



Cleaning the Recycling Stream

New Jersey League of Municipalities Conference

Wednesday, November 20, 2019

Presentations

- The Recycling Industry Gary Sondermeyer
- II. Yesterday, Today and Tomorrow John Stanton & Fred Patrone
- III. RecycleCoach Erin Jensen
- IV. Burlington County Tip N Tag Program Rachel Barton
- V. Middletown Recycling Amy Sarrinikolaou & Lory A. Hubbard







The Recycling Industry
Where We Are – Where We Need To Be and
How Do We Get There???

2019 League of Municipalities Conference Gary Sondermeyer, Vice President of Operations Bayshore Family of Companies November 20, 2019



Where it all began - NJ Recycling

- 1982 "Recycling in the '80's"
- 1987 Mandatory Recycling
 - "Floor" of Recycling "3 Materials, plus Leaves"
- Glass Containers, Aluminum Cans & Newspaper
- NO ONE Exempt!!!
- Down to "Kitchen Level"
- 1993 Plan and Integrated & Waste Management
- 50% MWS and 60% TWS
 Goals Codified by Legislature



Where Are We Today???

- Recycling Still MANDATORY (Many Forget)
- County-by-County Plans in Place & Current
- 50% and 60% Recovery Goals are Unchanged
- 22.7 Million Tons Generated (2016 Stats)
- 13.91 Million Tons Recycled
- 61% Total Waste Stream Recycling
- 44% Municipal Waste Stream Recycling
- Curbside Recycling VERY Successful
- Commercial/Institutional our Challenge
- Markets for Material VERY Divergent!



SO.....What's the Problem???

- Most New Jersey Towns have Gone to "Single Stream" v.
 "Dual Stream" Collection Leads to VERY High Contamination and Compromised Markets
- International Market Restrictions from China Green Fence & Green Sword
- Recycling is Confusing Plastics Recycling is NUTS!!!
- "Wishful Recycling" EVERYTHING is recyclable!!!
- Total Disconnect between "Supply and Demand" we Got the Stuff Too Few Markets to Send it to!
- **Economics of Recycling** have Left the Building In a Few Years Towns Went from "Getting Paid" to "PAYING" \$75/Ton + North!
- Long Lead Time Necessary to Restore Domestic Markets.
- International Tariff Wars Won't Help Markets!

SO.....What Can We Do?

Joint Legislative Hearing 8/15 – ANJR's 14 Point Plan

- 1. Reconvene State SWAC
- 2. Create a Markets Development Council
- 3. Keep Recycling Fund Whole
- 4. Examine Single v. Dual Stream
- 5. Contamination Campaign Recycle Right
- 6. Statewide Public Education Campaign
- 7. Standardization of Designated Materials



- 8. Single Use Plastic Bans
- 9. Incentives for Domestic Processing Capacity (Business Recycling Loans)
- 10. Executive Order on Procurement (price preference)
- 11. Expanded Product Specifications for Material (DOT In Particular)
- 12. Food Waste Recycling
- 13. Research & Development Incubators
- 14. Mandatory Recycling Remains the Law of the Land Strong Messaging & Enforcement!







Today's Presentation

- Overseas Quality Issues
- Pricing demands
- Single Stream & Dual Stream
- 4 What is being done
- 5 Animated Video





Overseas Quality Issues





China Quality Requirements

- Green Fence began in 2013
 - Enforced regulations on Plastics
 - Maximum 3% Contamination allowed
- Green "Goddness" started 2 years later
 - Targeted "garbage" in recyclables
 - Maximum 2% Contamination allowed



China
the world's largest importer
of
plastic waste





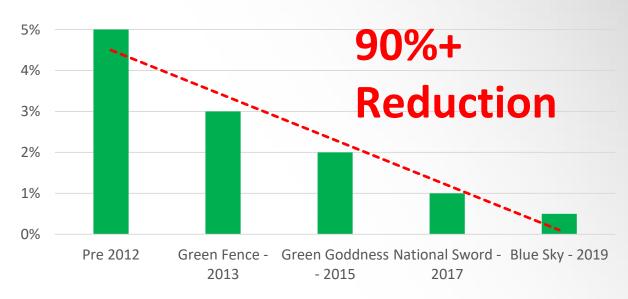
China Quality Requirements

- National Sword began in 2017
 - Banned imports of plastic
 - Maximum 1% Contamination allowed
- Blue Sky began in 2018
 - Most stringent quality program from China
 - Maximum 0.5% Contamination allowed





Allowable Contamination









- China notified the WTO in July that it will ban imports of unsorted wastepaper from Single Stream facilities by the end of 2017
- China wants to secure more recyclables domestically
- Government stopped issuing import permits
 - This limits the amount of recyclables that can be imported
 - They cancelled approximately 50% of the licenses







- China announced they will no longer accept mixed paper
 - Virtually every MRF built in the past 10 years was designed to produce mixed paper
- Other papers must have less than 0.5% contamination
 - Every container is x-rayed to ensure under
 0.5% contamination
- Proposed 25% tariff on US recovered paper shipped to China – Settled on 10% tariff





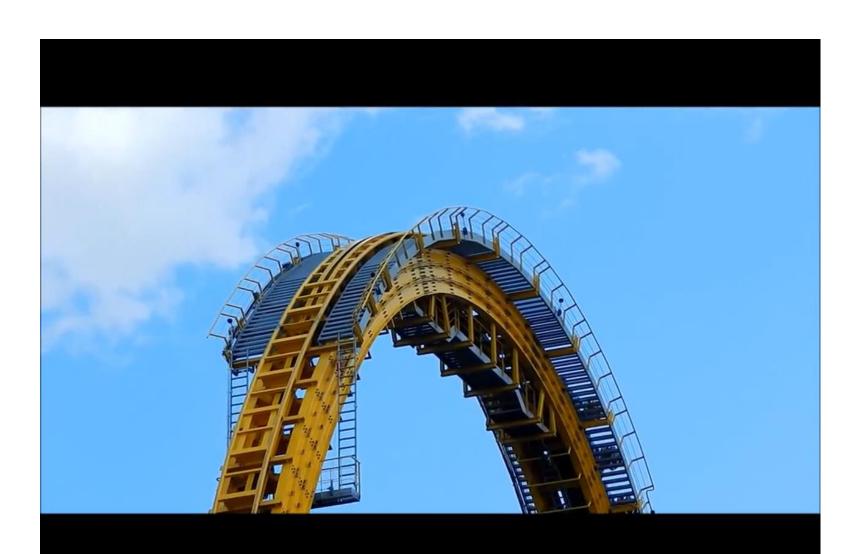
Why is China so important?

- China is the largest buyer of mixed paper in the world
- United States is/was the largest supplier to China
 - Recyclables exported from the US to China dropped 21.6%% in 2017 vs. 2016
- Other world markets CANNOT absorb the loss from China not buying





Has it affected pricing?







China Supports their Domestic Infrastructure

- OCC Export pricing to China dropped from \$235/ton to \$57 to \$60 per ton¹
 - When shipping to other Domestic and Asian markets pricing drops to \$55 to \$60 per ton or lower
- For Domestic infrastructure markets China is paying up to \$600/ton²
 - China wants to improve domestic supply

1) - Source: OBM 10/19

2) - Source: RISI





Recyclables Value

- Blended value of one (1) ton of single stream recyclables
 - -2017
 - 1st Quarter \$102.69/ton
 - 2nd Quarter \$98.12/ton
 - 3rd Quarter \$95.75/ton
 - 4th Quarter \$91.00/ton





Recyclables Value

- Blended value of one (1) ton of single stream recyclables
 - -2018
 - 1st Quarter \$72.04/ton
 - 2nd Quarter \$68.77/ton
 - 3rd Quarter \$68.06/ton
 - 4th Quarter \$54.44/ton





Recyclables Value

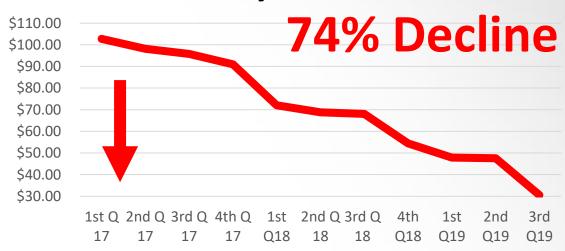
- Blended value of one (1) ton of single stream recyclables
 - -2018
 - 1st Quarter \$47.87/ton
 - 2nd Quarter \$47.53/ton
 - 3rd Quarter \$30.55/ton
 - 4th Quarter ?????????

And Still Dropping





2017 vs 2018 vs 2019 Value of Single Stream Recyclables







What issues do Processors Have?

- Processors cannot sort the same in 2019 as they did in 2017
- More sorters are required to "try" and clean the incoming recyclables
 - Requires slowing down the system

Slower production and more sorters = higher cost per ton





What issues do Processors Have?

- More "contamination" must be pulled
 - Higher expense
- Moisture is no longer acceptable
 - Wet paper CANNOT be sorted





Single Stream

November 8, 2018







This is what everyone thought Single Stream would look like





























Dual Stream

November 8, 2018



Commingle





Fiber Stream









Are Quality Demands for real?

- President Xi Jinping during his annual "Communist Party Congress" speech mentioned the "Environment" 89 times¹
- He only mentioned the "Economy" 70 times





What can we do to help?

- We have to educate our crews picking up the recyclables at the curb
- We must be proactive in ONLY picking up clean recyclables at the curb
- We must continually educate the public
- We must make sure that residents have the right containers WITH tops to keep recyclables dry





What is Atlantic Coast doing about the quality issues?

- We are inspecting all deliveries of recyclables
 - Some deliveries have been rejected
 - Some deliveries are downgraded due to contamination and/or moisture





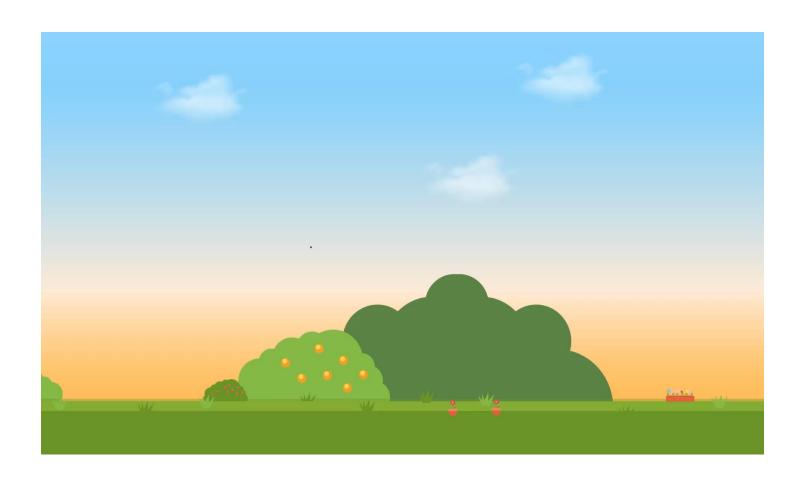
What else is being done?

- Some Municipalities are tagging stops that are non-compliant
- Atlantic Coast Recycling is making significant investments in updating equipment at our facilities





Remember... You are not alone, we are all in this together!







Thank You

Recycle Coach A free recycling education tool for NJ residents



- Purchased by NJDEP in late 2017
 - 3 year contract plus option for extensions
- Free to use for all NJ Counties and Municipalities
- Education with the goal of contamination reduction
- Accessible through a free app (Android and Apple) or desktop computer
- Individual admin pages
 - Municipal metrics
- Opportunity for direct resident communication
- Customizable
- English and Spanish

Collection Schedules

<	September 2019					
S	М	Т	W	Т	F	S
1	2	3	4	5 Q	6	7
8 1	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26 1	27	28
29	30					
	Set Reminder	Export Cale	ndar Do	wnload PDF	Switch zones	

What goes where tool



Popular Searches



BATTERIES



PAINT



STYROFOAM



FURNITURE



LIGHT BULBS



CARDBOARD



YARD WASTE



SOFT PLASTICS

What goes where tool: Example

Furniture Items

Bulky Items



Large bulk items can be put out at curb 2nd (second) trash collection of the week. One item per week.

Collection Requirements

Reuse Options

Here are some popular websites that encourage users to buy, sell or swap reusable goods:

BookMooch is a free online exchange community where users can give away and get books via points.

How It Works: Users receive a point for every book they give away, which they can use to get any book listed on BookMooch. Users have the option of keeping the new books in their collection or re-listing it to give to another user when they are done with it.

The Freecycle Network is made up of more than 5,000 groups with more than 7.6 million members across the globe. Rather than congesting landfills with reusable goods, Freecycle enables users to give and get these items for free. Each group is organized and managed locally by volunteers.

How It Works: To give away any goods or see what is available, find a group near you and sign up to be a member. Membership is free and everything posted must be free, legal and appropriate for all ages.

What goes where tool: Example

Oil-Based Paints

Household Hazardous Waste



Products that come in a container displaying a hazardous warning label are not accepted in our garbage or recycling programs. Other products such as paint, motor oil, compact fluorescent light bulbs, smoke detectors and batteries can also be harmful if not disposed of safely. Bring hazardous waste to a drop-off location or event.

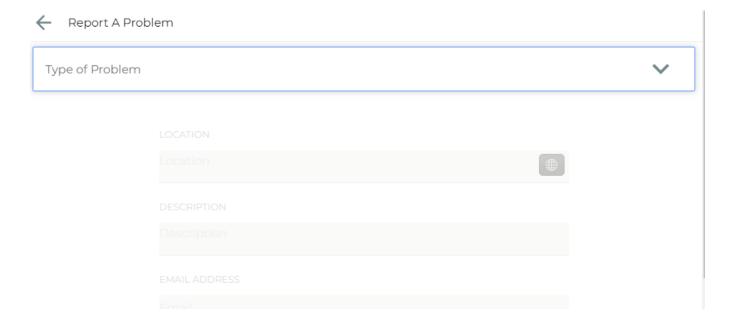
If you are unsure about whether a material is accepted, or if you need more information, please call the Passaic County Recycling Hotline at 973-881-4506.

About Warning Labels

What is Hazardous Waste?

Drop-off Events

Report a problem



Completely Customizable

Compatible with smart devices

OK Google, ask Recycle Coach if I can recycle an aerosol can.

Alexa, ask Recycle Coach if I can recycle a couch.



News and blog posts

Household Hazardous Waste Collection Day this Saturday 03-Jun-2019

Computer & Electronics Recycling Event this Friday & Saturday

13-May-2019

Today's Earth Day: Message from the NJDEP 22-Apr-2019

Today's Earth Day: Message from the NJDEP 22-Apr-2019

Recycle Coach now available on Alexa and Google Home

01-Jan-2018

Why recycling matters



If you're a recycling nay-sayer, stick around. I dare you. In this blog, I'm going to show you why recycling matters. ...

Read more

>

>

How to manage your medical waste safely



When you don't dispose of medical waste properly, it can be extremely dangerous—for your family, community and the sanit ...

Read more

he problem with recycling receipts



Turns out there are two types of receipts floating around out there. The paper ones, which are recyclable and compostabl ...

Read more

Handling your holiday waste: From Christmas lights to wrapping paper



Over the holidays, we toss out a million tons of... stuff. And we call it the season of giving... More like the season of wa ...

Read more

Additional program option



Burlington County's Tip & Tag & Curbside Rejection Program By Rachel Barton

Regional Recycling Program



- ▶ 140,000 Single Family Homes
- 29,500 Multifamily Units
- 40 Municipal Dropoffs
- ▶ 140 Schools & All County Facilities

Background

- China
 - Green Fence
 - National Sword
 - Banned all imports of recycled plastic
 - Contamination rate cut from 5% to 0.5% for paper and cardboard
- The Recycling Partnership
 - Contamination Tool Kit
 - Oops Tags
 - Shine On Tags
 - Post Cards
 - Mailers









ASE LEAVE THESE





o Food or Liquid pty all containers)



Tanglers, wires, chains, or ctronics)



- Program tested in 2018
 - Successful but slow process
 - Requires a lot of staff time interns eventually leave to go back to school
 - Takes at least three cycles to change behavior



- Types of contaminants
- Identify towns in need of recycle education
- Identify what method of education works best for that area



(wood furniture





- Compare recycling rate vs. recycling right
- Identify most common contaminants
- Measure effectiveness of tagging on recycling behavior changes
- Engage residents when possible
- Put single stream labels on cart lids

Awareness, Awareness, Awareness

- Team effort with recycling coordinators, township managers, elected officials, police officers, etc.
- Notify residents informing them about audits
 - Recycle Coach
 - Press Release
 - Website Alert
 - Email Lists
 - Mailers for study area
 - Flyers/Posters
 - Social Media Posts
 - "Audits Are Coming" video



















We are finding too many bad, dirty and downright dangerous items in recycling collected in towns across the county.



These put our workers and recycling sorting equipment at great risk.



STOP NOW!

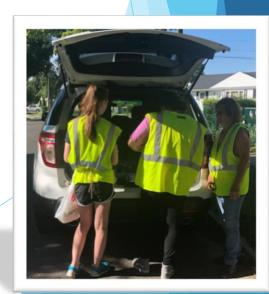


Our Tip & Tag Teams will be checking recycling carts this summer, leaving friendly "Oops tags" to help you

recycle right!

First Things First

- Picked towns with varied levels of contamination and demographics
 - ▶ High income and low income
- Routes selected with OTC (service provider)
 - Study route sized for ½ day of field inspections
- Chose routes in engineered communities with clusters of homes as well as older, traditional neighborhoods
- Staffing
 - High school & college students, county assistant recycling coordinators, municipal recycling coordinators, OTC
- Create tags
- Create data sheets



Cart Lid Labels

- ▶ 100,000 older carts had "Paper Only" labels
- New label placed directly on cart lid
- New carts have "hot stamp" graphic on lid



- · Hatten boxes to fit in carts
- Empty & rinse all containers
- No trasi
- No plastic bags/plastic wrap
- No tanglers (hoses/wires)
- NO SHREDDED PAPER
- NO STYROFOAM



They jam our sorting equipment. Recycle at glocery stores.

Questions? Call (609) 267-6889 or email recycling@otcbc.org

burlcorecycles.com

SET CARTS OUT BY 6AM | LID OPENING MUST FACE THE STREET

Step 1 - Stock Up

- Aprons
- Zip ties
- Oops & Shine On tags
- Rejection stickers
- No plastic bag stickers
- Cart placement stickers
- Pens, pencils, sharpies
- Cart labels

- Soap bottles and rags
- Clip boards
- Data sheets
- Route maps
- Recycling literature
- Giveaway reusable bags
- Safety vests
- Water/Gatorade
- Cold rags



Step 2 - Inspection

- Coordinate with OTC to stay ahead of service trucks
- Rejected addresses called into dispatch
- Interns assigned routes based on efficiency
- Followed highlighted route maps
 - Two interns inspecting perimeter & two interns inspected interior streets
 - Both sides of street inspected at the same time
- No tipping involved lift lid, surface inspect, tag
- Deeper inspection optional
- Removal of contaminants optional
 - Only when trash pickup is the same day, otherwise it's a rejection







Sample Data Sheet

													1		
House												4	2 1	2 1	1.00
	c				5	_						1st	2nd	3rd	
#	Street Name					Catego	ories					Audit	Audit	Audit	Comments
			Plastic							Napk., Paper	Cups,				
		Garbage/	Bags/Film/		2-	25				Towels,	Plates,				
		Bagged	Wrap	Yuck	Textiles	Tanglers	Big Items	Styro	Pizza Box	Tiss.	Utensils				
721	Bearm Pl											50			
723	Beacon Pl											50			
725	//	1	/									X			
727	11											Z			
729	10											X	1		
731	10		1/									X			
733	((50			
735	((SO			
	Braddock Terr											50			
	Braddock Terr											N			
808	11											SO			
810	11							V	,			X			
812	H		V.					1				X			
814	11											50			
		-1													

Step 3 - Tag for Problems

- Oops! Tags customizable
 - We used zip ties for attachment other suggestions?
- Pick types of contaminants that are problems for your MRF
- Make messages clear and concise
- Oops tagged carts still collected
- Rejection stickers must be clearly visible for collection driver
 - Pulled cart from curb and turned around
- Rejected addresses reported to collection manager
- Remove contaminants at your own risk





PLEASE LEAVE THESE ITEMS OUT!



packaging/peanuts

Step 4 - Reward Good Behavior

- No contaminants found
- Tag is customizable to your program
 - Added empty and rinse
 - Added replace water bottle caps only
 - Added Recycle Coach information

YOU ARE A RECYCLING ROCK STAR! SHINE ON

We have noticed that you are recycling the right things and leaving out the stuff that belongs somewhere else.

Keep up the great work!



RECYCLE MORE OF THESE:

CANS — Aluminum and Steel Cans Food and Beverage GLASS Bottles and Jars







empty and rinse do not flatten

empty and rins

empty and rinse

PAPER

Clean Mixed Paper, Newspaper, Magazines, and Flattened Cardboard







DI ASTICS

Kitchen, Laundry, Bath: Bottles and Containers







empty and rinse



replace water bottle caps only

To learn more, download our free Recycle Coach app!





Graphics provided by The Recycling Partnership

Contaminants Results

- ► Ten contamination categories
- Contamination decreased in all towns in each category

	*Program	Program contamination average over all three audits. Excludes all no set outs (1501 Total Homes Recycling)									
	Bagged/	Plastic Bags/Film/W								Cups, Plates	
	Garbage	rap	Yuck	Textiles	Tanglers	Big Items	Styro	Pizza Box	Tiss	Utensils	
Maple Shade	7%	20%	6%	1%	1%	3%	3%	7%	4%	8%	
Medford	3%	15%	8%	1%	2%	3%	2%	5%	6%	7%	
Mount Laurel	6%	17%	5%	1%	1%	4%	2%	5%	7%	7%	
Riverside	6%	22%	9%	1%	2%	4%	5%	8%	7%	7%	
Willingboro	9%	26%	11%	1%	2%	4%	5%	9%	6%	9%	
Total Average	6%	20%	8%	1%	2%	4%	3%	7%	6%	8%	

Contamination Results (Continued)

	Garbage/ Bagged	Plastic Bags/Film/ Wrap	Yuck	Textiles	Tanglers	Big Items	Styro	Pizza Box	Nap, Paper Towel, Tiss	Cups, Plates Utensils
Week 1 Oops/Rejects	25%	54%	15%	4%	6%	7%	3%	13%	13%	15%
Week 2 Oops/Rejects	11%	41%	10%	1%	1%	10%	10%	11%	20%	23%
Week 3 Oops/Rejects	8%	34%	14%	4%	0%	11%	0%	13%	21%	14%
Average	15%	43%	13%	3%	2%	9%	4%	12%	18%	17%
1st Week Comp to Average	10%	11%	2%	1%	3%	-2%	-1%	1%	-5%	-2%

Contaminants Results (Continued)

- Top 5 Contaminants:
 - Plastic Bags/Film/Wrap
 - Yuck
 - (Food waste/liquid left in recyclables)
 - Cups, plates, utensils
 - Garbage/Bagged Material
 - Pizza Boxes





Results

- 90% of homes are recycling
 - > 57% of homes are recycling right
 - ▶ 43% of homes need more education (includes homes not recycling)
- 33% of homes consistently recycled right
- 25% of homes improved recycling behavior
- 22% of homes did not change or improve recycling behavior



Conclusion

- Types and amounts of contaminants decreased
- Direct outreach needed for residents that did not change behavior, including NOVs

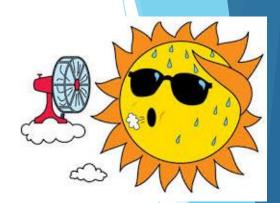
Traditional recycling efforts do work for recyclers that did it right (mailers, flyers, etc.)

Recommendations

- The study needs a minimum of 4 collections
- Towns must follow up immediately with residents

What would we do differently?

- Data sheet set up
 - ▶ Name of interns, date of data, sheet #'s
- Address list from towns
 - Exclude vacant properties from home count
- Keep interns on same routes throughout the study
- Data review
- Increase number of consecutive weeks for audits
- Schedule audits to avoid extreme weather
- Use same sample size (if comparing routes/neighborhoods)
- Municipality must issue NOVs to repeat offenders
 - Enforcement is key



Currently - No More Mr. Nice Guy



RECYCLING WAS NOT COLLECTED TODAY DUE TO CONTAMINATION!

Non-recyclable items: trash, plastic bags, plastic wrap, styrofoam, scrap metal, wood, etc. MUST BE REMOVED PRIOR TO NEXT COLLECTION.

Questions? Call the Recycling Hotline (609) 267-6889 or recycling@otcbc.org

- April 2019 → Enough is enough!
 - Carts rejected at the curbthere is no warning.
 - All drivers are trained to:
 - Reject visibly contaminated carts.
 - ► Tag the container and leave it full.
 - No items are removed/partially collected.
 - Each driver must check4+ carts/day.

What happens with cart rejection lists?

Drivers send in daily rejections lists.

OTC submits daily lists to the County.

County sends rejection reports to each town.

The reports also identify repeat offenders.

MRCs send residents letters, issue NOVs, or send a code officer to visit the home as needed.



Rejection List Example

Recycling Residents Rejection

DATE	HOUSE	Street	MUNICIPALITY	REASON	NOTE
9/24/2019	176011774	Alderton Lane	Mount Laurel	YARD WASTE	1X
9/24/2019	146003636	Alderton Lane	Mount Laurel	YARD WASTE	1X
9/24/2019	129	Canterbury Road	Mount Laurel	STYROFOAM	3X
9/24/2019	3805	Chadbury Road	Mount Laurel	TRASH/TRASH BAGS	1X
9/24/2019	3806	Chadbury Road	Mount Laurel	TRASH	2X
9/24/2019	108	Chelsea Place	Mount Laurel	BAGGED RECYCLING	2X
9/24/2019	661	Cornwallis Drive	Mount Laurel	BAGGED RECYCLING	1X
9/24/2019	769	Cornwallis Drive	Mount Laurel	BAGGED RECYCLING	1X
9/24/2019	117	Dorchester Road	Mount Laurel	TRASH	3X
9/24/2019	105	Glenbrook Blvd	Mount Laurel	STYROFOAM	1X
9/24/2019	739	Grant Road	Mount Laurel	CONTAINER PLACEMENT	1X
9/24/2019	1	Halter Court	Mount Laurel	CART REPAIR-LID REPLACEMENT	
9/24/2019	18	Hartford Road	Mount Laurel	TRASH BAGS	1X
9/24/2019	6	Hilltop Drive	Mount Laurel	BAGGED RECYCLING/STYROFOAM	2X



Top Contaminants

- 27% Bagged recycling
- > 20% Trash bags
- ▶ 17% Non-Recyclables
- ▶ 16% Trash
- ► 15% Styrofoam
- > 5% Wood/yard waste

To date...
7,150 Carts rejected

Which is 5% of the 140,000 homes with curbside recycling.

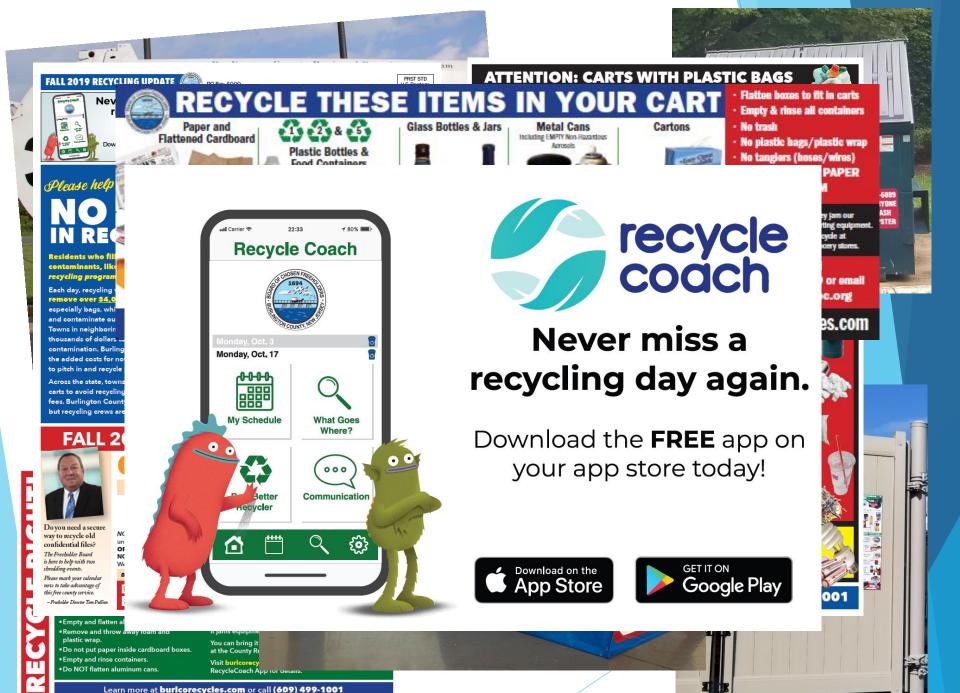
10% of containers were rejected 2X.

2% of containers were rejected 3X.

<1% of containers rejected 4X or more.









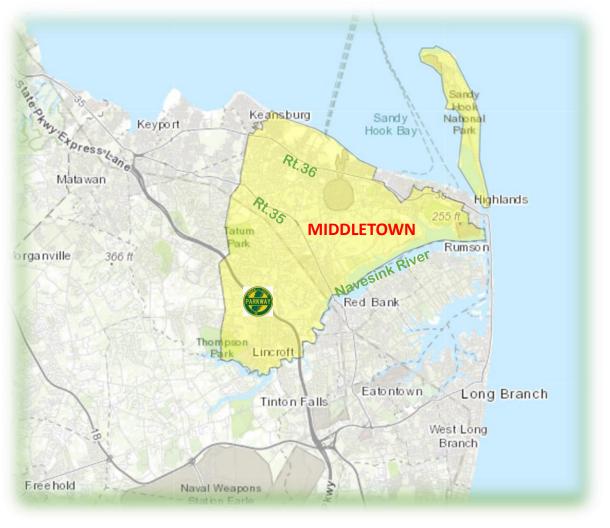
Middletown Township Recycling

Amy Sarrinikolaou & Lory A. Hubbard





- Located in central NJ, tucked in northeastern Monmouth County, consisting of 16 neighborhoods
- Waterbodies: Sandy Hook Bay, Raritan Bay, Navesink River
- Roads: State Highways Rt. 35 & 36, Garden State Parkway, easy commuter access to NYC by boat, rail or bus
- 42 square miles of land, including Sandy Hook, with a population of approx. 67,000
- Certified in the Sustainable
 Jersey Program since 2010
 (Bronze 2010-2018, Silver 2019)



Source image: US Census Bureau American FactFinder

MIDDLETOWN RECYCLING



CURBSIDE COLLECTION

- Single stream collection
- Every 2 weeks per zone



MIDDLETOWN TRAIN STATION RECYCLING AREA

- Cardboard, mixed paper & comingled
- Open 24-hours a day





MIDDLETOWN RECYCLING CENTER

- Almost everything
- Open 5 days a week, including weekends

COMPREHENSIVE RECYCLABLES CHART



		ACCEPTED:							
	Recyclable Material	Curbside (Single Stream) Collection Per zone, see schedule	Kanes Lane Recycling Center Thurs. – Mon. 8:30 AM - 4:30 PM	Train Station Recycling	Curbside Garbage Pick up				
APPLIANCES	A/C Units	√ (\$25)*	√ (\$10)		NO				
ATTEIANOLO	Refrigerators	✓ (\$25)*		NO	NO				
L	Stoves	✓ (\$20)*	V	Kanes Lane Recycling Center Station Recycling Center Station Recycling Pick up Recycling Recyclin	NO				
1	Washer/Dryer	√ (\$20)*	V	NO	NO				
CARDBOARD	Cardboard (broken down)	V	· ·	NO	NO				
5	Food-contaminated cardboard	NO	NO	NO	1				
ELECTRONICS	Computers/monitors/laptop	NO	1	NO	NO				
ELLCTRONICS	DVD Players/Stereos/VCRs	NO	/						
1 100	Printers/Tel/Fax/Copiers	NO							
	TVs	√ (\$20)*	✓ (limit of 2)						
GLASS	Bottles/Jars	(V2-0)	(mint 5, 2)	2000	The second second				
	Ceramics/Dishware**	NO	NO	NO					
	Lightbulbs/Windows**	NO	NO	NO	NO				
PLASTICS	Containers (#1, 2, 5 symbol)	-	/	/	NO				
A A	Containers (#3, 4, 6 symbol)	NO	NO	NO					
	Buckets/Storage Bins	NO			NO				
	Kid's Toys/Play Equipment	NO			Garbage Pick up NO				
130	Coolers/Trash Receptacles	NO	/						
METALS	Aluminum/Tin/Steel Cans		V						
METALS	Aluminum Foil/Trays/Pie Tin	NO			NO				
94 3	Metal Hangers/Scrap Metal	NO							
ALL PAPER	Ads/Catalogs/Magazines	7							
ALL PAPER	Cereal Box/Br Paper Bags	-							
	Copy/Fax/Office Paper		/						
	Envelopes /Soft Cover Books	/	/						
	Hardcover Books	✓ (no cover/binder)	✓ (no cover/binder)						
-	Non-Metallic Wrapping Paper	V							
	Cups/Plates/Food Wrappers	NO	NO	NO	1				
NEWS	Newspaper	√ (tied in bundles)	✓ (tied in bundles)	NO	NO				
	Newspaper used for Pet Waste/Household Projects	NO	NO	NO	~				
MISCELLANEOUS	Aerosol Cans	NO	NO	NO	V				
William .	Batteries - household & car	NO	NO	NO	V				
E Fair	Batteries – rechargeable**	NO	NO	NO	NO				
	Bowling & Golf Balls	NO	NO	NO	1				
	Construction Material***	NO	NO	NO	NO				
	Metal Fence Posts (w/o concrete)	NO		NO	NO				
	Grass Clipping/Tree Stump**	NO							
365	Latex Paint, lid off (dried)	NO			7/				
1000	Plastic Hangers/PVC piping	NO			45				
	Rubber Products (Hoses)	NO							
777	Tires - Automobile (< 17" Rim)	NO	√ (\$2 offrim/\$3 rim on)						
	Tires - Pick-up Trucks/SUV	NO	✓ (\$7, offrim only)	NO					
	Propane Tanks/Motor Oil	NO	✓	NO					
l .	Vinyl Products (manageable size)	NO	NO	NO	1				





3/30/2017



TOWNSHIP OF MIDDLETOWN **Comprehensive Recyclables Chart** "WHEN IN DOUBT - THROW IT OUT"



	RECY	CLABLE			GARBAGE			
CURRISIDE RECYCLING COLLECTION	MIDDLETOWN RECYCLING CENTER Thur-Man #35 FAF 4290 PM Charle Ture 5 West	TRAIN STATION RECYCLING AREA	RECYCLABLE MATERIAL		LANDFILL MATERIAL	CURBSIDE GARBAGE COLLECTION	CURBSIDE BUCK COLLECTION	
ACCEPTED (\$30)*	ACCEPTED (\$10)*	Open 20 Hours	APPLIANCES	A/C Units	APPLIANCES			
ACCEPTED (\$30)*	ACCEPTED (\$10)*		4	Humidiflers / dehumidiflers	A. 1		-	
ACCEPTED (590)*	ACCEPTED ISSUE!*		Description of the second	Refrigorators			- 0	
ALESPI HU (\$050)*	40.15+ +11			Stoves		-		
ACCIPTIO (\$250*	ACCIP*40			Washer / Dryer		- 32	198	
CCEPTED in part only	ACCEPTED	1050	CARDBOARD	Cardboard (Nationed / Brokes down)	CARDBOARD	1.5		
		143	A	Cardboard-waxed (reW & Juce containers)		AKCHITED		
				Cardboard-food contaminated (pitze boxes)	-	ACCEPTED	12	
	ACCEPTED.	(4)	ELECTRONICS	Computers / monitors / laptop	ELECTRONICS	1.5	- 3	
	ACDF (U			DVD Players / Stereos / VORs				
710000000000000000000000000000000000000	ACCEPTED.	-		Printers / Tel / Fax / Copiers				
ACCEPTED (\$25)* ACCEPTED	ACCEPTED (2 Sevil) ACCEPTED	ACCEPTED.	GLASS	Tolovicion (glars not hroken) Rottles / Jans	GLASS			
ACCEPTED	ACUSE 10	ACCEPTED	GLASS	Ceramics / Distriction	GLASS	ACCEPTED		
-	-		\$AAA		W (600)	ADCEPTED	-	
	-		194	Household Lightbulbs** Windows***	THE CONTRACTOR OF THE PROPERTY	MAACREEN		
_	ACCEPTED	-	PLASTICS	Buckets / Storage Dins	PLASTICS			
	ACCIP-10			Buckets / Storage tiens Coolers	PLASTICS			
ACCEPTED	ACCEPTED ACCEPTED	ACCEPTED	NO PLASTIC BAGS	Containers (#1, 2, 5 symbol)	# # N		2	
ALL III	ACCEPTED .	Teach 1950	35	Toys / Play Equipment				
	ACCEPTED ACCEPTED		U 0,89	Trash / Recycling Receptacles	Total and			
	Section 16	15.70	1	Pags	The Contract of the Contract o	ADX-P(FI)		
			HIAN	Bubble Wrap	Total .	ACC STIED		
4		4		Centainers (83, 4, 6 symbol)	19	ACCEPTED		
-	100	100		Drinking Straws	W W	ACCIPIED		
				Manners		ACCEPTED		
				Pool Covers / Liners	a hardy	ACCEPTED		
				PVC piping	Maria de la companya del la companya de la companya	ADC-PLED		
+1				Utensilis		ACCEPTED		
ACCEPTED	ACCEPTED	ACCEPTED	METALS	Aluminum / Tin / Steel Cans	METALS		18.	
	ACCIPTIO	4-1		Cast Iron Bathtubs	-0-	- 14	14. 1	
	ACCEPTED.		Service Control	Fence Posts (N/O concrete)	150			
	ACCEPTED	14	2017	Grills / BBQ	Call Man	- 1	12	
	ACCEP OR			Hangers				
- 8	WESS-10	(e)	1 7	Scrap Metal	colin.	-	(4)	
-		5.00	7	Aluminum Foil / Trays / Pie Tin		ACCEPTED		
ACCEPTED	ACCEPTED	(e)	PAPER	Ads / Catalogs / Magazines	PAPER	195	- 3	
CCSPTED (NY) LUNES	ACCEPTED (M/o cover)	1.00		Books - Herdcover				
ACCEPTED	ACCEPTED		(100)	Books - Softcover		16	+	
ACCIPITO	4039F11		The state of the s	Cereal Box / Brown Paper Bags				
ACCEPTED	ACCEPTED	(+)	709	Copy / Fax / Office Paper	158	1.5	-	
ACCEPTED.	4613 F = 0			Envelopes	1000			
ACCIFIED	ACCEP 10	3.50		Howspaper (clean)		18	- 3	
ACCEPTED	ACCEPTED.			Non-Metallic Wrapping Paper	CHEST AND ST			
	ACCEPTED.			Newspaper passa for Pal Mostal Projection		12	-	
				Paper Cups / Plates / Food Y/rappers	T. WARREST	ATC-PING		
-	1		- 1	Shreided Paper (boxe)	ALTHOUGH IN	ACCEPTED	-	
	ACCEPTED		MISCELLANEOUS	Batteries - car, hucks & emergency lighting	MISCELLANEOUS			
	ACCEPTED ACCEPTED			Cooking Oil	JAN (1984)			
	ACCEPTED ACCEPTED		4-04	Motor Oli / Anti Freeze			,	
	ACCEPTED (fam apply)		ple (MC)	Propane Tanks Tires – Automobile (< 17" Rito)				
	ACCEPTED (from oppiny)			Tires - Pick-up Trucks / SUV (>17"Way				
	(Jam apply)		1000000	Aerosol Cans (must be empty)	1	ADCEPTED		
				Batteries - household		ALCHIEL		
-				Bowling & Golf Rails		ACCEPTED	- 0	
				Car Seats		ACCEPTED	ACCEPTED	
				Carpets (3' sections, raifed & field		100000000	ADDPTHD	
- 2	- 3	320 0		Furniture (sofe, shelves, etc.)		1 10	ACCEPTED	
		-		Hoses / Tarps		ADCHITTED		
20				Mattresses / Box Spring			ACCEP HE	
	- 4	0.00	24 m	Mirrora (CONPLETELY toped)	Prof.	ACCEPTED	ACCEPTED	
		(4)	1000	Latex Paint, lid off (drod)	1, 1, 50	ACCEPTED	-	
	- 0			Plumbing Fixtures			ACCEPTED	
		-		Rubber Products (hoses, etc)		ACCEPTED	ACCEPTED	
20	-	1 2		Styrofoam / Packing Material		ADC-PTED	- 1	
2		1.01		Vinyl Products (managoable site)		ADCHRIED	4009746	
-	- 14			Batteries*** - rechargestile			- A	
-	-		- A	British and Televising Colore				
-			OE0 2	Concrede***		- 4		
-			2	Concrete*** Constituction Metersal*** (drysolat, colorate.	A 17	2		
2		•		Construction Metersal (crysmet, colorete, bricks, and shingles, wood, etc.)	AV	2	-	
*		4	0	Concrete*** Constituction Metersal*** (drysolat, colorate.	A V	3	-	

^{*}Must be scheduled and paid for prior to DPW pick up.

***Contact the Monimouth County Reclamation Center (6000 Asbury Avenue, Tinton Falls) at 732-683-8686 for disposal.



^{*}Must be scheduled and paid for prior to pick up.

**Accepted at home improvement and electronic stores. Visit www.CaliZRecycle.org for more information.

**Contact the Monmouth County Landfill at 732-683-6866 for disposal.

^{**}Accepted at home improvement and electronic stores. Visit www.Call2Recycle.org for more information.



Recycle Coach launched June 1, 2018



Recycle Coach makes <u>recycling</u> education seamless for municipalities



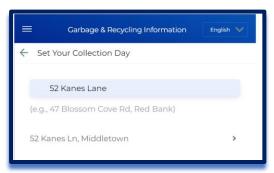


Embedded links to the app on our website





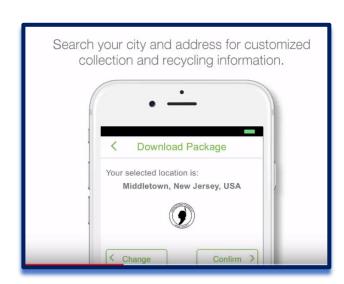
Color coded carts matching the new Township-wide program



Search your zone via address



Added leaf and brush collection with tips

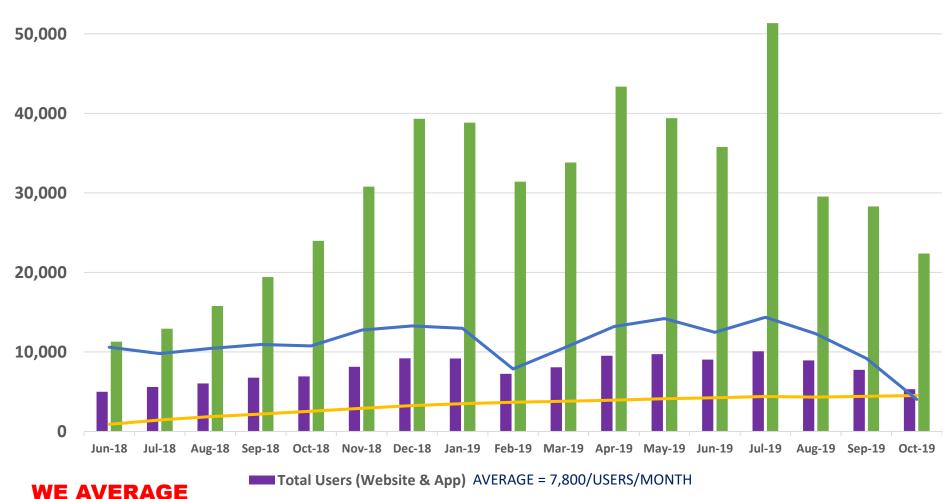


Customized YouTube video for Middletown

Recycle Coach Statistics







275 NEW
SUBSCRIBERS
PER MONTH!

60,000

Resident Interactions (reminders sent; calendar views/export, etc.) AVERAGE = 30,000 INTERACTIONS/MONTH

—Total Subscribers (receiving reminders) 900 -> 4,600 SUBSCRIBERS

——Content Page Views (item searches) AVERAGE 11,000 ITEMS/MONTH



RECYCLING TIP OF THE WEEK (A) RECYCLING TIP OF THE WEEK



TIP OF THE WEEK

When recycling cardboard, remove all internal packaging (tyrofoam & bubble wrap goes in the garbage) then flatten boxes.

Flattened cardboard should be clean & dry and placed inside your blue recycling cart or brought to the Middletown Recycling Center.

Note: pizza boxes, soiled, waxed and wet cardboard cannot be recycled.

Download the recyclecoach app.





"When in doubt, throw it out!"

Cardboard that has not been broken down or is soiled/wet can present complications for the recycling machinery.

DID YOU KNOW?

Flattening cardboard conserves

space in recycling containers and

makes them easier to transport.

Corrugated cardboard is the highest value grade of paper when it comes to recyclable rates.

www.middletownnj.org/recyding



TIP OF THE WEEK

When recycling a container that had food in it, please empty the contents and rinse out the container.

Labels may remain on.



DID YOU KNOW?

Rinsing containers before recycling helps make the recycling process more efficient at the recycling plant.

When the impurities are removed, a higher quality material is created, which will be used for a new product.

Download the recyclecoach app.

"When in doubt, throw it out!"

www.middletownnj.org/recycling

MAKING RECYCLING EDUCATION FUN



TIP OF THE WEEK

Recyclable items should be loose in the blue recycling cart.

Plastic bags are not accepted in curbside recycling collection.

Clean and dry plastic bags can be recycled separately at most supermarkets and superstores.

in the recycling bin!

DID YOU KNOW?

Plastic bags are the #1 contaminant in the singlestream recycling process.

These bags wrap around the equipment and cause complications at the recycling processing center.

www.middletownnj.org/recycling



TIP OF THE WEEK

Styrofoam is not recyclable in the single stream process, nor at any of the Township's facilities. Styrofoam (packaging material, coffee cups, shipping pellets, food containers, etc.) should be placed in the garbage.

NO STYROFOAM



The less Styrofoam products you buy, the more good you will do for the environment.

DID YOU KNOW?

Styrofoam is a petroleum based plastic. It's non-biodegradable, non-sustainable & the main component of marine debris.

Download the recyclecoach app

Download the recyclecoach app.

"When in doubt, throw it out!"

www.middletownnj.org/recycling

RECYCLING TIP OF THE WEEK (1) RECYCLING TIP OF THE WEEK (1)

TIP OF THE WEEK

Hardcover books (without binding) & softcover books are recyclable in your at the Recycling

Download the recyclecoach app.



DID YOU KNOW?

You can also sell or donate old books to a thrift store, library, church, etc.

TIP OF THE WEEK

Rubber/vinvl garden hoses are not recyclable and should be disposed of in your black garbage cart.

They can also be reused as blade covers, slow drip sprinklers, planter guides, tree support and much more!



DID YOU KNOW?

Garden hoses are a mess for recycling plant operators because they are long, stringy items that damage equipment. They also create safety hazards for the employees.

Please do not place garden hoses in your blue recycling cart.

"When in doubt, throw it out!"

www.middletownnj.org/recycling

Download the recyclecoach app.

"When in doubt, throw it out!"

www.middletownnj.org/recycling



blue recycling cart or Center.





WASTE AUDIT

Waste Management Services Newark, NJ January 2019







Material	Material Sub	Color	Product Bale Description	Weight (lbs)	% of Total
Recyclable Mat	terials				
Glass	Three Mix Glass > 3/8 (refers to thickness)		Three Mix Glass > 3/8 (thickness)	41.0	20.4%
Plastic	#1 plastic (PET)		#1 plastic (PET)	8.3	4.1%
Plastic	#2 plastic (HDPE)	Colored	#2 plastic (HDPE)	1.8	0.9%
Plastic	#2 plastic (HDPE)	Natural	#2 plastic (HDPE)	1.7	0.8%
Plastic	#5 plastic (polypropylene)		#5 plastic (polypropylene)	1.0	0.5%
Fiber	Mixed Paper 54		Mixed Paper 54	3.7	1.8%
Fiber	Cardboard (OCC)		cardboard (OCC)	76.5	38.1%
Fiber	Newspaper and inserts (ONP8-SRPN)		newspaper and inserts (ONP8-SRPN)	25.8	12.9%
Metal	Steel-Tin Steel-Tin		Steel-Tin	4.3	2.1%
Metal	Aluminum		Aluminum (UBC)	3.7	1.8%
Non-Recyclable	Materials				
Fiber	Milk Cartons-coated (Aseptic-Gable Top)		Res	0.6	0.3%
Plastic	#3,4,6,7 plastics		#3,4,6,7 plastics	1.0	0.5%
Plastic	Bulky Rigid Plastics		Bulky Rigid Plastics	0.0	0.00%
Metal	Scrap Metal		ScrpMtl	3.6	1.8%
Plastic	Plastic bags (MRF Film Plastic)		Res	1.1	0.5%
Residue	Plastic Bagged Material		Res	2.2	1.1%
Residue	Residue		Res	24.4	12.2%
			Total Sample Weighed	200.7	100.0%
			Total Recyclable Materials	167.8	83.6%
			Total Non-Recyclable Materials (residue)	32.9	16.4%
				Disposal Fee	Contamination
				Rate:	Rate /
				\$180/ton	

STRIVE FOR FIVE

NO PLASTIC BAGS IN THE RECYCLING CART



Collecting recyclables in a bag? Empty the contents into the cart.



Return plastic bags to retailers.

RECYCLE: STRIVE FOR FIVE!

THANK YOU FOR RECYCLING THESE:



Aluminum and

Steel Cans











Bottles and Jars (empty and rinse)





Newspaper. Magazines and Mail





Bottles and Containers (empty and rinse numbers #1,#2,#5)



CARDBOARD

Cardboard, Cereal Boxes, and Paper Tubes (flatten boxes)

NOT ACCEPTED:





No Plastic Bags or Plastic Wrap







No Food or Liquid (empty all containers)

732-615-3233

Middletown Township Department of Public Works

www.middletownnj.org/recycling

or download the recyclecoach app.





MOBILE TOWN HALL

Tuesday, 3/12

Lincroft Fire Company, 601 Newman Springs Road, Lincroft

Thursday, 3/14

Middletown Township Public Library, 55 New Monmouth Road

Thursday, 3/21

VFW Post 2179, 1 Veterans Lane, Port Monmouth

Thursday, 3/28

Fairview First Aid, 17 Kanes Lane





JOIN OUR MIDDLETOWN GREEN TEAM AND DEPARTMENT OF PUBLIC WORKS FOR THIS YEAR'S RECYCLING EDUCATION EVENT!

AS YOU CLEAN, GATHER HOME & YARD ITEMS THAT ARE RECYCLABLE AND DROP THEM OFF AT THE MIDDLETOWN RECYCLING CENTER.

SATURDAY, APRIL 27TH
MIDDLETOWN RECYCLING CENTER
(52 KANES LANE)
9:00AM-NOON

CLICK HERE TO LEARN MORE!

ALIANKANA I KANA WANA KANA INGGODONINA KANA MANAMANI WANA MANAMANI MANAMANI MANAMANI MANAMANI MANAMANI MANAMAN













- No recyclables in plastic bags
- No plastic bags or plastic wrap
- No tanglers, cords, hoses or chains
- No food or liquid (empty all containers)
- No scrap metal, wood or furniture



Questions about your curbside recycling service?

Visit www.middletownnj.org/recycling

or download the recyclecoach app.

732-615-3233

OOPS Tag Program

















Lory Hubbard, PE, CME, CPWM

Assistant Director, Public Works & Engineering lhubbard@middletownnj.org
732-615-3234

Amy Sarrinikolaou, PP, AICP

Recycling and Sustainability Coordinator asarrinik@middletownnj.org 732-615-2000 x2208

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PLATINUM







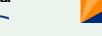
GOLD



SILVER

















American Water

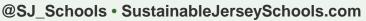


















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