

CONFRONTING CONTAMINATION

Tactics from the Tarheel State

OVERVIEW OF NORTH CAROLINA

Statewide education campaigns: Recycle Guys, Re3, and Recycle More NC

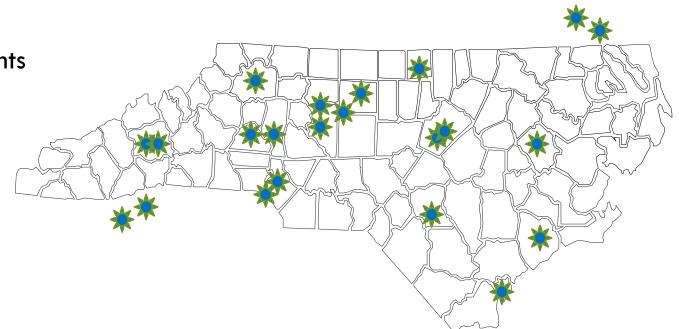
100 Counties, over 500 local governments

Curbside > Drop-off

Most are Single Stream

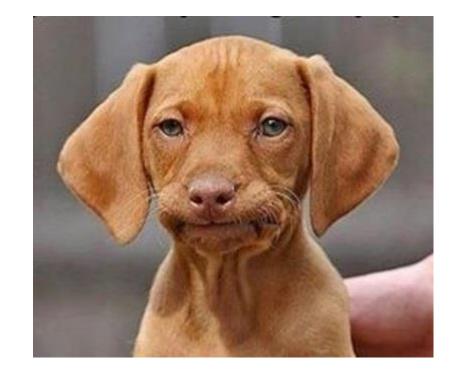
NC landfill bans

Over 700 recycling businesses



CHALLENGES TO RECYCLING COMMUNICATION

- Not everything is recyclable
- Complex process, complex messaging
- Contracting from early SS mentality (easier=more volume)
- Packaging is constantly changing
- Chicken and the egg approach to markets
- >MRF technology changes evolve the accepted materials list
- ➢Nothing is uniform



- >Most effective communication tool (face to face, trusted source) is most time consuming
- >Frustrating to understand what is and what isn't sometimes

TAKING ON CONTAMINATION ON TWO FRONTS

Recycling and Solid Waste Professionals

The Public



TALKING WITH YOUR MRF

REALLY understand the separation process

- Small things
- Tanglers
- Materials not in their original shape

Talk about materials that could be problematic

- Shredded paper
- Large metal objects
- Unrecyclable plastic

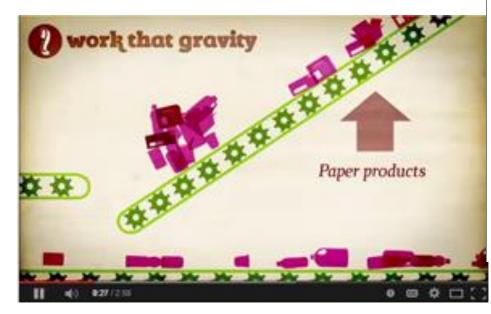


Balance pressure to add more materials with the feasibility of their recovery

Know the top contaminants and threats to quality

RESOURCES





IMPROVING MATERIAL QUALITY

Strong and healthy Material Recovery Facilities (MRFs) are essential to the future of county and municipal recycling programs in North Carolina. MRFs are better able to support your program and possibly share market revenues if they receive high quality materials.

KNOW WHERE YOUR MATERIALS GO

Whether you use public staff or a contractor to collect recyclables, make it a priority to know which MRF receives your recyclables and what materials your MRFs can successfully process and market from your program. Visit and talk to your MRF as often as you can. MRFs will appreciate your efforts to improve material quality and will support those efforts. As MRFs see their residue costs drop and their material quality increase, they also may have more revenue to share. Everybody wins if the right stuff is in the bin.

QUALITY MATTERS

Here are some simple ways your community can positively influence MRF material quality:

Get the bags out reason plastic bags and other film plastic are very difficult for MRFs to handle and can cause shutdowns and contamination of outgoing commodities. Educate your citizens to keep plastic bags out of recycling carts and drop-off bins. Encourage them to use alternative outlets such as retail stores instead. A good resource to share on your Website or other outreach materials is: http://plasticfilmrecycling.org/

Clean and dry are bell Food and liquids create moisture that can seriously reduce material quality. Educate residents to empty bottles, cans, and jars before recycling them and instruct them to keep food or containers with food still in them out of the recycling. Related contaminants include napkins, paper towels, and usually paper plates. Check with your MRF for specific questions about acceptable materials.

Rechink shredded paper many communities allow citizens to put bagged shredded documents in recycling carts and fropoff bins. Unfortunately, because of how recyclables are processed at MRFs, much of that shredded paper ends up mixed with glass or is lost in residue streams, not even making it to a recycling market. Most shredded paper also comes in plastic bags, which makes that problem worse, and bits of wet paper are costly contaminants for glass processing facilities. Take shredded paper out of your material mix and point citizens to alternative outlets, such as commercial shredding companies or their backyard compost bin.

Be clear about plastics symbol and number on the bottom of plastics to make recycling decisions. MRFs then end up with unrecyclable or very low value material, which costs them money and reduces the value of the plastics they receive and therefore what they can pay communities. Take care to understand what your MRF can handle and then communicate carefully and consistently to the public about plastics. Avoid phrases like "all plastics" or "#1 through #7." Consider not even referring to the numbers at all but instead specify the shape or type of plastic your MRF wants, such as "plastic bottles" or "only plastic bottles and tubs" or "only food, beverage, personal care and household plastic containers." Remember to also clearly and simply say what you don't want – e.g., "no Styrofoam or plastic bags." Citizens should also get the message to leave their caps on their plastic bottles.



O THE RECYCLING

ACCEPTABLE MATERIALS WORKSHEET

MRF:		
CITY:	DATE	

This worksheet serves to ensure that local programs and MRFs remain on the same page regarding acceptable and problematic materials. Use this document to identify and address issues, inform front line staff, and create materials to educate readicts. It is recommended that the local program representative and MRF representative complete this worksheet together every 6 months and during the creation or renewal of processing contracts. We encourage this document be used in the RFP process as well.

When creating educational materials, use this document to understand the ins and outs of acceptable items, then create broader categories, images, and definitions to inform residents.

Please go through the entire worksheet and mark whether each item is acceptable or not acceptable. You will see two categories under the "Do Not Accept" column. Here is how they are defined. Non-detrimental: Item is not sent to a market for recycling, but does not cause any major problems if found in the stream. Detrimental: them can shut down or damage equipment, harm employees, and/or substantially degrade the value of material.

PAPER PRODUCT	ACCEPT	DO NO NON- DETRIMENTAL	DETRIMENTAL	DO NOT WANT ON LIST BUT ACCEPT
Cartons (gable top containers like milk and orange juice, and aseptic containers like juice boxes and soup)				-
Cold Cups (e.g. paper fountain drink cup)				
Hard Cover Books				
Hot Cups (e.g. coffee cup)				
Ice Cream Container				
Junk Mail				
Kraft Bags				
Magazines				
Newspaper				
occ				
Office Paper				
Paperback Books				
Paperboard Boxes				
Pizza Boxes				
Shredded Paper				
Directions on how to prepare	· · ·			
Take-out Containers				
Tissue Paper				
Other:				

TWO (OVERSIMPLIFIED) SOURCES OF CONTAMINATION

Never Recyclers

Generally unaware of how to recycle.

Using the recycling cart as a second trash can.

Likely to require a more aggressive approach like code enforcement, cart hangers, and direct contact, or fines.

Overzealous Recyclers

Think they know how to recycle.

Keep messages positive and proactive.

Explain why some materials are problematic.

Provide alternative recycling options when possible.

Avoid overwhelming people, tackle the 3 most common/problematic sources of contamination. Fix those, then move down the list.

TAKING THAT TO THE PUBLIC IN A SIMPLE WAY

Update outreach with images and words that people can understand

Prioritize messaging with top contaminants

Promote alternatives

Be positive

Be consistent

BROCHURES AND SIGNS

Uses images

Prominent NO BAGS message

Uses words that people recognize

"Milk and Juice Cartons" not "gable top containers"

"Butter Tubs" instead of "rigid plastics"

Avoids messaging like "Plastics 1-7"

Plastic Bottles, Jugs and Tubs

Plastic Food Containers (getting a little slippery?)

Has a clear yes AND no list

No bags, Styrofoam, food/liquids, etc.





IF YOU SAY THIS... WILL YOU GET THIS?





ENFORCEMENT





Plastic bags

Styrofoam

Ceramic & dishware

Clothes



Print and Go Click to download Customizable Template



N Tangles. Chains, coat hangers, garden hoses, wire, rope and plastic bags tangle in our equipment.

Compostables. Food waste or NO./ other organica can be composted, but not recycled in this cart.

Non-Curbside Recyclables. Ciothing, electronics, sorgo metal, and some other items can be recycled locally, but not in this cart.

Other. Not recyclable at this time.

Commonts:

Five Communities all Using the same MRF

Town of Cary

- Yes- Bottles and tubs #1-7, lids places back on bottle, tub, or jar, rigid #2 plastics
- No- bags, frozen food trays, clamshells/hinged containers, toys, flower pots

Town of Wake Forest

- Yes- Narrow-necked, screw-top bottles, such as soda bottles, dairy containers, plastic milk and water jugs and colored bottles labeled with the RICs, six pack rings with rings cut
- No- bags, Styrofoam, and plastic bottles containing oil or hazardous substances
 <u>City of Durham</u>
- Yes- plastic bottles, jugs and jars
- No- take-out 'clamshell' containers
- Franklin County
- Yes- plastic soda bottles or milk jugs
- No- bags or bowls

Nash County

- Yes- plastic drink bottles and milk jugs
- No- non-bottle plastics



COMMON SUITE AND REGIONAL MESSAGING

All communities feeding same MRF.

Communities came together to create new outreach.

Same messaging and terms where you work, live and play.

Ayden 'Bethel' Falkland' Farmville' Fountain' Greenville' Grifton' Grimesland 'Simpson' Winterville IS SAKE RE Pitt County Residents can recycle the following together: Mixed paper: catalogs, magazines, nespapers, Food and juice cartons Plastic containers Plastic bottles junk mail Aluminum/Tin cans Flattened Glass bottles cardboard boxes and iars ITEMS NOT Pitt County offers 14 drop-off site NO plastic bags including the Transfer Station that accept NO styrofoam the recyclables described above. The NO pizza boxes sites also accepts the following NO napkins, toilet paper or paper towels NO contruction debris or yard waste NO ceramic or glassware Tires Yard Waste Chemical Jugs Anti-Freeze Appliances Clothing/Shoes NO plastic food trays & cups Bulk Items Thermostats Batteries NO pots and pans Motor Oil Electronics NO hazardous waste Eveglasses Cooking Oil NO household waste BAG Find the site closest to you: pittcountync.gov/depts/solidwaste/sites/ HECYCLARIES For a detailed list and more information, please visit: pittcountync.gov/depts/solidwaste/



or call: Paula Clark 252-902-3353



CLINTON, NC

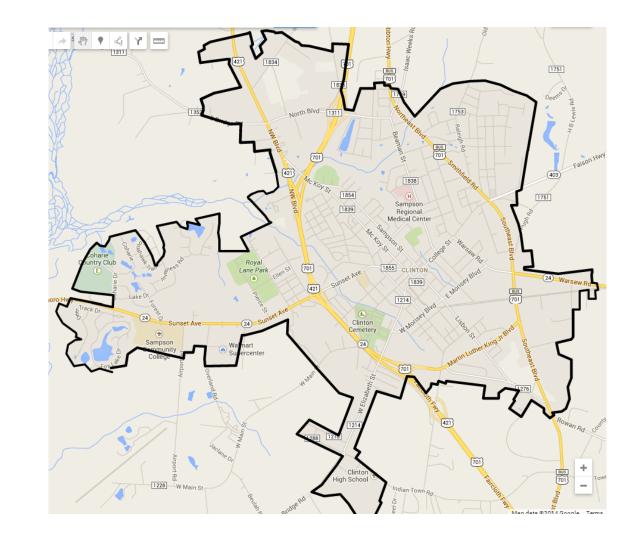
Located in Sampson County

Tier 2 (economically distressed)

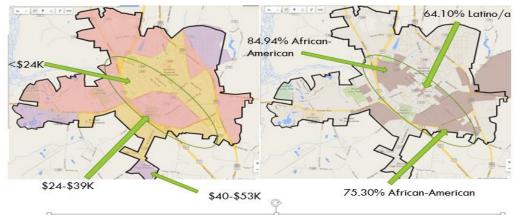
Population – 8,743

Underserved population demographics:

- Rural
- Per capita income \$24, 973
- Language spoken at home, other than English (7.9%)
- Race/Ethnicity: African-American (40%), Native American (0.8%), Latino/a (8.1%)
- Project Objective: How to appeal to hard-toreach/underserved populations in an effort to increase recycling participation and decrease incidences of contamination



MEDIAN HOUSEHOLD INCOME & RACE/ETHNICITY CLUSTERS













...

GLASS

Bottles & jugs

Mixed colors

RECYCLEMOR

00281 AVOID COMMON RECYCLING MISTAKES

Your cart contained items NOT recyclable curbside. Improperly recycled materials can contaminate whole recycling loads and cause problems with the recycling equipment. These items are NOT recyclable curbside:

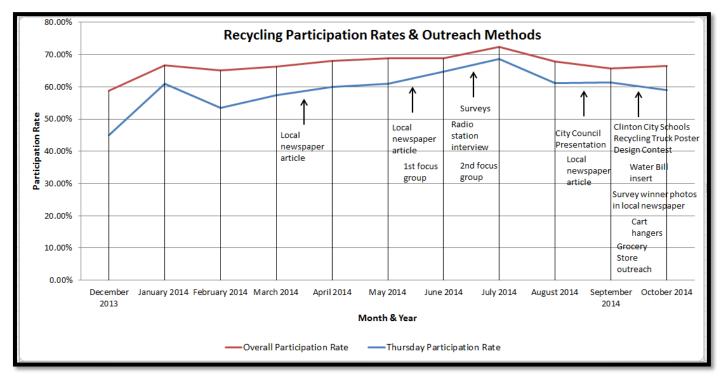


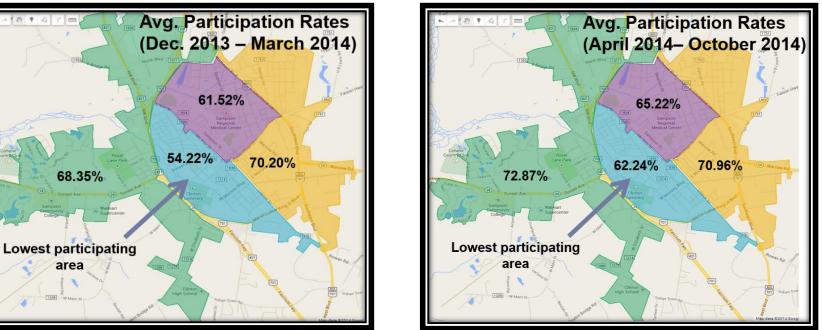
 Household trash Books Plastic bags Hazardous waste Styrofoam Electronics

 Clothes Plastic cups & trays Food & liquids Hoses Ceramic &

dishware PLEASE DO NOT BAG YOUR







CARY, NC CONFRONTS CONTAMINATION

Cary Begins Recycling Survey to Help Citizens Curb Contamination

FOR IMMEDIATE RELEASE July 10, 2015

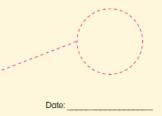
> Cary Begins Recycling Survey to Help Citizens Curb Contamination Crews to touch every curbside recycling cart now through September

CARY, NC - Don't call 'em snoopers or looky loos - now through September, Town of Cary recycling crews will be individually surveying recycling carts as they look for and filter out popular contaminates in an effort to reduce Cary's recycling contamination while simultaneously educating curbside customers. Beginning with Tuesday, July 14's blue week service, a three-person crew will manually dump recycling carts: large contaminates, like bubble wrap, plastic bags, bagged recycling, and pizza boxes will be left in the cart along with educational information on the proper ways to participate in the Cary Recycles program. It will take roughly 12 weeks to survey every recycling cart one time in Cary. In 2015, the Town's recycling contamination, or "residue," rate was 9.87 percent, which mirrors the state's average municipal rate for single-stream recycling but is well above Cary's goal of five percent.

"Thanks to citizen support, our curbside recycling program has grown so much over the years. However, when we collect a contaminated cart we risk having the entire truckload of recvclables sent to the landfill, which is something we know nobody wants to happen. This survey is a check-in to ensure our collective efforts don't go to waste." said Scott Hecht, Public Works Director. "By adhering to the Cary Recycles program, we all can recycle more by doing less, keeping the program cost-effective and efficient." For the best result, Hecht asked that recyclers remember to keep it loose in the cart: reduce contamination by keeping plastic bags and bagged recyclables out of your cart and only tossing in accepted items

Implemented in 1989. Cary's recycling program is just one example of how the Town works to lead the state in preserving and protecting natural resources. In Fiscal Year 2014, Cary residents helped to divert over 50 percent of waste from the landfill with about 30 percent coming from recycling. The Town holds year-round workshops and special events focused on recycling, including biannual litter sweeps, Earth Day, Reuse Rodeo and America Recycles Day, Carv Recycles is open to all Town of Carv solid waste customers and individually owned multifamily complexes; an estimated 79 percent of customers participate in the Town's curbside recycling program. This is the first Town-wide recycling survey.

For a comprehensive list of the more than two dozen items accepted at the curb in Cary, and for tips for proper recycling, search "Curbside Recycling" at www.townofcary.org or call § (919) 469-4090.



NO. THANKS!

We appreciate your efforts to recycle; unfortunately, today our crews noticed your recycling was not properly prepared and/or contained the unaccepted item(s) noted below:

- Item(s) contained in bags
- Plastic bags, plastic wrap, plastic film
- Other incorrect plastic(s)
- Pizza boxes
- Trash/food waste
- Yard waste
- Other unaccepted item(s) household hazardous waste, building material. Sturofoam[™]. See back for a list of items accepted in your recycling cart.

Including any unaccepted items in your cart could mean that the entire truck's worth of recyclables has to be dumped into the landfill instead of recycled, something we know no one wants to see happen.

Please prepare your recycling correctly for future collection.

- Collection was provided today and items were correctly disposed; however this may not be possible in future.
- Collection was provided today however unaccepted items were left in the cart so that you can dispose of them properly.

YES, PLEASE!

Together we can reduce contamination and maintain an efficient recycling program.

- >> Keep it loose in the cart; do not bag items.
- >> Put plastic bags in the trash, reuse or return to your local grocery store for recycling.
- >> Keep trash and yard waste out of your recycling cart.
- >> Only recycle items accepted in our Cary Recycles program; search "Recycling" at www.townofcary.org for details on all of our recycling services.

Questions? Call (919) 469-4090. TOWN OF CARY

ACCEPTED IN YOUR CAR

Plastics

>> Bottles (neck smaller than body) and tubs #1-7 >> Lids (placed back on bottle, tub or jar)

Specific Rigid Plastics Labeled #2 HDPE

- >> Laundry baskets >> Lawn fumiture
- >> 5-gallon buckets
- >> Storage containers and lids
- >> Soda crates
- >> Garbage cans/cart >> 18-gation recycling bins
- If your #2 rigid plastic on this list will not fit in your cart, please call (919) 469-4090 for a free, special collection

Pape

- >> White and color paper/cardstock/manila
- >> Newspaper/inserts, magazines/catalogs >> Mail including envelopes with windows and postcards
- >> Non-foil alft wrap and wrapping tissue
- >> Greeting cards with no electronic devices
- >> Telephone books
- >> Shredded paper that is contained in a clear plastic bag that is tied closed

Metal

>> Aluminum cans, foil and pie pans >> Tin/Steel food cons. >> Lids (placed back on bottle, tub or Jar)

>> Pots, pans and lids Chipboard & SBS/White Paperboard

- >> Paper towel rolls >> Cereal-type boxes and other paperboard packaging ► Egg contons (only paperboard, not StyrofoamTM)
- >> Cup holder traus (only paperboard, not Sturofoam™)

Corrugated Cardboard >> Boxes

- >> Packing paper okay. Properly dispose of all other packing material.
- >> Flatten and/or cut to ensure that it fits in the cart/bir If you have more cardboard than will fit in your cart/bin, call (919) 469-4090 to schedule a free, cardboard collection

Glass

>> Bottles and Jars

Gable Top Cartons & Aseptic Packaging >> Milk and juice cartons

>> Drink and soun baxes

Remember to rinse containers and put lids back on so they, too, will be recycled.



KEEP IT LOOSE IN THE CART

MAKE YOUR RECYCLING A FKEELH

It's a team effort to operate a successful recycling program and it starts with you. Never bag your recyclables and always bench unaccepted items like plastic bags and pizza boxes that can send a truckload of quality recyclables to the landfill.

TOWN OF CARY

(919) 469-4090

Be a team player and remember to keep it loose in the cart. For a list of items you can toss in, search "Recycling" at www.townofcary.org

RECYCLE MORE DOWNLOADABLES



To increase recycling's value and decrease environmental costs, keep these CONTAMINATORS

> NO PLASTIC BAGS Plastic bags tangle up and shut down recycle equipment at the processing facilities. Don't bag y recyclables, keep them loose and treet Take clean of any clastic bags back to process stores for recycling

CLEAN, DRY & EMPTY

ood, liquids and trash do not belong in your recycling carls and can ruin the good stuff. Drain bottles then eplace the caps and don't recycle containers that have food or liquid left in them.

NO TANGLERS

Electronic cords, hoses and even wire hangers are not meant for commingled recycling- they tangle things up. While some of these materials may be recyclable through separate collections, they do not belong with your battles, cans and paper.

> Click here to insert your contact information

RECYCLEMORENC.ORG

Find out





Downloadables tab at www.recyclemorenc.org

BEYOND CURBSIDE

Remember your Away From Home recycling too!

Only ask for the materials that are there, nothing more.

Use labels and pick the right containers/lids to prevent contamination.





LET'S GET STARTED

1. Have you called your MRF today?

2. Talk to your neighbors about regional efforts.

3. Adopt more effective outreach materials.

4. Invest a little time in evaluating your community.

5. Tackle contamination one thing at a time-

Start with BAGS!







THANK YOU!

Heather Cashwell NC DEQ (919) 707-8127 Heather.Cashwell@ncdenr.gov