler, a recycling services company or a local government recycling program. There will likely be some cost associated with the first two options, but below the costs may be at least partially offset by reduced solid waste services and disposal fees.

Case Studies and Other Information

For more information or assistance on recycling beverage containers under House Bill 1518, please contact the NC Division of Pollution Prevention and Environmental Assistance at 919-715-6500 or 800-763-0136. Your community’s local recycling, solid waste or public works office may also be able to provide assistance. If you have trouble finding a contact through local telephone directories or other means, please use the search mechanism at www.p2pays.org/localgov/payt/ncwaste.asp or call the DPPEA at the numbers listed above.

Finally, for information on ABC permit holders in North Carolina who have successfully implemented recycling programs for beverage containers, see www.p2pays.org/bannedmaterials/abcontainer/casestudies.asp.

The North Carolina Division of Pollution Prevention and Environmental Assistance provides free, non-regulatory technical assistance and education on methods to eliminate, reduce, or recycle wastes before they become pollutants or require disposal. Telephone DPPEA at 919-715-6500 or 800-763-0136 for assistance with issues in this fact sheet or any of your waste reduction concerns.

APPENDIX H

Litter Prevention And Control For The Business Community

Every business has a basic responsibility to its community and our world - to ensure that its waste does not become litter. The public appreciates businesses that keep their properties clean and litter free. In addition to the stigmas of litter, your business may be charged and fined under state and local littering laws.

Litter Prevention Musts

- Keep all outdoor recycling and waste receptacles covered.
- Make sure receptacles are the appropriate size and collections are frequent enough to avoid overflows.
- Conduct end-of-day cleanups in loading and unloading areas, parking lots, and sidewalks.
- Place litter containers near entrances and walkways.
- For additional information call Catawba County Utilities and Engineering at 828-465-8217.

Litter Fact

Litter is everyone's problem and the problem is getting worse. Each year 11 million pounds of litter (one pound of litter per person) is deposited on the streets and highways of North Carolina. Surveys indicate that some litter in Catawba County comes from business operations, especially in loading dock and dumpster areas.

North Carolina LITTER LAWS

§ 14-399 - Effective 3/1/02

Definition of Littering: No person, including any firm, organization, private corporation, or governing body, agents, or employees of any municipal corporation shall scatter, spill, or place or cause to be blown, scattered, spilled, or placed or otherwise dispose of any litter upon any public property or private property not owned by the person within this State or in the waters of this State including any public highway, public park, lake, river, ocean, beach, campground, forestland, recreational area, trailer park, highway, road, street, or alley...

Penalties:

c1) Any person who violates subsection (a1) of this section in an amount not exceeding 15 pounds is guilty of an infraction punishable by a fine of not more than one hundred dollars (\$100.00). In addition, the court may require the violator to perform community service of not less than four hours nor more than 12 hours. The community service required shall be to pick up litter if feasible, and if not feasible, to perform other labor commensurate with the offense committed. Any second or subsequent violation of subsection (a1) of this section in an amount not exceeding 15 pounds within three years after the date of a prior violation is an infraction punishable by a fine of not more than two hundred dollars (\$200.00). In addition, the court may require the violator to perform community service of not less than eight hours nor more than 24 hours. The community service required shall be to pick up litter if feasible, and if not feasible, to perform other labor commensurate with the offense committed.

For purposes of this subsection, the term "litter" shall not include nontoxic and biodegradable agricultural or garden products or supplies, including mulch, tree bark, and wood chips.

Mission Statement:

Keep Catawba County Beautiful promotes education and responsible behavior regarding littering, recycling, proper solid waste management, and beautification through positive individual and community involvement which will enhance the quality of life for all.

Website: www.keepcatawbacountybeautiful.org



We want YOU to participate!

Ways you can help:

- ~ Adopt-a-Highway
- ~ Swat-a-Litterbug
- ~ Litter Sweep (Fall and Spring)
- ~ Big Sweep
- ~ Help Spread the Word!

Opportunities to Serve:

- ~ Litter Prevention/Waste Reduction/ Recycling Committee
- ~ Fundraising Committee
- ~ Public Awareness & Education Committee

Contact:

Kelly Groves, Executive Director
828-465-8246 or
kgroves@catawbacountync.gov

APPENDIX I

Just Say No To Junk Mail

Not only does junk mail clog the postal systems and creates a nuisance for you, it also uses up valuable natural resources and contributes to pollution and litter problems. For every ton of paper generated in the form of junk mail, 17 trees are destroyed. Tons of junk mail are going to landfills around the country every day, depleting precious landfill space.

How did I get on these mailing lists?

Every time you provide your name and address to receive a product or service, there's a good chance you are being added to one or more mailing lists. When you buy a car, have a baby, make a purchase from a catalog, give money to a charity or fill out a product registration card, your name will likely be entered into a computer database.

How do I get off these lists?

The website www.p2pays.org/junkmail.asp includes some really great links so you can start reclaiming your privacy and stop the deluge of unwanted junk mail, spam and telemarketing calls.

Tried-and-True Methods For Reducing Junk Mail At The Source

Contact the Direct Marketing Association (DMA) Mail Preference Service www.dmaconsumers.org/consumerassistance.html to get off of their mailing list. DMA is the oldest and largest trade association for the users and suppliers in the direct database and interactive marketing field. Sending a request to DMA to have your name and address removed from their mailing list at can significantly reduce your junk mail load.

Contact the major credit bureaus to request your name to be removed from mailing lists for pre-approved credit cards. The major credit bureaus, Experian, Equifax, Innovis, and Trans Union Corp can be reached at one telephone number [888-567-8688](tel:888-567-8688).

Fill in and return opt-out privacy cards from financial organizations. Financial organizations are now required to provide customers with opt-out privacy cards so you can request that your name be removed from their bulk mailing lists.

Call the "800" numbers provided on catalogs and other bulk mailings to request your name to be removed from mailing lists.

Avoid giving your name, address, phone number and e-mail address to businesses if possible. They may use the information to put you on another mailing list and will oftentimes sell it to other bulk mailers.

This information has been compiled by the NC Division of Pollution Prevention and Environmental Assistance to help you to get off mailing lists and to stop unwanted telemarketing call and e-mail "spam".



North Carolina Department of Environment and Natural Resources (NCDENR)
1639 Mail Service Center, Raleigh, NC 27699-1639 (919) 715-6500 (800) 763-0136
North Carolina Division of Pollution Prevention and Environmental Assistance (DPPEA)

Catawba County

Utilities and Engineering Department

100A SW Blvd
Newton, NC 28658
828-465-8261
www.catawbacountync.gov/depts/u&e

Amanda Kain

Waste Reduction Coordinator/Educator

100A SW Blvd
Newton, NC 28658
828-465-8217
amandak@catawbacountync.gov

Catawba County Solid Waste Services

Commercial Recycling Technical Assistance	828-465-8217
Commercial Recognition Program	828-465-8217
Blackburn Landfill	704-462-1348
Construction and Demolition	704-462-1348
County School Recycling	828-464-3562
Keep Catawba County Beautiful	828-465-8246
Back Yard Composting	828-465-8250
GDS Residential Curbside Service for Waste and Recycling	828-256-2158
GDS Commercial Curbside Service for Waste	828-256-2158
GDS Commercial Curbside Service for Recycling	828-327-3119

County Waste Reduction and Recycling	828-465-8217
City of Claremont	828-459-7009
City of Conover	828-464-4808
City of Hickory	828-323-7439
City of Newton	828-695-4288
Town of Brookford	828-322-4903
Town of Catawba	828-241-2215
Town of Longview	828-322-3921
Town of Maiden	828-428-5000

North Carolina Department of Environment and Natural Resources (NCDENR)

North Carolina Division of Pollution Prevention and Environmental Assistance (DPPEA)
1639 Mail Service Center, Raleigh, NC 27699-1639 (919) 715-6500 (800) 763-0136
www.p2pays.org



Earth 911

Earth 911 delivers actionable local information on recycling and product stewardship that empowers consumers to act locally, live responsibly and contribute to sustainability www.earth911.org

NC Recycling Markets Directory

Find outlets for recyclable materials www.p2pays.org/dmrm/start.aspx

Environmentally Preferable Procurement

Learn how to plan and implement a successful buy recycled program www.p2pays.org/epp/

NC Recycled Products Directory

A reference for public and private sector buyers to purchase products from companies that either distribute, manufacture or sell recycled products in North Carolina www.p2pays.org/ref/06/05987.pdf

North Carolina Manufactures of Recycled Products

A directory of recycled products made in North Carolina. Page 46 of www.p2pays.org/ref/03/02333.pdf

NC WasteTrader, North Carolina's marketplace for discarded or surplus materials and products. This waste exchange service is designed to divert recoverable materials from disposal while providing feedstocks and supplies to potential users. www.ncwastetrader.org/home.aspx

Electronics

Identify methods to properly manage old electronic products and safely divert them from disposal www.p2pays.org/electronics/

Compost

Get information on North Carolina's composting and organics recycling industry www.p2pays.org/compost/

Environmental Management Systems

Learn about environmental management systems and how they can help your organization www.p2pays.org/iso/

The Waste Reduction Resource Center (WRRC) provides pollution prevention technical support to the states in EPA Regions II and IV. WRRC is a member of the Pollution Prevention Resource Exchange network of regional centers wrrc.p2pays.org

Environmental Stewardship Initiative

Learn how your organization can be recognized for its environmental accomplishments www.p2pays.org/esi/

Fats, Oil and Grease Programs

Learn how to properly manage residual fats, oils and greases from residential, institutional and commercial food service establishments www.p2pays.org/food/

Recycling Guidebook for the Hospitality and Restaurant Industry

www.p2pays.org/ref/05/04032.pdf

Food for Thought: Waste Reduction in the Restaurant Industry

This handbook offers suggestions for how restaurants can become more environmentally sustainable through source reduction, recycling, and energy conservation programs www.p2pays.org/ref/03/02905.pdf and www.p2pays.org/ref/03/02368.pdf

ABC Recycling for Bars and Restaurants

This site is for bar and restaurant owners, managers and employees who want to establish and operate successful recycling programs. Partnership for Bar and Restaurant recycling www.partnership4recycling.org
Case studies p2pays.org/bannedmaterials/abccontainer/csrestaurants.asp

Slide Presentation to Download and Use for Your Business Presentation:

Waste Reduction for the Food Service Industry: Tips for food service vendors on how to save green by going green www.p2pays.org/ref/14/13004_files/13004_files/frame.htm

Waste Reduction Partners

A team of highly experienced volunteer engineers, architects, and scientists, provides Western North Carolina businesses and industries with no-cost waste and energy reduction assessments and technical assistance www.landofsky.org/wrp/

GreenBiz

Is the leading information resource on how to align environmental responsibility with business success www.greenbiz.com

Green Building

The US Green Building Council is a 501c3 non profit community of leaders working to make green buildings available to everyone www.usgbc.org North Carolina Triangle Chapter chapters.usgbc.org/nctriangle

Catawba County Commercial Recycling and Waste Reduction Partnership Agreement

DATE

BUSINESS NAME is committed to being a leader in environmental stewardship through practicing recycling and waste reduction management and employee involvement. We are also dedicated to the achievement and maintenance of the Catawba County Commercial Recycling and Waste Reduction Partnership Program requirements and the goals and objectives of the ongoing process.

We will adhere to the requirements of this agreement and provide the information listed below to the Catawba County Utilities and Engineering Department:

- ~ Agree to make a three-year commitment to recycling and waste reduction; and
- ~ Implement a comprehensive recycling and waste reduction program in your business; and
- ~ Provide a copy of the recycling and waste reduction program to Catawba County; and
- ~ Submit a Catawba County Commercial Recycling Annual Report at the end of each fiscal year.

Optional:

Please check the box if your company;

- Agrees to act as a mentor to another business, offering information and technical assistance including over the phone assistance, facility tours, etc.

In agreeing to make this information available to Catawba County, we understand that materials needed to document the recycling and waste reduction program may not involve invasion of privacy or a company trade secret.

It is understood that **BUSINESS NAME** may withdraw from participating in the Catawba County Commercial Recycling and Waste Reduction Partnership Program at any time and for any reason.

Business office located at: **BUSINESS ADDRESS**

Telephone: **CONTACT NUMBER**

Name
Title