



PROPERTY MANAGER'S GUIDE TO RECYCLING AND WASTE REDUCTION AT MULTI-FAMILY PROPERTIES



Montgomery County, Maryland
Division of Solid Waste Services
Waste Reduction and Recycling Section



Printed on recycled and recyclable paper.

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I INTRODUCTION



There are approximately 115,000 multi-family units in Montgomery County, Maryland.

Montgomery County, Maryland has a strong tradition of commitment to preserving natural resources and protecting the environment. The County's recycling and waste reduction program began in the late 1970's, and it continues to expand and improve every year, with the help of all who work and live in the county. Multi-family properties such as yours comprise approximately 30 percent of all households in the county, and they can contribute significantly to maximizing recycling achievement and reducing the amount of waste generated. More than one million tons of waste are generated in the County annually. Montgomery County has a goal to reduce waste and recycle 70 percent of all waste by 2020.

Many multi-family properties in Montgomery County have successful recycling and waste reduction programs that operate efficiently, are convenient for residents and staff, comply with the County's recycling regulations, and help reduce their overall solid waste disposal costs. Several properties already are exceeding the County's 70 percent recycling goal!

If you are developing a new recycling and waste reduction program for your property, this guide will lead you through the process by providing information about the County's solid waste and recycling requirements, helpful lessons learned by other properties, and resources to make your job easier. If you already have a recycling program in place, information in this guide can help you improve your program to maximize recycling achievement and cost savings.



The same materials must be recycled at multi-family properties as at businesses and in single-family homes.

The Montgomery County, Maryland Division of Solid Waste Services' TRRAC (Think Reduce and Recycle at Apartments and Condominiums) team is available to assist you, so please contact us with your questions or requests. For more information and resources, visit www.montgomerycountymd.gov/recycling, or call 3-1-1 (or 240-777-0311 if out of Montgomery County).

The recycling regulations for Montgomery County, Maryland are found in Executive Regulation 15-04AM. This regulation defines which materials must be recycled by all residents and businesses in the County and establishes the requirements for properly managing recyclable materials.

Montgomery County Executive Regulation (ER) 15-04AM defines "multi-family entities" as "dwelling units that have 7 or more units."





II BENEFITS – ECONOMIC AND ENVIRONMENTAL

We all have a responsibility to use our natural resources wisely. Recycling conserves natural resources and energy, reduces pollution, and reduces the amount of waste sent to disposal facilities. By recycling, we contribute to a cleaner, healthier environment and a more sustainable economy.

A. Recycling Costs Less Than Trash

Recycling collection service generally costs less than trash collection service, on a per ton basis. While collection companies must pay tipping fees to dispose of the trash they collect at multi-family properties, they can sell recyclable materials for revenue or, at a minimum, take them to the Montgomery County Shady Grove Processing Facility and Transfer Station at no charge. The table below shows the “tipping” fees assessed on materials brought to the County’s facility. As can be seen, loads of trash taken to the transfer station are charged \$56-\$66 per ton, while commingled materials, mixed paper, and scrap metal may be recycled at no charge. Logically, the more your property can recycle, the less you will have to spend on trash disposal.

Montgomery County Shady Grove Processing Facility and Transfer Station Fees*	
Material Type (Residential Sources)	Fee
Commingled materials – aluminum cans and foil products; bi-metal cans; empty non-hazardous aerosol cans; glass bottles and jars; plastic bottles, containers, jars, tubs, lids, caps, pails, buckets and flower pots; and #1 PET clamshell containers, trays, deli containers, domes, cups, and lids.	No charge
Mixed paper – cardboard boxes, white and colored paper, newspapers and inserts, magazines, catalogs, paperboard, shredded paper, paperback and hardcover books, telephone books, unwanted mail, coated paper items such as milk cartons and juice boxes, frozen food and ice cream containers. paper cups, and all other clean and dry paper.	No charge
Scrap metal – household metal items such as irons, pots, pans, lamps, and hangers; appliances such as refrigerators/freezers, washers/dryers, humidifiers, air conditioners, and toasters; metal bed frames; cabinets; furniture; fencing; tools; and pipes.	No charge
Yard trim and Christmas trees – grass clippings, leaves, brush, garden trimmings and Christmas trees.	\$46/ton for loads greater than 500 pounds No charge for loads less than 500 pounds
Trash/Refuse (more than 500 pounds)	\$56/ton
Solid waste delivered for disposal in open-top roll-off containers	\$66/ton

* Fees effective July 1, 2014 and subject to change.
Visit www.montgomerycountymd.gov/recycling for current fees.



Montgomery County operates a dual-stream recycling program (i.e., mixed paper items are collected separately from commingled materials). Recyclable materials in dual-stream recycling programs are generally more valuable than materials collected together in single-stream recycling programs. This is due to less contamination, which allows these materials to be recycled into higher quality new recycled products. The sales of the high-quality commingled materials processed at the Montgomery County Shady Grove Processing Facility and Transfer Station consistently generate revenue to partially cover the Recycling Center's operating costs.

Beyond saving money through increased recycling, waste reduction initiatives can help reduce costs as well. Preventing waste, reusing items, and donating gently-used working items to non-profit organizations help eliminate the volume of waste generated and reduce overall disposal costs. The more you reuse, the less you throw out.

B. Recycling Conserves Natural Resources

Recycling also helps us use our natural resources more efficiently. Using recycled materials in place of virgin feed stocks in manufacturing saves materials, water, energy, and reduces pollution.

Did you know...

- The energy saved by recycling one aluminum can will power a television for three hours. Also, manufacturing aluminum cans with recycled aluminum uses 95 percent less energy than manufacturing an aluminum can using virgin ore.
- Recycling one ton (2,000 pounds) of paper saves 17 trees.
- Plastic is made from natural gas or petroleum—recycling it conserves these non-renewable energy resources!
- The typical glass container is made up of as much as 70 percent recycled glass.
- Glass and metals such as steel and aluminum never wear out—they can be manufactured into new products as many times as they are recycled.



Recycled glass being made into new glass bottles.

III RECYCLABLE MATERIALS

A. Required Recyclable Materials

Montgomery County Executive Regulation 15-04AM mandates that five categories of materials must be recycled—**mixed paper, commingled materials, scrap metal, yard trim, and Christmas trees**. All multi-family properties in Montgomery County are required to provide collection service and storage space (containers) for the recycling of these materials. These five groups of materials are defined in detail below.

Mixed paper is defined as “acceptable paper items which are not separated by type, but are mingled and collected together.” This includes the following types of paper:

- Cardboard boxes (old corrugated cardboard or OCC)
- White and colored office paper
- Construction paper
- Newspapers and inserts
- Magazines and catalogs
- Unwanted mail (including envelopes with plastic windows)
- Receipts
- Paperboard such as cereal boxes (remove liner), paper towel and toilet tissue rolls, and snack food and toothpaste boxes
- Shredded paper
- Hardback books, paperback books, and telephone books
- Coated paper items such as milk and juice cartons, frozen food boxes, ice cream containers, empty paper beverage cups, and juice and drink boxes
- All other clean and dry paper

The following items should not be recycled with mixed paper:

- Paper contaminated with paint, chemicals, or kitty litter
- Food-contaminated paper, such as take-out containers and pizza boxes
- Napkins, tissues, or paper towels
- Foil gift wrap
- Plastic bags (Plastic bags can be recycled at most local grocery stores.)



Examples of Recyclable Mixed Paper



Food-contaminated pizza boxes cannot be recycled. If the lid is clean and free of food and grease, however, tear off the lid and recycle it with other mixed paper.



*Examples of
Commingled Materials*

Commingled materials are defined as “acceptable items... which are not separated by type, but are mixed together in one container.” Acceptable commingled materials include:

- Aluminum cans and foil products (soft drink and beer cans, aluminum foil, and foil cookware such as pie plates, lasagna pans, and foil TV dinner trays)
- Bi-metal steel/tin cans and lids (juice, sardine, soup, vegetable, and pet food cans)
- Empty non-hazardous aerosol cans (cooking oil spray, deodorant, hair spray, and shaving cream aerosol cans)
- Glass bottles and jars (soft drink, beer, juice, and wine bottles; spaghetti sauce, mayonnaise, and pickle jars)
- Plastic bottles, containers, jars, tubs, lids, caps, pails, buckets, flower pots, and durable reusable containers (e.g., Tupperware and Rubbermaid®-type containers)
- #1 PET packaging including clamshells, trays, lids, domes, deli containers, cups, caps, and lids

The following items should not be recycled with commingled materials:

- Mirror or window glass
- Drinking glasses, cups, plates, or cookware
- Ceramics or light bulbs
- Household metal items such as pots, pans, or furniture (Recycle these items separately as scrap metal)
- Automotive parts
- Automotive product containers (such as motor oil, antifreeze, or brake fluid)
- Pesticide containers
- Plastic wrap or bags (Plastic bags can be recycled at most local grocery stores)
- Styrofoam™/polystyrene products (#6 plastics)

Bulky Rigid Plastics

Bulky rigid plastics are items such as plastic clothes hangers; plastic toys; plastic furniture or shelving; garbage cans and waste baskets; laundry baskets; large buckets or containers (5 gallons or larger); and plastic utensils, bowls, or plates. Some collectors will take these items with your commingled materials or provide separate containers for these items. Speak to your collector to determine if they offer this service. Otherwise, these materials can be taken to the Montgomery County Shady Grove Processing Facility and Transfer Station for recycling.



Examples of Scrap Metal Items

Scrap metal consists of any metal item or item that is predominantly metal. Examples of scrap metal items include:

- Household items such as irons, pots, pans, lamps, and wire clothes hangers
- Metal toys
- Appliances such as refrigerators/freezers, washers/dryers, humidifiers, air conditioners, and toasters
- Metal bed frames
- Metal cabinets and furniture
- Metal fencing
- Metal tools and pipes
- Other items that are more than 50 percent metal by weight

The following items should not be recycled with scrap metal:

- Oxygen or propane tanks
- Other pressurized tanks/containers
- Full paint cans

Multi-family properties not only generate large scrap metal items such as appliances, metal furniture, bicycles, and construction materials from renovation projects, but also smaller metal items such as wire clothes hangers, bed frames, broken ironing boards, old pots and pans, lamps, toasters, and other small appliances. While residents may generate scrap metal on a less frequent basis than mixed paper or commingled materials, the same requirements for providing convenient and available recycling storage space apply.

An effective multi-family scrap metal recycling program will include well-labeled scrap metal recycling containers for smaller scrap metal items (e.g., pots, lamps, wire clothes hangers, toasters) located wherever mixed paper and commingled material recycling containers are located, as well as a designated scrap metal recycling collection/storage area for larger metal items. In addition to scrap metal generated by your residents, ensure that any contract for construction or renovation work on your property includes requirements for the contractor to recycle scrap metal.

Scrap metal collection containers need to be large enough to accommodate small metal items, such as toasters, pots, or irons, so some of the recycling bins typically used for mixed paper recycling and commingled materials may not be appropriate for scrap metal recycling collection.

Clearly label your scrap metal recycling collection containers and provide adequate signage in the collection areas. In addition,



Scrap Metal being recycled at a multi-family property

provide information to your residents about how and where to recycle scrap metal at your property. At some properties, small trash rooms make placement of scrap metal recycling containers difficult. If scrap metal recycling containers are not available at all recycling collection sites, post notices at those sites informing residents where to take their scrap metal for recycling (i.e., your designated scrap metal recycling collection/storage area).

For larger metal items such as appliances, bed frames, metal furniture, and bicycles, a container is not necessary as long as you designate a separate collection and storage area. This area should be separate from bulk trash storage areas and easily accessible by residents at all times. This area could be a storage room or a designated space on a loading dock.

Scrap metal scavenging is an increasing problem in Montgomery County. Ensure that your scrap metal collection areas are secure and monitor them frequently. If you have containers in unmonitored outdoor areas, consider locking or chaining your containers to prevent theft.

Working with your recycling collection service provider, establish a convenient collection schedule based on the volume of material generated and your available storage capacity (e.g., twice a month, once a month, every other month, on-call). Some properties have maintenance staff who empty the smaller containers located throughout the property into a larger container in the storage area to reduce collection frequency. Others contract with companies that provide regular collection service for scrap metal recycling.

You also have the option of self-hauling your scrap metal to a scrap metal recycling facility. The Montgomery County Shady Grove Processing Facility and Transfer Station, located at 16101 Frederick Road in Derwood, Maryland, accepts scrap metal for recycling at no charge. Other facilities in the area may pay you directly for the scrap metal you bring to them. For a list of these locations, visit www.montgomerycountymd.gov/recycling.

Be sure to maintain records of how much scrap metal you recycle to include on your Annual Multi-Family Recycling and Waste Reduction Report.

Yard trim consists of leaves, grass, garden trimmings, and brush.

If you generate small quantities of leaves and plant trimmings, consider composting these materials on site. Composting is a simple, natural, and easy method for “recycling” yard trim materials. Place yard trim materials in a compost bin as they are generated. Over time, these organic materials break down and turn into a nutrient-rich compost that can be used as a soil amendment in garden beds or lawns. The County offers compost bins to Montgomery County residents and multi-family properties. These bins are designed to accommodate yard trim generated by the average single-family home, but they also are ideal for use in resident community gardens. To find a convenient location to pick



Examples of yard trim



Get a compost bin for resident community gardens

up a compost bin, visit www.montgomerycountymd.gov/yardtrim and click on the “Compost Bin” bullet. There are numerous compost bin pick-up locations throughout the county. (See Appendix C for the list of pick-up locations.)

For properties that generate large volumes of yard trim, onsite composting may not be possible. The same is true for properties with limited outdoor space, and some properties simply choose not to manage their yard trim on site. These properties will likely contract with a landscape contractor to maintain their properties. When contracting with a landscape service, ensure that they are properly managing your yard trim material (i.e., composting it).

Grasscycling (leaving grass clippings on the lawn after mowing) is the most environmentally friendly and economically preferred way to recycle your grass clippings. It is also the easiest—you literally have to do nothing, “just mow and go!” In just a few days, the clippings biodegrade, releasing valuable nutrients into the soil. Proper grasscycling reduces the need to purchase and apply commercial fertilizers and reduces the need for watering. If your property uses a landscaping service to mow your grass, request that they grasscycle. As long as you have your lawns mowed regularly—at least once per week during the growing season—you likely will not even notice the clippings.



Grasscycle—Just mow and go!

Regardless of whether you compost your yard trim materials on site or have your lawn care service provider compost it elsewhere, be sure to include the amount of materials composted on your annual recycling report. Your landscape service provider should be able to give you these tonnages. Even if you do not know the tonnage, but have an estimate on the cubic yards of materials composted, report it. The County has conversion factors to determine the weight of material composted. The same is true for the amount of grass clippings grasscycled. All you need to do is indicate on your annual report that your property grasscycles and the acreage or square footage of your grassy areas, and we will convert that to an annual tonnage for you. (See Appendix D for a link to the TRRAC Recycling/Trash Weight Calculator tool.)

Christmas trees include live trees from residential units and common spaces. All ornaments, lights, and tinsel should be removed before recycling.



Compost live Christmas trees after the holiday season

If residents are permitted to have live Christmas trees, wreaths, or garlands at your property, you are required to make arrangements for collection after the holiday. Obviously, you do not need to provide a Christmas tree recycling container year-round. Most properties provide either a designated container (e.g., roll-off container) or area for residents to place their Christmas trees and schedule specific collection times in January. Be sure to notify your residents about the location(s) and collection schedule so residents know where and when to bring their Christmas trees.

To make Christmas tree recycling arrangements, contact your solid



Examples of additional types of recyclable materials

waste/recycling collector or landscaping contractor to see if they offer this service. Another option is to self-haul your residents' Christmas trees to the Montgomery County Shady Grove Processing Facility and Transfer Station where they will be mulched.

Keep records of the total pounds or number of Christmas trees collected and recycled, and to where they were taken so you can complete your Annual Recycling and Waste Reduction Report. If you contract for this service, your collector should be able to provide you with this information.

B. Additional Recyclable Materials

In addition to the materials required to be recycled in Montgomery County, there are many more types of materials that also can be recycled. Recycling as many other materials as possible can help reduce your solid waste disposal costs and reduce your properties environmental impact.

Many multi-family residential properties in Montgomery County voluntarily recycle additional materials. Some examples of the materials currently being recycled include:

- Antifreeze and motor oil
- Automobile and boat batteries
- Automotive tires
- Bulky rigid plastics (see text box on page 8 for examples)
- Carpet and carpet padding
- Clothing, textiles, and shoes
- Computers and computer-related equipment, televisions, and other electronic items (either through electronic recycling services or through retail electronics recycling take-back programs)
- Construction and demolition materials, such as concrete, asphalt, and brick
- Cooking oil
- Fluorescent lights and compact fluorescent light bulbs
- Food scraps
- Pallets
- Plastic bags and shrink wrap
- Propane and helium tanks
- Printer/toner cartridges
- Rechargeable batteries

- Usable construction and building materials
- Confidential paper/document destruction

Many organizations offer donation and reuse opportunities for materials such as furniture, clothing, books, appliances, plumbing and electrical fixtures, and construction materials.

The County's Shady Grove Processing Facility and Transfer Station, located at 16101 Frederick Road in Derwood, is a great resource for you and your residents, where many materials can be brought for recycling. The facility hours of operation are:

Monday – Friday: 7:00 a.m. – 8:00 p.m.

Saturday: 7:00 a.m. – 5:00 p.m.

Sunday: 9:00 a.m. – 5:00 p.m.

For more information, visit:

www.montgomerycountymd.gov/recycling

C. Construction and Demolition Materials

Reuse and recycling is an important part of any remodeling or construction project. Construction and demolition (C&D) materials generated during these projects include appliances, cabinets, carpeting, lighting, metals, cardboard, mantels, flooring, windows, doors, drywall, concrete, brick, asphalt, and treated and untreated wood. These materials typically are generated in large quantities and are bulky and heavy. Fortunately, many of these materials are reusable or recyclable.

Salvaged and deconstructed C&D materials are often reusable as is. If you don't have a use for these materials, consider donating them to a charitable organization or a reuse center. The County's "Don't Dump. Donate!" Program, a collaborative effort between DSWS and The Loading Dock (www.loadingdock.org) and other reuse organizations, offers builders the opportunity to donate usable building materials by dropping them off at the County's Shady Grove Processing Facility and Transfer Station. Habitat for Humanity's ReStore (habitat-mc.org) and Community Forklift (www.communityforklift.com) are two more organizations in the area that accept reusable building materials donations. You also can use the County's Use It Again website (www.montgomerycountymd.gov/useitagain) to find organizations that accept donations. Donating or reusing building materials reduces disposal costs, reduces demand for new materials, and assists people in need.

When undertaking projects that will generate C&D materials, plan ahead and consider the following:

- Identify the mandatory items that must be recycled (e.g., cardboard, scrap metal), and establish a plan to separate these items from the rest of the debris.

- Identify materials that can be reused or donated, such as toilets, sinks, bricks, doors, windows, flooring, lumber, and kitchen cabinets, and look for organizations that are interested in these materials.
- Identify other types of materials that can be recycled by construction and demolition recycling companies; these materials include asphalt shingles, wood, wood pallets, bricks, drywall, concrete, and glass.
- Research collection companies to arrange recycling collection services and work with them to determine the size and number of containers and a collection schedule that best fits your needs. The Metropolitan Washington Council of Governments produced the *Builders' Guide to Reuse & Recycling: A Directory for Construction and Demolition Materials in the Metropolitan Washington Region*, which is available at www.mwcog.org/buildersrecyclingguide. This resource lists many C&D reuse and recycling companies in the metropolitan region.
- Ensure that all containers are properly labeled to indicate the appropriate material to be placed inside and prevent contamination.
- Require contractors and subcontractors to participate in your recycling program. Include specific salvage/reuse or recycling guidelines in their contracts.
- Allow time for deconstruction and salvage. Remove salvageable items before demolishing part or all of a building. Windows, doors, wood flooring, bricks, cabinets, and architectural details such as mantels and molding are among the most valuable building materials.
- Document your reuse and recycling efforts and include it on your annual recycling report.

D. Household Hazardous Waste

Household hazardous waste (HHW) is discarded materials that contain corrosive, toxic, ignitable, or reactive ingredients. Common examples include mercury-containing thermometers and thermostats, oil-based paints, cleaners and solvents, motor oil, lead-acid and rechargeable batteries, and pesticides. These materials contain potentially hazardous ingredients and require special care when you dispose of them to prevent polluting the environment and posing a threat to human health.

The HHW drop-off area at the Shady Grove Processing Facility and Transfer Station offers multi-family property residents an easy option for safely disposing of their HHW. Multi-family properties can enroll in the County's ECOWISE Program which enables businesses and multi-family properties that generate small quantities of hazardous waste to dispose of them in an environmentally



responsible manner at a fraction of the cost of direct contracting with a private hazardous waste management firm. To learn more and register for this program, visit www.montgomerycountymd.gov/hazardouswaste and click on "Ecowise."

Common examples of HHW materials include:

- Fluorescent light bulbs and tubes (several retail stores also accept compact fluorescent light bulbs from customers for recycling-visit www.montgomerycountymd.gov/recycling and click the "How do I recycle/dispose..." button)
- Oil-based paint
- Paint thinners and solvents
- Lithium, lithium-ion, and nickel-cadmium (rechargeable) batteries (some retail locations offer customers the opportunity to recycle their rechargeable batteries)
- Lead acid (car/boat) batteries
- Mercury thermometers and thermostats
- Pesticides (e.g., insecticides, herbicides, fungicides)
- Photographic chemicals
- Used motor oil
- Brake fluid and antifreeze
- Unwanted fuels such as gasoline and other flammable liquids

Where possible, limit the amount of HHW your property generates by reducing the use of these products or by seeking non-hazardous alternatives. See Chapter IX Reuse and Waste Reduction for more information on waste reduction strategies and non-hazardous alternatives.

E. Plastic Bags

It is important to note that plastic bags are not accepted at some recycling facilities, including the Montgomery County Recycling Center. At recycling facilities without debagging machines, workers are forced to tear open plastic bags in an attempt to remove the recyclable materials inside. Unfortunately, even with these efforts, some recyclable materials may get thrown out with the bag. Plastic bags also can get caught in and damage the recycling processing equipment and conveyor belt systems. For these reasons, it is best to encourage residents to remove all plastic bags from their recyclable materials, even the bags used to carry recyclable materials to the collection containers.

Plastic bags also can create problems at your property. Black or other non-transparent bags filled with recyclable materials can



Examples of common household hazardous waste



Keep plastic bags out of recycling bins

easily be mistaken for trash bags, and be thrown out with the trash. These bags also can mislead other residents into thinking that the recycling containers have been contaminated with trash and discourage proper recycling.

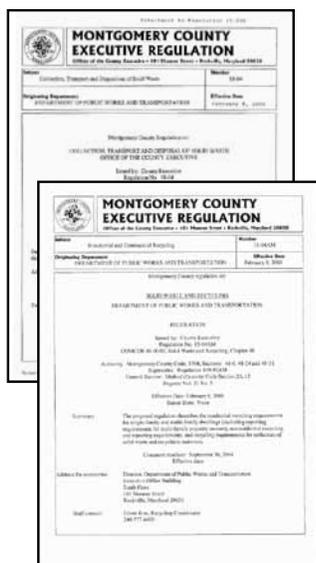
F. Contamination

Contamination can cause significant disruptions to your collection schedule. Collection companies are required to notify a customer if containers for recycling are contaminated with trash or if excessive amounts of recyclable materials are placed in the trash. Collectors and multi-family properties are subject to fines at County disposal facilities if they dispose of recyclable materials as trash, or if they dispose of trash as recycling. Consequently, collectors may refuse collection of a trash container that has a significant quantity of recyclable material in it. In fact, they are required to not collect the material. If recycling containers are contaminated with trash, collectors may be unable to accept these as well. Fines assessed on collectors may be passed back to the property. The easiest way to avoid contamination is with well labeled containers and ensuring that your residents are aware of your recycling program.

IV CONTAINERS

Responsibility to Provide Containers

Chapter 48 of Montgomery County Code and Executive Regulation 15-04AM (see box below) both state that it is the responsibility of the multi-family property, not its residents, to develop and implement a recycling program. This means that arranging for collection service and providing all of the necessary recycling and trash containers is the responsibility of property owners, property managers, and/or condominium boards and associations. Residents should not be required to purchase their own recycling containers.



To view and download copies of the Montgomery County solid waste and recycling regulations, visit www.montgomerycountymd.gov/recycling and click on the "Executive Regulations" link under "Codes and Regulations."

Chapter 48 Montgomery County Code

Sec. 48-24 Storage and removal

§48-24 (b) Responsibility of owners and occupants

§48-24 (b)(2) It shall be the responsibility of the owner and/or resident manager and not the occupants of multifamily residential dwellings to provide a sufficient number of approved containers for the storage of solid waste to prevent overflow between times of collection and to maintain the premises in accordance with the standards of this chapter. ... these items [recyclables] shall be stored in such a manner that these kinds of solid waste materials can be collected and disposed of separate and apart from other types of solid waste.

ER 15-04AM Residential and Commercial Recycling

Section 3(b)(7) Property Owner of Multi-Family Properties

Property owners of multi-family entities must make recycling collection service and storage space for recyclable solid waste available to tenants in compliance with these regulations and Section 48-24 of the Montgomery County Code.

Container Standards and Requirements

ER 15-04AM and Chapter 48 do not prescribe detailed technical container specifications. Rather, these regulations simply state that all solid waste containers must be waterproof, vermin-proof, non-corrodible, and come with tight-fitting lids. Properties also must provide enough containers of sufficient size to handle the volume of waste and recyclables generated to prevent the overflow of materials on the ground. There are many types and styles of containers available that meet these requirements. You can work with your collection company to obtain central collection containers appropriate for your property. County staff also can provide assistance in reviewing your options.

Recycling containers must be placed everywhere trash and recyclables are generated...



Lobbies



Business Centers



Kitchens



Fitness Centers

ER 15-04AM Residential and Commercial Recycling

Section 3(b)(6) Containers

Containers for all required recyclable materials in adequate sizes and quantities must be placed in each location where trash containers are located, and must be clearly labeled to indicate the appropriate material(s) to be placed inside for recycling. All containers must be located within reasonable and convenient proximity to all dwelling units, and to any offices, clubhouses, recreation facilities, and other uses on-site. In addition, wherever vending machines dispensing products in recyclable packaging are located, recycling containers for those materials must be located in close and convenient proximity.

Chapter 48, Sec. 48-24 Storage and removal

§48-24 (c) Container standards

All containers for the storage of solid waste, except bins for the storage of bulky rubbish, shall be vermin-proof and waterproof, of noncorrodible metal or similar material, and shall be equipped with tight-fitting lids at all times.

Recycling Container Placement

In addition, ER 15-04AM requires properties to place recycling containers in every location where trash containers are located as well as everywhere recyclable materials are generated. This includes trash rooms and central collection areas, but also applies to common space areas such as:

- Foyers and lobbies
- Parking garages
- Mail rooms
- Laundry rooms
- Pools
- Community rooms, libraries, and business centers
- Fitness centers
- Picnic areas, gazebos, walkways, and playgrounds
- Areas with vending machines
- Leasing and management offices
- Conference rooms
- Staff kitchen and break areas
- Maintenance shops



Collection areas located within a 300-foot "walking" distance of dwelling units.



Collection areas on each floor.

"Reasonable and convenient proximity"

While ER 15-04AM clearly states that "all containers must be located within reasonable and convenient proximity to all dwelling units...", exactly what "reasonable and convenient proximity" means is not defined. This allows for flexibility depending upon the design of the property. DSWS conducted a study to determine the optimal distance between common-area recycling collection containers and individual multi-family dwelling units for maximizing resident participation. This study showed that, in general, the shorter the distance between central collection areas and individual units (i.e., the greater the "convenience"), the higher the recycling rates. It also showed a correlation between the number of buildings or dwelling units being served by a collection area and recycling rates, with the properties having fewer buildings or units serviced per recycling area having higher recycling rates.

Based upon this study and our observations, experiences, and conversations with residents, DSWS developed the following convenience standards to provide guidance on "reasonable and convenient proximity."

For garden-style multi-family properties:

- A common recycling collection area should be located within a 300-foot "walking" distance (as measured on the ground using the path pedestrians will take) of every dwelling unit. Each collection area must include containers for mixed paper and cardboard, commingled materials, and scrap metal. To reduce contamination of recycling containers, refuse containers must be located next to recycling containers.
- A single common recycling collection area should serve no more than four buildings.
- A single common recycling collection area should serve no more than fifty dwelling units.

For high-rise multi-family properties:

- Recycling collection containers should be located on every residential floor.

Container Labeling

ER 15-04AM requires all recycling containers to be "clearly labeled to indicate the appropriate material(s) to be placed inside for recycling." Clearly labeling and differentiating trash, commingled materials, mixed paper, and scrap metal recycling containers is crucial to ensuring materials are placed in the correct container which reduces the potential for contamination. Unmarked or poorly labeled containers create confusion leading to a guessing game for residents and feelings of frustration.

You need to label every container, including those used for trash, specifying which materials can be placed in each container. DSWS offers and provides a comprehensive selection of labels and posters



TRRAC "Yes" labels

specifically designed to meet the container labeling requirements. This includes our "Yes" and "No" labels. "Yes" labels show residents which materials can be recycled in that bin. "No" labels remind residents which materials should not be placed in containers and are yet another tool to encourage positive disposal behavior and prevent contamination. Examples of "No" labels include, "No Trash," "No Recyclables," and "No Plastic Bags."

You also can create your own labels. If designing your own labels and signs, be sure that they are large and easy to read. Labels and signs that include photographs and/or illustrations are helpful, as are ones that are multilingual to accommodate your community's diversity. Several multi-family properties have designed highly effective labels for their containers. One example is provided in the sidebar.

Label the lids, the insides of lids, and the fronts, backs, and sides of containers to make sure labels are visible regardless of how or where the containers are placed in the collection area.

Posters can provide more detailed information than labels and illustrate which materials can be recycled. If placed above the appropriate container, residents can look at the poster to determine quickly where to place their materials. In dark or poorly-lit spaces, posters may be easier to see than labels. Just make sure the correct container is consistently placed in front of the appropriate poster! (And the containers are labeled!)



Recycling/Trash Room sign at the Blairs

Another effective strategy for distinguishing between the containers for the different types of recyclable materials and trash is to use different colored containers and/or lids. If all trash and recycling containers are the same color, it can be confusing for residents to determine what goes where. Different colored containers can help residents associate each color with its particular material (just be consistent!). For example, use green containers for commingled materials (the County commingled materials label is green), blue containers for mixed paper and cardboard (the County mixed paper label is blue), and another color, such as black or brown, for trash. Properties sometimes use grey containers for scrap metal recycling. If your collector only offers two colors, use one color for trash and the other for recycling. If using different colors for the containers is not possible, consider using different colors for the lids as a possible alternative.

Screened from View

Chapter 48 further requires that all solid waste containers and collection areas located outdoors must be screened from view of any residential unit at street level, including neighboring residential units. Frequently, recycling and trash collection areas are screened with wooden or brick enclosures. Some properties successfully screen their collection areas using bushes and other landscaping. It is also important to ensure that the collection areas are well-lit for safety and to encourage recycling.



Central collection areas must be screened from view at ground level and be well-maintained.

Chapter 48, Sec. 48-24 Storage and removal

§48-24 (b)(4) The owner of [a] multifamily residential property must screen from view at street level any solid waste container or solid waste storage area on the property if the container or storage area can be seen from the street level of any residential unit on the property or the street level of any other residential property.

Container and Collection Area Maintenance

Once you have selected your recycling and trash containers and located them in “reasonable and convenient proximity” to residential units and buildings, you need to ensure they are accessible and properly maintained. Chapter 48 requires that residents have access to recycling and disposal areas at all times. Chapter 48 also requires trash room and central collection area doors be closed and all dumpster lids and trash chute doors be closed while not in use. There are both safety and sanitary reasons for this. Keeping dumpster lids and trash chute doors closed helps control odors and keep vermin out. The main safety issue is to prevent children from climbing into dumpsters or open trash chutes, thinking that they might be places to hide.

You also must periodically clean containers and storage area floors to remove any waste residue. Trash rooms, trash and recycling storage areas, and loading docks also need to be kept clean and free of trash and debris. This includes any trash and recyclable material overflow from full containers. Allowing trash or recyclables to collect on the ground is a violation and may result in a citation.

Chapter 48, Sec. 48-24 Storage and removal

§48-24 (d) Maintenance standards

(1) All containers or local disposal systems shall be accessible to the users at all times.

(3) Doors to solid waste storage rooms, chute doors, lids to hoist containers and lids to all other solid waste containers shall be in place and shall be kept closed when not in actual use.

(4) Containers and storage area surfaces shall be washed periodically so that no encrusted waste material is evident upon inspection.

(5) Interior storage rooms, unloading platforms or aprons, and other solid waste storage areas of buildings shall be kept clean, free of litter and solid waste overflow, free of vermin, and well ventilated.

Collection Frequency

Container size and collection frequency are integrally connected to one another. Larger containers generally require less frequent collection than smaller containers when servicing similar volumes of materials. For example, a two cubic yard mixed paper dumpster may only need to be emptied once a week, whereas two 96-gallon wheeled carts servicing the same area would need to be emptied two to three times per week. At a minimum, your trash is required to be collected at least once a week to minimize odors, per Chapter 48. Highly putrescible waste, such as seafood, however, must be collected daily.

In determining the optimal collection frequency for your containers, you also need to consider resident habits and solid waste generation patterns. If residents tend to generate more recyclable materials and trash on weekends—a common trend—scheduling collection days on a Thursday or Friday (to create space for the volume of materials generated during the upcoming weekend) and on a Monday (to empty the containers after the weekend) may be wise. Monitor your containers, and if you notice specific days where containers are consistently full (before overflowing!), make those the collection days. Waste generation also fluctuates throughout the year, peaking especially around holidays. Schedule extra collection days in advance of these periods to avoid significant overflows. Finally, if you increase the frequency of your recycling collection, monitor your trash containers to see if you can reduce trash capacity. Also consider including language in your service contract to allow on-call collections if containers fill to capacity before the regular collection day.

Chapter 48

Sec. 48-24 Storage and removal

§48-24 (e) Removal schedule

(1) The frequency of collection of garbage shall be at least once a week or of such greater frequency as is necessary to keep all solid waste in the proper containers without producing overflow or objectionable odors.

**ER 15-04AM
Section 3(6)(8)(A)**

(8) Collectors
Servicing Multi-Family
Entities

(A) Collectors must collect and deliver to a recycling facility materials that have been source separated from the solid waste stream, unless the recyclable materials are not acceptable. If a collector determines that the recyclable materials are not acceptable then the collector must inform the generator or responsible agent in writing using a form designated by the County, keep a copy on file, and send a copy to the County. The collector must indicate the name of the property, name of the responsible agent notified, date, time, address, the nature of the problem and suggested remedy and specify a collector contact name and phone number for additional information.

V RECYCLING & WASTE COLLECTION SERVICE

A. Who is responsible for providing collection service?

Montgomery County does not provide refuse or recycling collection services to multi-family properties. Multi-family properties have the choice of either contracting with licensed solid waste collectors for collection service, or self-hauling their materials to private recycling facilities or to the Montgomery County Shady Grove Processing Facility and Transfer Station located in Derwood.

If you contract with a private collector, ER 15-04AM Section 3(b)(9) (A) requires that you use a currently licensed collection company to collect and transport your property's recyclable solid waste. There are numerous licensed collection companies to choose from in Montgomery County.

It is important to know (per Executive Regulation 15-04AM) that collectors and haulers must deliver collected recyclable materials only to a recycling facility and trash only to a solid waste disposal facility (see the sidebar). When negotiating for collection service, be sure to ask where your recyclables and trash will be taken to ensure these requirements are being met.

Solid waste collectors also are subject to another regulation—Montgomery County ER 18-04—which covers the collection, transportation, and disposition of solid waste. ER 18-04 bans the disposal of required recyclable materials as solid waste at County disposal facilities and requires collectors to deliver recyclable materials to a recycling facility. This regulation defines requirements and responsibilities for collection companies that contract with multi-family properties in Montgomery County for collection of recyclable materials.

B. Selecting a Collection Service Provider

If you already contract with a recycling collection company, or plan to in the future, seek competitive bids regularly and continually monitor your program and evaluate the level of service you receive. Many collection companies offer both recycling and refuse collection services. There are, however, variations in the types of services they offer and the facilities to which they take the materials. Most collectors provide the central containers they service. It is important to note that the different collection companies use different types of equipment, which may limit your container options for your central collection areas. For example, some companies only use wheeled carts for trash and recyclable materials, others only use dumpsters, and still others use both types of containers as well as compactors. Speak with several collectors to discuss options and offered services to find the best set up for your property and staff.

There also can be significant differences in levels of service. Examples include whether a collection company will pick up



Multi-family properties must contract for collection services, or self-haul their recyclable materials and refuse to an appropriate recycling or disposal facility.

materials on the ground around containers, service containers that are required to be carried up or down stairs, repair or replace damaged or defective containers, and handle bulk trash pickups.

There also are differences in the tipping fees charged by the different disposal facilities to which companies bring trash and recyclable materials, and the amount of money they offer for recyclable materials. These factors impact the rates collectors charge.

It is important to compare multiple collection service providers to find the one that best meets your needs, provides convenient recycling service for your residents, and offers service at a competitive cost. The following are variables to consider as you evaluate collection companies and service types:

- Larger containers versus more frequent collection – increasing container size is typically less expensive than adding collection days.
- Leased versus purchased containers – this will determine who is responsible for maintaining containers, including replacing lids and fixing broken containers.
- Indoor or outdoor collection.
- Length of service contract – long-term contract may offer better rates, but lock you into an extended commitment.
- Flexibility in changing service in response to changes in waste generation:
 - o Increasing collection capacity of recyclable materials.
 - o Decreasing collection capacity of trash.
 - o Changing/modifying the collection schedule as needed.
- Customer service:
 - o Replacing lost or damaged lids and containers.
 - o Labeling containers.
 - o Collecting material that is outside appropriate containers.
 - o Timely response to extra pick-up requests.
 - o Assisting with completing the property's annual recycling and waste reduction report.

To help you determine which recycling collection company to select, you may want to ask some of the following questions when comparing providers:

- Are you licensed in Montgomery County to provide collection services? (Collection companies must be licensed to collect recyclable solid waste in the County.)

- What types of recyclable materials do you collect?
- Will you help me determine the appropriate number and size of central recycling collection containers and the placement of these containers? Will you suggest a collection schedule that fits my property's needs?
- What types and sizes of collection containers do you offer? Are you able to offer containers that differ in color for the different types of material collected?
- Do you provide "scheduled" or "on call" pickups?
- What are your procedures for special collections during peak waste generation periods, such as holidays, if necessary?
- To which facility do you take recyclable materials? Are there other recycling facilities to which you can take my material that will lower my costs or result in revenue? (You can request that the service provider take your recyclable materials to the Montgomery County Shady Grove Processing Facility and Transfer Station which does not charge tipping fees for residentially-generated recyclable materials.)
- What is the allowable level of contamination?
- How will I be notified if the recyclables are too contaminated?
- Will you maintain the central recycling collection containers, making sure they have functional lids and are properly labeled?
- What is the term of the contract (e.g., one year, two years, etc.)? How is the contract impacted by necessary changes in service such as increasing or decreasing container sizes or adding or removing collection days?
- Can you provide monthly or yearly tonnage reports for each type of recyclable material collected to support my data needs for completing the annual recycling report?

C. Negotiating a Service Contract

When researching your collection service options, ask collection companies to visit your property to survey your current waste generation and collection methods before giving you an estimate. A Montgomery County TRRAC recycling education specialist is available to attend these meetings as well, offering insights based on previous visits to your property and tips to maximize recycling and ensure compliance with the County's recycling and solid waste regulations. If you or your management company manage multiple properties in Montgomery County or the surrounding area, investigate including all properties on one contract to increase your buying power and lower costs. Once you select a collector, stipulate contract language that will help you maintain high quality, timely, and cost-effective service.

When negotiating a solid waste and recycling collection contract, consider including specific contract language that requires the collector to:

- Deliver clearly and appropriately labeled containers to your property.
- Notify the property manager or representative of issues regarding overflowing, under-utilized, or missing containers.
- Provide itemized invoices that identify container capacity per material type and collection frequency and that separate monthly charges for trash and recycling collection service. These details will help you determine how to reduce costs and maximize recycling.
- Provide data no later than a specified date (e.g., January 15) to assist with filing your property's annual recycling report by the annual February 1st filing deadline.
- Specify and adhere to a specific collection time frame.
- Specify and adhere to a time frame for changing containers to address capacity needs.
- Specify requirements for repositioning containers after they are emptied (e.g., placing containers entirely in the enclosure, placing containers in front of the appropriate posters on the walls with labels facing out).
- Specify and adhere to a container repair time frame.
- Collect spilled or intentionally-placed materials on the ground surrounding central collection containers.
- Provide collection company points of contact.
- Specify end of contract procedures, such as how quickly the collector will remove containers once service is terminated.

If you change collectors at any point, work with both companies to achieve a smooth transition in service. This primarily consists of coordinating old container removal and new container delivery to coincide as closely as possible to avoid interruption in services.

D. Monitor Collection Service

Once you have selected a collection service provider and service has begun, regularly monitor your central collection areas and containers to ensure that the arranged service is meeting your property's needs. For example, if you find that certain containers are consistently full or close to overflowing on collection day, you might need to increase the size or number of containers or increase collection frequency. Conversely, if containers are consistently half-full, you may be able to reduce collection frequency or obtain smaller containers, which will save your property money. Also, be sure to look in your trash containers for recyclable materials.

Consistent placement of recyclable materials in trash could mean your residents and/or staff require further education on how to recycle. It also could mean that you lack sufficient recycling container capacity and residents are being forced to put their recyclable materials into the trash. Trash and recyclable materials on the floor or ground of trash rooms and collection areas is another sign that you have capacity issues.

When evaluating your collection service, some questions to ask include:

- Do your containers for recyclable materials and trash have too much or too little capacity? (i.e., are they always half empty or overflowing?).
- Is your collection schedule adequate for both recycling and trash?
- Are containers for recyclable materials routinely contaminated with trash?
- Are recyclable materials routinely being placed in trash containers?
- Would additional signage help reduce contamination?
- Is your collector responsive to your needs?

It also is important to confirm that you are receiving the level of service for which you are paying. Check your contract to make sure you have the proper number and types of containers on site and that they are being serviced at the frequency indicated. Monitoring your service also helps ensure you have a clean, well-operating recycling program, and can help you avoid complaints, problems, and even fines.

E. Self-Haul Materials to Recycling/Disposal Facilities

The alternative to contracting with a refuse and/or recycling collection service provider is self-hauling your trash or recyclable materials to the appropriate recycling and solid waste disposal facilities. There are no tipping fees for recyclable materials self-hauled to the County's Shady Grove Processing Facility and Transfer Station (except yard trim loads greater than 500 pounds). Also, many of the voluntary materials, such as electronics, textiles, used motor oil, and propane and helium tanks, do not have tipping fees either. Another option is to take your materials to private recycling facilities that may pay for your materials.

Tips for successful self-hauling:

- Take all necessary health and safety precautions.
- Establish a regular collection schedule.
- Make sure you have an appropriate vehicle and loading equipment if the recycling containers are heavy.

- Keep records of how frequently and how much material you self-haul to assist with completing and filing your annual recycling report. Obtain scale house tickets/weight slips that indicate the amount of materials self-hauled.
- Obtain a collector's license if needed. (See Chapter 48, Sections 48-19 to 48-30, of the Montgomery County Code.)

F. Record Keeping

ER 15-04AM Section 3(b)(5) requires multi-family properties to keep copies of any contracts and invoices for the collection and disposition of materials recycled for the most recent five year period. This documentation must be made available upon request by the County for inspection and copying during normal business hours. For properties self-hauling, this would include scale house receipts and invoices from the recycling and disposal facilities to which your materials are delivered.

TRRAC Annual Recycling and Waste Reduction Report

VI ANNUAL MULTI-FAMILY RECYCLING AND WASTE REDUCTION REPORT

ER 15-04 Section 3(b)(3)(C) requires every multi-family property in Montgomery County to submit an Annual Multi-Family Recycling and Waste Reduction Report to the Division of Solid Waste Services (DSWS) by February 1 each year. This report covers all solid waste and recycling activities for the previous calendar year (e.g., the annual report submitted on February 1, 2015 would cover the activities from January 1 through December 31, 2014). The County uses these reports to measure the success of our recycling initiatives and monitor compliance with the recycling regulations. The report documents your property's recycling and trash tonnages, staff and resident education activities, and waste reduction efforts for the previous calendar year.

To reduce paper usage and mailing costs, we urge all properties to file online using our annual recycling report tool. By filing online, you will not only save paper, but you will receive instant notification that your report was submitted to the County, and you will be able to easily track your progress from year-to-year.



File your property's annual recycling report online to save time, paper, and postage!

To file online, visit www.montgomerycountymd.gov/recycling and click on the "at your apartment/condo" tab, then select "file your Annual Recycling Report." If this is your first time filing online, you will need to create a new user account. If you already have an existing account, you can log in, access tools that will help you complete your report, and file your report. When you file online again in future years, you will be able to view your previous year reports and track your property's recycling achievements. *If you submit your annual report using the online annual report tool, you do not need to fax or mail a hard copy to DSWS.*

Paper report forms also are available for download by visiting www.montgomerycountymd.gov/recycling, clicking on "at your apartment/condo" tab. Mail your completed report to the address listed on the form, or fax it to 240-777-6465 to the attention of the TRRAC Program. Keep a copy of the report for your records.

Appendix B includes a copy of the annual report form and detailed filing instructions. A User's Guide for online filing is available at www.montgomerycountymd.gov/recycling.

After DSWS receives and reviews your annual report, our Recycling Education Specialists will conduct a field verification to ensure accuracy. Every annual report submitted to DSWS is field verified. Based upon the field verification results, we then calculate the recycling rate for each property. These final approved recycling rates are then sent to each property.



Education is critical to the success of any program. Use posters, labels, door hangers, and events to educate your staff and residents about the recycling program at your property.

VII DEVELOPING A SUCCESSFUL MULTI-FAMILY RECYCLING & WASTE REDUCTION PROGRAM

Whether you are starting a new recycling program, maintaining and/or improving an existing program, or taking over an existing recycling program as the new management company, a few simple steps will ensure the success of your program. Wherever you find yourself in this process, please know that Montgomery County's Think Reduce and Recycle at Apartments and Condominiums (TRRAC) team always is available to assist you.

A. Evaluate Your Current Program

Given what you currently know about your property's solid waste, recycling, and waste reduction program, how would you answer the questions below?

- How well do your residents know about your recycling program?
- What recycling and reuse information is included in your move-in package for new residents?
- Do prospective residents hear about your recycling and waste reduction program as part of the property rental/sales proposal?
- How do your solid waste collection areas look? Are they generally clean and well-maintained?
- What is in your recycling containers? Are they filled primarily with the correct recyclable materials, or are they filled with trash?
- How frequently are your recycling and trash containers collected?
- Do the trash and/or recycling containers overflow regularly?
- Are all containers—for both recycling and trash— clearly labeled?
- Is it just as easy to recycle as it is to throw trash away at your property?
- Do you have recycling containers next to every trash container? (including in foyers, mail rooms, pool areas, etc.)
- Do you notice many recyclable materials in the trash containers?
- What do residents do with their unwanted bulk trash items?
- Where can your residents place their scrap metal items for recycling?

- Do you know how your trash and recycling invoices are structured? Are the recycling collection costs separate from the trash collection costs?
- Did you have recycling containers at your last community event?
- Are there apartment-sized recycling bins in each residential unit and do your residents know how to obtain additional recycling bins?
- When was the last time your residents received some form of recycling education?
- When was the last time your staff received some form of recycling education?
- Do you know what your recycling rate is? Is it increasing from year to year?

Your answers to these questions, even if you answered “I do not know,” should help you pinpoint potential areas of improvement in your recycling and waste reduction program. The next steps will help you address those areas. Revisit these questions regularly to evaluate program advancement.

B. Start at the Top

Whether you are a resident, property maintenance staff, the onsite property manager, or the offsite regional manager, you need to know your recycling and waste reduction program exists in a supportive environment. No program is successful without commitment from management. If property maintenance staff carefully maintains container labels but does not feel comfortable letting property management know additional capacity is necessary, the recycling program will not be successful. If residents see property staff throwing recyclable materials in the trash, they may doubt the value of the recycling program and stop recycling. If the property management staff requests changes to the recycling contract, but the regional office is resistant because it is not aware of the longer term economic and environmental benefits, the program may become ineffective.

If your property management company is unaware of the benefits of recycling, you will need to educate them. As your recycling program evolves, having top management on your side will help with making contract changes and setting workplace priorities for staff.

Some examples of commitment that residents will identify:

- Recycling bins visible and in-use in the property leasing and management offices.
- Recycling posters displayed in offices.



Juan Gonzalez, previous Housekeeping Supervisor at Grosvenor Park I Condominium, proudly maintained an excellent recycling program and shared his experiences with other properties.

- Recycling containers set out at community-sponsored events.
- Unique property-specific recycling signage.
- Regular recycling reminders and encouragement.
- Well-maintained collection areas with sufficient capacity.

Some examples of commitment that staff will identify:

- Regular training on your recycling and waste reduction program.
- Job descriptions that outline recycling responsibilities.
- Recycling bins in staff-only areas.
- Guidelines to use when answering resident recycling questions.

The important thing is for **EVERYONE** to know that recycling is an important part of a property's community culture.

C. Designate a Recycling Coordinator

As with any important undertaking, you will need someone to take the lead and act as the recycling coordinator for the recycling and waste reduction program at your property. It is likely that someone on the property staff or one (or more) of your residents is passionate about the environment and would be interested in taking on this responsibility. Some multi-family properties, for example, have a leasing specialist, the head of housekeeping, or the assistant property manager as their recycling coordinator, while others rely solely upon resident volunteers.

Recycling Coordinator responsibilities may include:

- Selecting and interfacing with recycling collection companies.
- Organizing, monitoring, and maintaining the collection areas.
- Engaging staff and residents, including scheduling educational trainings and events, adding recycling/waste reduction information to move-in packages, and creating signs and notices.
- Contacting DSWS for resources and/or assistance.
- Tracking the progress of the recycling program and reporting to management.
- Tracking and maintaining waste and recycling data to file the Annual Multi-Family Recycling and Waste Reduction Report.

Many properties with successful recycling programs have recycling or green teams, or one or more resident recycling advocates. Green teams offer residents a great opportunity to meet like-minded people and to personally contribute to bettering their



"Grandpa Chris" Christenson, a resident recycling team leader at Eton Place Condominium, ensures his neighbors are aware of the property's recycling program.

immediate environment. These individuals may be willing to assist staff by monitoring containers, updating labels and posters, setting up events, and posting notices. At properties without onsite management offices, they might be the onsite contacts for storage and distribution of information and apartment-sized recycling bins to residents. If residents see their neighbors caring for the collection areas or trash rooms, they might be more likely to dispose of their materials properly or get involved, too.



"Baby blue" recycling bins for residents

D. Establish a Convenient Collection System

To ensure your residents are recycling properly, you need to make it convenient and simple for them. To do this you need to provide residents with simple to understand and easy to use recycling options. A 70 percent recycling rate (or greater!) is achievable at multi-family properties, but only if your recycling collection system is properly designed and implemented.

In Unit Recycling Bins

If residents find it convenient to store recyclables at home, they will be more likely to participate in your recycling program. Montgomery County conducted a study and follow-up resident survey on the impact of in-unit recycling containers on multi-family recycling participation. The survey confirmed that many residents find it easier to recycle, and recycle more, when they have an in-unit recycling container. This was particularly true at garden-style properties with outdoor collection areas, where residents typically have the farthest to walk to recycle. The study also documented increased recycling rates in these units as a result of the added convenience of in-unit recycling containers. Based upon the results of this study and survey, along with DSWS staff observations and discussions with multi-family property managers and residents, DSWS highly recommends distributing in-unit recycling containers or bins to each household. Also be sure residents know how to obtain additional recycling bins.



Keep a visible supply of "baby blue" recycling bins on site to remind residents of their availability.

The TRRAC program offers and delivers small, 6-gallon, blue apartment-sized recycling bins, or "baby blues," to multi-family properties. These bins are sized to fit underneath kitchen sinks or in storage closets. Many properties give these bins to new residents as part of their move-in package or place them (with recycling guidelines) in apartments before new residents move in. DSWS recommends keeping an onsite supply and letting residents know you have them by keeping a small and visible stack in the lobby or management office, posting a notice, or including reminders in newsletters. Also, let residents know that the bins are provided by the management and must be returned if the resident moves. Some management companies have established a deposit system for the recycling bins. To order bins from DSWS, visit www.montgomerycountymd.gov/recycling, or call 240-777-6446.

An additional option to consider is incorporating space for mixed paper and commingled materials recycling containers into your

The most frequent complaint DSWS receives from multi-family residents is overflowing recycling containers and the lack of space to recycle the required materials.



dwelling units when designing new buildings or during renovations. During a recent renovation of a high-rise multi-family property in Silver Spring, the developer incorporated a pull-out cabinet in the kitchen that had separate spaces for mixed paper, commingled materials, and trash. The key is to make recycling convenient for all of your residents.

Trash Rooms and Collection Areas

In addition to providing apartment-sized recycling bins, how you design and where you locate your central collection areas can increase recycling ease and convenience for your residents. There is a large variety in the styles of multi-family properties in Montgomery County including garden-style, mid-rise, and high-rise properties. Not surprisingly, collection areas vary greatly across all these property types. The crucial thing for every property is to make recycling collection areas as convenient as possible. The farther residents have to travel to the recycling collection areas, the less likely they are to recycle. The more collection areas you have, the more convenient recycling is for residents, and the greater your flexibility is in dealing with unanticipated overflows and weather-related complications at individual collection sites. See "Section IV Containers" for guidance on central collection area placement and Montgomery County's convenience standards.

In many older properties built before recycling was required in Montgomery County, trash rooms are very small. It can be difficult to fit all of the necessary recycling and trash containers in these spaces. Some multi-family properties remedy this situation by placing small containers for mixed paper, commingled materials, and trash that are emptied by staff daily to prevent overflow problems. Signs are posted instructing residents to take their scrap metal to designated central containers or scrap metal collection areas. If you are facing severe space constraints, contact us and we can help devise an acceptable solution that meets the County's recycling requirements.

If you are designing new or renovated trash rooms or central collection areas, be sure that they are large enough to accommodate an adequate number and size of recycling and trash collection containers to manage your recyclable materials and trash to prevent overflow. Build in additional space for containers you may use during peak generation times such as holidays or times of year with high occupancy turnover rates. To maximize your flexibility and minimize the need to re-build collection sites in the future, anticipate future changes in resident waste generation and incorporate additional space that will allow you to increase the number and/or size of collection containers if necessary.

All of your property's collection areas do not need to be the same size or same configuration. Collection areas that serve more units should be larger than other sites that serve fewer units and site-specific space constraints might require a different layout or different size and style of containers. The important thing is to

Examples of Container Options



23-Gallon "Slim Jim"



50-Gallon "Brute"



64-gallon Wheeled Cart



8-Cubic Yard Dumpster



40-Cubic Yard Roll-off

make sure all of your sites are convenient for residents and provide adequate recycling options.

Central Recycling Containers

Recycling collection containers come in all shapes and sizes. Containers commonly used at multi-family properties include cans, wheeled carts, dumpsters, roll-off containers, and compactors. The type of container you use at your property will depend on the size of your property, the size of your collection areas, the locations of your collection areas, and your collector's equipment.

When selecting recycling containers for your trash rooms, choose the largest size containers that will fit the space. If your space only accommodates small containers, empty them as frequently as possible, and post a notice above the containers identifying alternate locations where residents can place larger amounts of recyclable materials (i.e., the central collection area). Providing instructions on who to contact if containers are full or overflowing will keep your residents happy and your collection areas clean.

Properties with outside central collection areas typically use dumpsters or wheeled carts for recyclable materials and trash. Carts work well for commingled materials, but DSWS recommends at least a 2-cubic yard dumpster for mixed paper to accommodate cardboard boxes. Again, space limitations and collection area configurations can often dictate which options are possible. Properties with collection areas located indoors also can use dumpsters and wheeled carts, but low ceilings and tight loading areas might preclude collection trucks from being able to lift and tip dumpsters or navigate in small spaces. At some properties, dumpsters and carts located indoors need to be wheeled outside to be emptied.

All of these factors need to be considered and discussed with your collection company when determining which containers to use. As a general rule-of-thumb, use the largest containers possible in your collection areas to ensure adequate capacity and prevent overflow between collections.

When recycling programs were first implemented at many multi-family properties, a common approach was to add two small wheeled carts for recycling to a collection area that already held a large trash dumpster. This arrangement does not accommodate all of the recyclable materials generated by residents, and leads to overflowing recycling containers, recyclable materials placed in trash containers, and frustrated residents who are unable to recycle. Table 4-1 below demonstrates how such an arrangement results in a poor recycling rate.



Using an 8-cubic yard dumpster for trash and 2 90-gallon wheeled carts for recycling does not provide adequate recycling capacity for most properties.

Table 4-1 Example Recycling Rate

(Excluding scrap metal, yard trim, and Christmas tree recycling)

Trash	Commingled Materials	Mixed Paper	Average Recycling Rate*
8-cubic yard dumpster, serviced 3 times per week	90-gallon wheeled cart, serviced 1 time per week	90-gallon wheeled cart, serviced 1 time per week	4.9%
Average Annual Weight: 174,720 lbs	Average Annual Weight: 2,912 lbs	Average Annual Weight: 5,564 lbs	

In addition to overflow and contamination issues, properties with insufficient recycling capacity are missing out on potential cost reduction opportunities. If you see that your recycling containers are frequently full or overflowing, or that there are a lot of recyclable materials in your trash, increase your property's recycling capacity either through larger containers or more frequent collection. Assuming your total waste generation (i.e., total recycling plus trash) remains constant, increasing your recycling capacity should lead to an increase in the volume of materials recycled and a corresponding reduction in the volume of trash disposed. This is because materials previously placed in the trash are now being recycled. This should allow you to reduce your trash container capacity or decrease your collection frequency and possibly save on disposal costs as recycling collection and processing costs generally are less than trash collection and disposal costs. Revisiting our previous example, Table 4-2 demonstrates that increasing the size of recycling containers and collection frequency yields a significant increase in the overall recycling rate, with no significant change to overall total solid waste collection capacity.



Replacing 90-gallon wheeled carts with 2-cubic yard dumpsters, can increase your property's recycling rate and possibly reduce your needed trash capacity.

Table 4-2 Effect of Increasing Recycling Capacity

(Excluding scrap metal, yard trim, and Christmas tree recycling)

	Trash	Commingled Materials	Mixed Paper	Average Recycling Rate*	Total Capacity
Before	8-cubic yard dumpster, serviced 3 times per week	90-gallon wheeled cart, serviced 1 time per week	90-gallon wheeled cart, serviced 1 time per week	4.9%	25 cubic yards
After	4-cubic yard dumpster, serviced 3 times per week	2-cubic yard dumpster, serviced 2 times per week	4-cubic yard dumpster, serviced 2 times per week	58.3%	24 cubic yards



Mixed Paper Recycling
Dumpster with Paper
Slot

Mixed Paper Recycling: Dumpsters versus Wheeled Carts

Many multi-family properties are switching from wheeled carts to dumpsters for their mixed paper and cardboard recycling. Due to their size and shape, dumpsters are inherently better suited for cardboard recycling than 64- and 96-gallon wheeled carts which can be filled by a single cardboard box if not broken down completely. For this reason, DSWS highly recommends using 2-cubic yard or larger-sized dumpsters for mixed paper and cardboard recycling.

A two-cubic yard dumpster has a footprint only slightly larger than two 96-gallon wheeled carts, but it has twice the capacity. Depending on the number of residents served at a collection area and the collection frequency, a four-, six-, or 8-cubic yard recycling dumpster may be needed.

Some multi-family properties collect their cardboard separately from their mixed paper. This is an acceptable practice, as long as both mixed paper and cardboard recycling containers are present at all collection areas. Some properties with multiple collection areas have tried to designate a single dumpster for cardboard recycling at only one site for the entire property. Mixed paper recycling containers are placed at the other collection sites with instructions to take cardboard to the designated dumpster. This typically yields poor results as some staff and residents are unwilling or unable to walk the extra distance to the cardboard recycling container (or forget it even exists) and simply place their cardboard in with the mixed paper, on the floor next to the containers, or even in the trash. To avoid this, make sure adequately sized recycling containers are placed at each collection area for all recyclable materials.

When switching from carts to dumpsters for recycling, be conscious of the possibility that your residents may not be used to thinking of dumpsters as containers for recycling. This may involve a mental shift and re-education for everyone involved. Advance notices informing residents about the coming improvement, as well as ample labeling, signage, and other efforts to differentiate the containers can help you minimize contamination during the transition period.

Properties that have made this switch have been surprised by the positive resident response to increased recycling capacity. In many cases, more paper and cardboard get recycled, necessitating the need to further increase the recycling container size or collection frequency, and allowing them to decrease trash capacity.

E. Train Office and Maintenance Staff

Even the best designed and maintained recycling program will not succeed if it is not supported by property staff. Your staff will be the first people residents approach with recycling questions. This includes the leasing agent who markets your recycling program to potential residents, the maintenance and grounds staff whom residents see and interact with daily, concierges and/or front desk staff, and management office staff. Not only do they need to know what to tell your residents, they need to know how to recycle themselves. Some of your staff may not live in Montgomery County, or they may live in a single-family home with different requirements and may not be familiar with the County's multi-family recycling requirements.

Recycling requires individuals to change long-established habits and to make an effort to do things differently. Hopefully, most employees will be enthusiastic about recycling, and possibly some will become your recycling champions. At a high-rise apartment in Bethesda, it was the housekeeping supervisor who was enthusiastic about recycling. He made and placed in the lobby recycling displays to educate residents, monitored the impact of the displays on resident recycling activities, and attended an evening meeting at another property on his personal time to discuss what it takes to have a great recycling program. An obvious commitment from management and a positive and supportive approach to staff awareness and education will help your program excel.

All staff should know:

- About the property's trash and recycling collection areas and where they are located.
- What materials can and cannot be recycled.
- Where residents can take larger recyclable items at your property (e.g., large scrap metal items).
- Where apartment recycling bins for your residents are stored and how to request more from DSWS.
- Resources for residents to recycle other materials.
- What your recycling rate is and what the County's recycling goal is (70 percent by 2020).

Suggestions for staff education:

- Include information about your recycling and waste reduction program in your new staff orientation program and routine staff meetings.
- Create a recycling reference for staff, and have it accessible at front desks and in management offices. Include information about your collection contractors, County contacts, extra labels and posters, nearby reuse donation



The Promenade Towers Green Team sponsors annual Earth Day events and maintains signage in the trash/recycling rooms.

organizations, the most recent recycling brochure, and a fact sheet covering the specifics of your program.

- Schedule regular staff trainings on recycling (at least twice per year); TRRAC Recycling Education Specialists can assist with this, answering questions and reviewing the basics. DSWS also can assist with bilingual training as needed.
- Encourage staff attendance at multi-family recycling seminars and webinars conducted periodically by Montgomery County.
- Train rental agents and reception and office staff to field questions from residents regarding your recycling and waste reduction program.

F. Provide Recycling Education to Your Residents

After you have developed your recycling program and trained your staff, the next step is to educate your residents. Similar to staff, new residents may be entirely unfamiliar with recycling or how recycling works in Montgomery County, and few will know how it works at your property. Start the education process immediately by providing recycling information and an apartment-sized recycling bin as part of your move-in package, and continue educating residents at every opportunity with property newsletters, listserv and bulletin board announcements, posters and flyers, and special events.

You may be lucky enough to have residents that are recycling enthusiasts and are willing to help you educate their neighbors. Take advantage of this and put these advocates to work to help improve your program.

Take every opportunity to educate your residents. The most successful multi-family recycling programs include frequent resident recycling education and awareness activities. These activities not only improve recycling achievement, but also help create a stronger sense of community. Examples of common education opportunities include:

- Incorporating recycling information and discussion of your property's recycling program into prospective resident property tours and lease signings.
- Including recycling information and apartment-sized recycling bins with move-in packages.
- Providing move-out packages with guidance on recycling and waste reduction/donation options for unwanted items.
- Labeling containers and providing informative signage at all collection areas.
- Posting notices reminding residents about recycling in elevators, at mail boxes, on bulletin boards, and in other

common areas.

- Showcasing apartment-sized recycling bins at the front desk or in management offices and letting residents know they are available.
- Utilizing community websites, newsletters, and social media outlets to make announcements and promote recycling at your property.
- Holding or sponsoring educational events, such as Earth Day in April or America Recycles Day in November.

Regardless of the form of your educational activities, the following tips will increase their effectiveness:

- Use messages that are simple, accurate, and consistent.
- Stress why, what, where, and how to recycle.
- Provide feedback on recycling achievement and challenges, including your recycling rate and common contamination problems.
- Encourage resident feedback.

How well do you know your residents? Assess resident knowledge and interest to identify obstacles to overcome and find recycling enthusiasts who can help with your program. Here are some questions to ask to help get a better understanding of your residents and their needs and preferences.

- How knowledgeable are your residents on recycling? If your residents are already very knowledgeable, discuss with them ways to increase recycling and other opportunities to reduce waste. If they are less knowledgeable about recycling, explain what recycling is and how to recycle at your property.
- Do your residents primarily speak languages other than English? Will information in languages other than English or that rely on pictures reach a broader segment of your community?
- What are the age demographics of your residents? Do any of your residents have any special needs? Knowing this will help you design your program to accommodate their needs. For example, signage and labels with larger print or waist-level containers with easy-to-open lids.
- Are your residents aware that your property has a recycling program? Speak with residents to identify new ways of communicating and conveying information about your program. Not everyone has easy access to a computer or the Internet, so electronic notices may not reach all of your residents. Ask these residents how they would like to receive information.

Highlight: Reaching out in Other Languages

University Gardens Housing Manager, Ms. Gina Oak, requested the County's assistance with a recycling presentation for her residents, most of whom speak Korean. A TRRAC Recycling Education Specialist made the presentation with Mr. Jean Toh (a County volunteer) translating into Korean. The residents learned about recycling, asked questions, and offered input on how to improve the property's recycling program. After the presentation, each resident received an apartment-sized recycling bin.

Ms. Oak was enthusiastic about the outcome. "It was very successful and the first of its kind [using a Korean translator at her property]. I can definitely tell that our recycling bins are overflowing now! I would recommend it not only to other multi-family homes but to anyone that wants to better their recycling efforts."

Resident response was so great that Ms. Oak had to increase the property's recycling capacity. She then noticed the trash container was not filling up, so she eliminated a collection day from her trash collection service, lowering her property's waste disposal costs!

- Who are the enthusiasts and community leaders at your property? Are they interested in forming a green team to help reduce the community's environmental footprint? Green teams work with property staff to implement, monitor and maintain recycling programs. Green teams can help lighten property staff workload by taking on roles and responsibilities previously assumed by staff.

One way to get to know your residents and understand their recycling knowledge, is to send a short recycling survey to each unit at regular intervals (e.g., once a year). Ask for feedback and suggestions on ways to improve your current recycling program. Use the results to find ways to improve your program and design new educational activities. This also shows residents that you are listening to their feedback and taking steps to incorporate and address their ideas and concerns.

There are numerous ways to reach out to and educate residents about your recycling program. DSWS recommends performing some form of education at least every six months. Provided below are some examples of educational activities. Be creative, taking into consideration all you have learned about your residents' needs and preferences.

- Distribute recycling and waste reduction brochures and magnets. The County has educational materials such as brochures (in several languages), magnets, and door hangers designed for this purpose. Contact DSWS to get as many as you need.
- Distribute a short letter of endorsement for your recycling program from the tenants' or owners' association and top management to all residents.
- Conduct recycling and waste reduction awareness events for all residents (see sidebar).
- Provide notices with details on scrap metal and Christmas tree recycling.
- Write recycling or waste reduction articles for your property newsletter.
- Place recycling trivia questions of the day or quizzes (with prizes) in your property newsletter or in your elevators, laundry rooms, or other public areas.
- Create temporary recycling displays in your lobby or other common area highlighting which types of materials residents should and should not recycle.
- Host recycling competitions (between floors or buildings). Residents could volunteer to monitor achievement.
- Post charts of recycling participation progress at your property.



TRRAC Recycling specialists are available to assist you providing detailed recommendations to increase recycling achievement at your property.

- Schedule a tour of the County’s Recycling Center, for you, your staff, and residents. See what happens to your recyclable materials once they leave your property. Schedule a tour of the Recycling Center by calling the Recycling Center at (301) 417-1433.

Property management company websites and resident portals are other excellent sources of information for residents. Many multi-family properties’ websites include information on their recycling programs and links to the County’s online resources.

Basic information to post on your website or portal includes:

- A description of your recycling program, including a list of acceptable recyclables materials; the locations of recycling and trash containers; and instructions on handling large, bulky, and other unusual items.
- Information on any extra recycling or waste reduction programs you offer, such as recycling collection for rechargeable batteries or plastic bags, regularly scheduled clothing and household good donation events, or confidential paper shredding/recycling days.
- A link to Montgomery County’s *How to Recycle at Multi-Family Properties in Montgomery County* video that explains how, why, and what to recycle at multi-family properties in Montgomery County. This 14-minute video introduces the County’s recycling goal and requirements to residents new to the County or to apartment/condominium living (www.youtube.com/mcrecycles).
- A link to the Montgomery County “how to recycle/dispose of...” Web page, that provides helpful information regarding how to recycle or dispose of just about everything people can think of! (www.montgomerycountymd.gov/recycling).
- A link to Montgomery County’s “Use It Again” database. In three easy steps, residents can search for opportunities to get the most out of used items by either renting, repairing, donating or selling them (www.montgomerycountymd.gov/useitagain).

G. Monitor, Maintain, and Adjust Your Program

The effectiveness of any recycling and waste reduction program will decline over time without regular monitoring, maintenance, and adjustments to address changes in waste generation. Whether you are on site or off site, establish a regular schedule of monitoring your program that involves onsite staff and residents as much as possible. Residents are more likely to dispose of their materials properly at a well-maintained collection area than at an area in disrepair with overflowing and/or contaminated containers.

Recycling and trash collection areas need to be monitored regularly to ensure they are clean, with no material accumulating on the



Montgomery County offers many resources to help your recycling and waste reduction program excel. Many materials are translated into other languages.

ground. You should also check that containers are clearly and properly labeled and replace any deteriorating or missing labels. If you notice broken or damaged containers, immediately report this to your collection company. Also, alert your collector if any containers are missing.

You also should look for contamination, such as recyclable materials inappropriately placed in trash containers, or trash placed in recycling containers. If you consistently observe contamination, educate your residents to address this issue.

Other things to monitor include:

- Fullness of trash, mixed paper, commingled materials, and scrap metal recycling containers. This will help determine if collection service frequency or the size of container(s) need to be adjusted.
- Placement of recycling containers in all common areas where recyclable materials are generated. Again, observe how full these containers are to determine if they are the appropriate size.

If maintenance staff conducts the monitoring and maintenance, encourage feedback and reporting to property management. Maintenance staff may be wary of reporting issues if they feel it will reflect poorly on their performance.

Of course, all this monitoring will be for naught if you don't make the necessary adjustments to correct any problems or issues you observe. Work with your collector to address issues concerning container size, overflow, and collection frequency. Work with your staff and residents to address contamination issues. County Recycling Education Specialists are trained to assist you with this. Contact DSWS at 240-777-6446, if you need assistance.

H. Use County Resources

The Montgomery County Division of Solid Waste Services' TRRAC team is available to assist multi-family property residents, owners, and management with their recycling and waste reduction programs. DSWS Recycling Education Specialists work daily with multi-family properties and have a wealth of information and have many best practices to share. Services and materials available to assist multi-family properties maximize their recycling efforts include:

- Onsite consultations and technical assistance to help you design and implement your recycling and solid waste programs specific to your property. An experienced TRRAC team member will help you assess your current waste stream, recommend sufficient recycling containers and collection service, develop plans for ongoing communication with staff and residents about your recycling and waste reduction programs, resolve site-specific challenges, and



TRRAC Posters are ideal for trash rooms and central collection areas.



Baby blue recycling bins make recycling easier for residents. Contact DSWS to arrange for delivery of these recycling bins to your property.



Multi-family properties and individuals are recognized at the Annual Recycling Achievement Recognition Program.

identify ways to enhance your programs. A TRRAC team member also can meet with you and your collector to discuss site-specific challenges and opportunities.

- Participation in community and property events and training, including those that occur in the evenings or on weekends. Event types include pool parties, community festivals, staff training, condominium board meetings, and informational lobby displays or recycling presentations. Bilingual staff and/or volunteers are available to participate in these activities. Recycling awareness events educate residents on how to recycle and why it's important, but they also strengthen your resident community and give people opportunities to meet their neighbors.
- Educational materials are available in several languages and can be requested by calling 240-777-6446 or via the DSWS website (www.montgomerycountymd.gov/recycling). Click on the "at your apartment/condo" tab and look for the links to order blue bins and other materials. Available items include:
 - o Multi-lingual labels for recycling and solid waste collection containers.
 - o Bilingual recycling posters for collection areas (English and Spanish).
 - o Recycling brochures for residents (available in Amharic, English, Farsi, French, Japanese, Korean, Mandarin, Russian, Spanish, and Vietnamese).
 - o Bilingual magnets for residents (English and Spanish).
 - o Videos to motivate residents to recycle and explain how to do so (available in English and Spanish).
- In-unit recycling containers for residents. Six-gallon, "baby-blue" recycling containers are ideally sized for in unit use and storage and have a handle for easy carrying to collection areas.
- Common area and trash room recycling containers. DSWS provides several different shapes and sizes of containers that fit different needs and space constraints.
- Property-specific notices and letters developed through collaboration with property representatives at your request.
- Educational seminars that provide ongoing education for multi-family property representatives on how to implement, maintain, and improve recycling and waste reduction programs and purchase recycled-content items. Learn from a variety of guest speakers, and interact with other property representatives to share ways to resolve recycling challenges and learn from each other's experiences.

- Information on the DSWS website. Learn more about the types of materials that can be recycled and where facilities are located in Montgomery County (www.montgomerycountymd.gov/recycling).

I. The Payoff: Montgomery County Annual Recycling Achievement Awards

If you have taken all of the steps outlined above, then you should be well on your way to having a successful multi-family recycling and waste reduction program at your property.

Each year Montgomery County recognizes a limited number of award-winning multi-family properties and individuals at the Recycling Achievement Recognition Ceremony as part of Montgomery County Recycling Awareness Week. Multi-family awards are presented to properties, management companies, and individuals that contributed to excellent recycling programs or made significant improvements to their recycling programs. Recipients typically demonstrate commitment to maintaining and improving recycling programs, increasing resident awareness and participation, and employing creative approaches to boost their recycling and waste reduction programs. The recipients are featured in press releases, on the County website, and in newsletters. Award winning properties also display their awards and discuss their achievements in property newsletters and marketing materials.



VIII COMPLIANCE AND ENFORCEMENT

DSWS offers many resources to help multi-family properties comply with MONTgomery County's recycling and solid waste regulations. This includes recycling education specialists who will perform onsite assessments, offering property-unique compliance recommendations, and providing outreach and education services to ensure both your residents and staff are aware of your property's recycling program and efforts. When properties are not in compliance with the County's recycling and solid waste regulations, the Division of Solid Waste Services Recycling Investigations, Compliance, and Enforcement Unit enforces the County's regulations and addresses violations directly with the properties.

A. Investigation Process

When DSWS receives a trash or recycling-related complaint about a multi-family property, a Multi-Family Recycling Investigator will visit the property to investigate and assess the situation. Depending upon the severity of the issue, the Recycling Investigator may issue a verbal warning, a Notice of Violation (NOV), or a citation. Verbal warning and NOV's give the property a specified amount of time to rectify the problem and come into compliance with the solid waste and recycling regulations. Citations are compliance orders with a fine attached. The amount of the fine can increase if the property does not come into compliance. The Recycling Investigator retains the right to issue citations immediately if a violation is a matter of public health and safety.

- Verbal Warnings – not written, but need to be taken seriously. Often given to first time offenders or where violations are not severe or can quickly be remedied.
- Notice of Violation (NOV) – official written warning notice.
- Citations – official written compliance order with a mandatory fine that must be paid or a court appearance is required. Failure to comply can lead to increased fines plus payment of the associated Court costs.

B. Fines

Failure to comply with the solid waste regulations found in Chapter 48 of the Montgomery County Code is a Class A violation of Montgomery County Code. Class A violations are subject to fines of \$500 for the initial violation and fines of \$750 per day for subsequent violations.

Failure to comply with the recycling regulations found in Executive Regulation 15-04AM is a Class B violation. Class B violations are subject to fines of \$100 for the initial violation and fines of \$150 per day for subsequent violations.

If a property fails to pay its fines and come into compliance, a summons to appear in Court will be issued. This may result in an

Class A (Chapter 48) Initial fine \$500; \$750 per day for subsequent offenses
Class B (ER 15-04AM) Initial fine \$100; \$150 per day for subsequent offenses

abatement order, which is a judge's order to comply. Compliance is ultimately required, even if a fine is paid. Failure to comply with an abatement order will lead to a Show Cause Order which expedites a contempt of court hearing and can lead to jail time if the property still refuses to comply.



Provide reusable bags to your residents. Customize with your property logo and recycling program information.

IX REUSE AND WASTE REDUCTION

In the solid waste management hierarchy, RECYCLE comes after REDUCE and REUSE. "REDUCE" refers to preventing the generation of waste by buying less, using reusable materials (such as reusable shopping bags), purchasing products with minimal packaging, maintaining and repairing products, and borrowing or renting items that are used infrequently. If waste is prevented, there is no need (or cost) for trash and recycling collection, processing, and disposal. "REUSE" refers to efforts to use something in as many ways as possible before recycling or disposing of it. This includes passing items on to others who will find new uses for them.

A comprehensive resource for you and your residents is the County's on-line Use It Again database, available at: www.montgomerycountymd.gov/useitagain. This database provides information on local organizations that pick up or accept materials in working condition, repair items, or offer items to rent instead of purchase.

To reduce waste at your property, the first step is to conduct an informal consumption and waste audit. What are you buying but not using? What items might you be able to buy in bulk to reduce packaging (and cost)? What do you see in your trash? What happens to construction and demolition project materials? (See the "Construction and Demolition Materials" section that starts on page 13.)

Here are some of the waste reduction activities reported by multi-family properties in Montgomery County:

- Online portals for paying rent and requesting maintenance service.
- Resident e-mail lists for announcements and updates.
- Double-sided printing, and reuse of unwanted faxes and one-sided print jobs.
- Reusable mugs in leasing offices.
- Office and cleaning supplies purchased in bulk.
- Property-customized reusable bags for residents.
- Reuse of boxes, packing peanuts, and bubble wrap to ship packages.
- Property donations:
 - Usable air conditioners, furniture, and building supplies to non-profit organizations.
 - Usable equipment to schools.
 - Craft/office supply items to schools or senior centers.



Organize used clothing donation events for residents.



Set up a book swap library to share unwanted books.

Try implementing some of these, or come up with other activities that fit your property's needs and operations. Whatever waste reduction activities you implement, be sure to include them in your annual recycling and waste reduction report. We want to hear about what you are doing.

Property managers can support resident reuse and waste reduction efforts through a number of onsite activities. A few examples of such activities reported by other multi-family properties in Montgomery County include:

- Onsite libraries of unwanted books.
- Onsite closets for resident drop-offs (unclaimed material delivered monthly to charitable organizations).
- Charitable donation drives throughout the year.
- Resident/community yard sales.
- Move-out guidance on how to contact charitable organizations for pick-up of usable furniture and other household goods.
- Offers to new residents of furniture left behind by past residents.
- Use of property listservs, bulletin boards, chat rooms,...etc., to list unwanted items for sale, trade, or giveaway.

You can encourage waste reduction by providing your residents with lists of organizations that accept or pick up items for recycling or donations. This is also an opportunity to reduce bulk trash at your property by encouraging options other than disposal for large items, such as furniture.

Be creative in finding new ways to reduce waste and reuse. Your residents and staff may have good ideas as well.



Look for the "made with recycled-content" symbol when making purchases.

X BUYING RECYCLED PRODUCTS — CLOSE THE LOOP

Recycling works because people buy products that are made from recycled materials. By purchasing a product made with recycled content, you are ensuring a demand for goods made from recycled materials, creating and sustaining jobs, and conserving natural resources for future generations. The manufacture of products from recycled materials reduces our dependence on virgin raw materials and often uses less energy than the same processes using virgin materials. It also can reduce air and water pollution.

The recycled product manufacturing industry continues to grow due to an ever-increasing supply of recyclable materials and demand for recycled-content products. As demand has grown, the variety of these products has expanded, while the cost to consumers has declined. The following are examples of materials that are made with recycled content. The next time you need to purchase these items, consider buying recycled.

Office supply products

- Furniture
- Office supplies (bulletin boards, calendars, folders, letter openers, note holders and trays, pens, pencils, push pins, rulers, scissors)
- Packaging material
- Printing and writing papers
- Recycled toner cartridges
- Tissue and towel products
- Trash can liners
- Trash and recycling containers

Building materials

- Building insulation
- Carpet
- Cement and concrete containing fly ash
- Flooring
- Plastic partitions, decking, fences/posts, parking stops, and drain pipes
- Shower dividers/toilet partitions/wall panels, sinks, and counter tops
- Wallboard

- Alternative lumber products such as benches, picnic tables, and playground equipment
- Asphalt (rubberized asphalt/glassphalt)
- Compost/mulch

Vehicle fleets

- Auto parts
- Recycled antifreeze
- Re-refined motor oil
- Retread tires
- Solvents

Other products

- Absorbents
- Reusable bags
- Food service containers (paper and plastic)
- Mats (plastic and rubber)

Recycled-content products are widely available. You may be purchasing these products without even knowing it. Others may require a conscious choice on your part. Look for the recycled-content symbol. This symbol indicates the product is made from recycled materials. Seek out products made with the highest percentage of post-consumer recycled-content, which is the material collected and recycled by recycling programs.

If you are unfamiliar with your options, shop around, starting with your regular vendors and branching out to other vendors and specialty markets. While in the past it was true some recycled products were inferior to products made from new materials, increased demand and major changes in technology have resulted in improved products that are competitive in quality with virgin goods. These same innovations and demand for recycled products have significantly reduced costs to the point where many recycled-content products already are less expensive than their virgin counterparts. Comparison shopping, bulk purchasing, competitive bidding processes, and calculating the life-cycle cost of a product are the best ways to manage costs. Look around for vendors that are willing to help you find the products you want.

Close the recycling loop—buy recycled!

Appendix A

Compost Bin Pick-up Locations

Bethesda

Bethesda Green
4825 Cordell Avenue, Suite 200
Bethesda, MD 20814
240-396-2440

Davis Library
6400 Democracy Boulevard
Bethesda, MD 20817
240-777-0922; TTY: 301-897-2203

Whole Foods Market - Bethesda
5269 River Road
Bethesda, MD 20816
301-984-4860
Visit the Customer Service Desk
(Evening and weekend hours)

Burtonsville

Country Nursery
3330 Spencerville Road
Burtonsville, MD 20866
301-421-9593

Chevy Chase/Friendship Heights

Audubon Sanctuary Shop
Woodend Nature Sanctuary
8940 Jones Mill Road
Chevy Chase, MD 20815
301-652-3606
(Weekend hours)

Whole Foods Market
4420 Willard Avenue
Chevy Chase, MD 20815
301-657-1520
Visit the Customer Service Desk
(Evening and weekend hours)

Damascus

Damascus Library
9701 Main Street
Damascus, MD 20872
240-773-9444; TTY: 301-253-0148
(Evening and weekend hours)

Derwood

Shady Grove Processing Facility and
Transfer Station
16101 Frederick Road
Derwood, MD 20855
Compost bins are available in the Trans-
fer Station's Administrative Offices. (The
Recycling Center does not have compost
bins!)

Monday through Friday, 8:30 a.m. to
Noon and 1 p.m. to 5 p.m.

Gaithersburg

Habitat for Humanity of Montgomery
County ReStore
9100 Gaither Road
Gaithersburg, MD 20877
301-947-3304
(Weekend hours)

Whole Foods Market - Kentlands
316 Kentlands Boulevard
Gaithersburg, MD 20878
301-258-9500
Visit the Customer Service Desk
(Evening and weekend hours)

Olney/Sandy Spring

Good Earth Garden Market
1610 Olney-Sandy Spring Road
Sandy Spring, MD 20860
301-774-2631
(Evening and weekend hours)

Poolesville

Poolesville Library
19633 Fisher Avenue
Poolesville, MD 20837
240-773-9550; TTY: 301-972-7825
(Evening and weekend hours)

Potomac

Good Earth Garden Market
11650 Falls Road
Potomac, MD 20854
301-765-0224
(Evening and weekend hours)

Rockville

Montgomery County Executive Office
Building
Division of Solid Waste Services
101 Monroe Street, 6th Floor
Rockville, MD 20850
240-777-6484
Open Monday through Friday, 8:30 a.m. to
5 p.m.

Dawson's Market
225 North Washington Street
Rockville, MD, 20850
240-428-1386
Visit the Customer Service Desk
(Evening and weekend hours)

Whole Foods Market - Rockville
11355 Woodglen Drive
Rockville, MD 20852
301-984-4880
Visit the Customer Service Desk
(Evening and weekend hours)

Silver Spring

Whole Foods Market - Silver Spring
833 Wayne Avenue
Silver Spring, MD 20910
301-608-9373
Visit the Customer Service Desk
(Evening and weekend hours)

Takoma Park

City of Takoma Park
Public Works Department
31 Oswego Avenue
Takoma Park, MD 20910
301-891-7633

Wheaton

Friends of the Library at Wheaton Library
(In the basement of the Wheaton Library)
11701 Georgia Avenue
Wheaton, MD 20902
240-777-0688
(Evening and weekend hours)

Appendix B

Annual Multi-Family Recycling & Waste Reduction Report Instructions and Forms

Instructions for Completing the Annual Multi-Family Recycling & Waste Reduction Report Paper-based Forms

Page 1

Property Name: Provide the complete legal name of your property.

Physical Address: Provide the complete mailing address of your property including street address, suite number, city, and zip code.

Type of Property: Check the appropriate box to indicate whether your property is an apartment, condominium, or cooperative.

Property Sub-Type: Check the appropriate box to indicate whether your property is a High-rise (more than 5 stories), Mid-Rise (4 or fewer stories), Garden style, or mixed.

Number of Units: Provide the number of dwelling units within your property.

Total acreage of green area (landscaped and grassy area): Provide the total acreage or square footage of landscaped and grassy areas on your property.

Onsite Contact Person Name and Title: Provide the full name of the onsite person who will be available to County staff to answer questions about this annual report. If there is not an onsite point of contact, you may leave this section blank.

Onsite Mailing Address: Provide the complete mailing address of the onsite contact person including street address, suite number, city, state, and zip code. You may check the box at the right if it is the same as the property's physical address provide above.

Telephone Number/Fax Number/E-mail: Provide the complete telephone number, fax number, and e-mail address of the contact person.

Property Management Company: Provide the complete name of the property management company for the property.

Mailing Address: Provide the complete mailing address of the property management company including street address, suite number, city, state, and zip code.

Property Management Company Contact Person: Provide the full name and title of the person at the property management office who will be available to County staff to answer questions about this annual report.

Telephone Number/Fax Number/E-mail: Provide the complete telephone number, fax number, and e-mail address of the property management company contact person.

Signature: The person preparing the annual report must sign and date the form.

Required Recyclable Materials: Complete the table for *each of the 5 categories of required recyclable materials*.

For Mixed Paper, Corrugated Cardboard (only if collected separately, this is not required), Commingled Materials, and Scrap Metal:

- *Container Type & Size* – Provide the size (i.e., volume/capacity) of each container used. A list of common collection container types and sizes is provided at the bottom of the form for your reference.
- *Total Number of Containers* – Provide the total number of containers of each type & size at your property.
- *Number of Collections* – Provide the number of times each container type & size is collected for each material.
- *Collection Frequency* – check the box that corresponds how frequently each container type & size is collected (i.e., weekly, monthly, yearly, on-call)
- *Total Annual Amount Collected (Pounds/year)* – Indicate the total pounds of each material that were collected during the calendar year. Your hauler may be able to provide this information. You also may use the TRRAC Recycling/Trash Weight Calculator to estimate these amounts based upon the number and size of your containers and the frequency of collection. The calculator is available at: www.montgomerycountymd.gov/SWS/Resources/Files/arr/trrac-calculator.xls
- *Collector Name, Address, Phone Number* – Enter the complete name of the collection company handling these materials. After entering this information once, you may check the “Same as above” box on subsequent lines if the using the same collector. If you are self-hauling materials, enter “self-haul” and indicate the facility to which these materials are being self-hauled.

For Christmas Trees:

Indicate either the total pounds or the number of trees of Christmas trees recycled during the previous year. If the number of Christmas trees recycled is reported, we will use an average weight of 17.6 pounds per tree to calculate your property’s total pounds recycled.

Provide the name, Address, and Phone Number of the collector or landscape service provider managing your Christmas trees. If you are self-hauling Christmas trees, enter “self-haul” and indicate the facility to which these materials are being self-hauled.

If live Christmas trees are not allowed at your property, please check the provided box. This lets us know that Christmas tree recycling does not apply at your property and that this section was intentionally left blank. This saves us verification time.

For Yard Trim:

Provide the total pounds of leaves, grass, brush, and garden trimmings recycled/composted either onsite at your property or removed by your landscape service provider. If total pounds are not known, provide the total cubic yards removed and we will calculate using a conversion factor of 500 pounds per cubic yard of yard trim.

Provide the name, Address, and Phone Number of the landscape service provider managing your yard trim.

For Grasscycling:

Provide the area, either in acres or square feet, of the mown lawn area where the grasscycling occurs. We use a conversion factor of 7.6 tons of grass clippings per acre per year to calculate the total annual pounds.

Provide the name, Address, and Phone Number of the landscape service provider grasscycling at your property, or check the provided box if done by property staff.

Page 3

Solid Waste (Trash) and Bulk Trash

- *Container Type & Size* – Provide the size (i.e., volume/capacity) of each container used. A list of common collection container types and sizes is provided at the bottom of the form for your reference.
- *Total Number of Containers* – Provide the total number of containers of each type & size at your property.
- *Number of Collections* – Provide the number of times each container type & size is collected for trash.
- *Collection Frequency* – check the box that corresponds how frequently each container type & size is collected (i.e., weekly, monthly, yearly, on-call)
- *Total Annual Amount Collected (Pounds/year)*– Indicate the total pounds of trash collected during the calendar year. Your hauler may be able to provide this information. You also may use the TRRAC Recycling/Trash Weight Calculator to estimate these amount based upon the number and size of your containers and the frequency of collection. The calculator is available at: www.montgomerycountymd.gov/SWS/Resources/Files/arr/trrac-calculator.xls
- *Collector Name, Address, Phone Number* – Enter the complete name of the collection company handling your trash. After entering this information once, you may check the “Same as above” box on subsequent lines if the using the same collector. If you are self-hauling trash, enter “self-haul” and indicate the facility to which the trash is being self-hauled.

Voluntary Recyclable Materials (Optional)

This section is provided for you to report any other non-required materials which your property is recycling. Some of the columns may not be applicable for the voluntary recyclable you are listing. You may leave these sections blank or indicate “N/A.”

- *Container Type & Size* – Provide the size (i.e., volume/capacity) of each container used. A list of common collection container types and sizes is provided at the bottom of the form for your reference. (If applicable)
- *Total Number of Containers* – Provide the total number of containers of each type & size at your property. (If applicable)
- *Number of Collections* – Provide the number of times each container type & size is collected for each voluntary material. (If applicable)
- *Collection Frequency* – check the box that corresponds how frequently each container type & size is collected (i.e., weekly, monthly, yearly, on-call) (If applicable)
- *Total Annual Amount Collected (Pounds/year)* – Indicate the total pounds of voluntary recyclable materials collected during the calendar year. We have conversion factors for many materials. If you do not know the pounds of materials recycled, provide material volumes or item counts (e.g., 100 square feet of carpet and padding, 5 refrigerators, 75 fluorescent tubes), we can calculate a weight for you.

- *Collector Name, Address, Phone Number* – Enter the complete name of the collection company handling these materials. After entering this information once, you may check the “Same as above” box on subsequent lines if the using the same collector. If you are self-hauling trash, enter “self-haul” and indicate the facility to which the trash is being self-hauled.

Page 4

Waste Reduction/Reuse and Education Summary

Waste Reduction

Describe all waste reduction activities undertaken at your property. Lists and bullet points are acceptable.

Outreach and Education

Check the boxes that apply. List any other activities conducted not listed in the check box section.

What new educational materials from the County would be helpful in your efforts to educate yourself, your staff, and your residents? (Optional)
Provide us with any suggestions or feedback you might have.

Record Keeping & Filing

Copies of Annual Report: Please keep a copy of the completed form for your records.

Submitting the Annual Report: You may mail the form to the address listed on the form or fax it to 240-777-6465.

Please note: Failure to submit an annual report to the County by the February 1 deadline is a Class B violation of Montgomery County Code, subject to fines of up to \$150.00 per day the report is late.



Annual Multi-Family Recycling & Waste Reduction Report

THIS FORM REPORTS ON RECYCLING AND DISPOSAL AT YOUR PROPERTY DURING CALENDAR YEAR: _____

This form must be completed and returned by FEBRUARY 1st.

Mail completed form to: Montgomery County Division of Solid Waste Services
 Waste Reduction and Recycling Section
 ATTN: TRRAC Program
 101 Monroe Street, Sixth Floor
 Rockville, Maryland 20850
 or Fax to: 240-777-6465

Please retain a copy of this report for your records. For questions regarding this report, call 240-777-6446.

PROPERTY NAME: _____

Physical Address of Property: _____

City: _____ Zip Code: _____

Property Type: Apartment Condominium Cooperative
 Property Sub-Type: High-Rise Mid-Rise Garden Mixed

Number of Units: _____ Total acreage of green area (landscaped and grassy area): _____

On-site Contact Person – Name: _____
 Title: _____

On-Site Mailing Address: _____ (Check if same as above)

City: _____ State: _____ Zip Code: _____

Telephone Number: _____ Fax Number: _____

E-mail: _____

PROPERTY MANAGEMENT COMPANY (if applicable): _____

Mailing Address: _____ Unit/Suite # : _____

City: _____ State: _____ Zip Code: _____

Property Management Company Contact Person Name: _____
 Title: _____

Telephone Number: _____ Fax Number: _____

E-mail: _____

PLEASE SIGN THE REPORT:

Signature of Property Owner, Manager or Other Responsible Party _____ Date _____ Printed Name of Signatory _____

I hereby certify that as the Designated Responsible Party, my property complies with Montgomery County Executive Regulation 15-04AM, which requires recycling and reporting by my property, and confirm that the above information is accurate.

FOR DSWS USE ONLY: Field Verified By: Date Verified:	Verification Comments:	Date Reviewed: Total Recycled: Total Generated: Recycling Rate (%):
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(OVER)

Required Recyclable Materials (use additional page if necessary)

*****YOU MUST SUBMIT DATA FOR ALL FIVE REQUIRED RECYCLABLE MATERIALS AND TRASH**
 Incomplete Annual Reports will be returned to filer for completion.**

Material Type	Container Type & Size (see below for types)	Total Number of Containers	Number of Collections	Collection Frequency	Total Annual Amount Collected (Pounds/Year)	Collector Name, Address, Phone Number
1. Mixed Paper (includes corrugated cardboard, newspaper, white office paper, and all other paper collected together)				<input type="checkbox"/> weekly <input type="checkbox"/> monthly <input type="checkbox"/> yearly <input type="checkbox"/> on-call		
Corrugated Cardboard (only if collected separately from mixed paper)				<input type="checkbox"/> weekly <input type="checkbox"/> monthly <input type="checkbox"/> yearly <input type="checkbox"/> on-call		<input type="checkbox"/> Same as above
2. Commingled Materials (includes aluminum cans/foil products, plastic bottles and containers, glass bottles and jars, and steel/tin cans collected together)				<input type="checkbox"/> weekly <input type="checkbox"/> monthly <input type="checkbox"/> yearly <input type="checkbox"/> on-call		<input type="checkbox"/> Same as above
3. Scrap Metal				<input type="checkbox"/> weekly <input type="checkbox"/> monthly <input type="checkbox"/> yearly <input type="checkbox"/> on-call		<input type="checkbox"/> Same as above
4. Christmas Trees				<input type="checkbox"/> weekly <input type="checkbox"/> monthly <input type="checkbox"/> yearly <input type="checkbox"/> on-call		<input type="checkbox"/> Same as above
<input type="checkbox"/> Check here if live trees are not allowed at property (or) Number of Trees Collected: _____ (Conversion factor: 17.6 lbs/tree)				<input type="checkbox"/> weekly <input type="checkbox"/> monthly <input type="checkbox"/> yearly <input type="checkbox"/> on-call		<input type="checkbox"/> Same as above
				<input type="checkbox"/> weekly <input type="checkbox"/> monthly <input checked="" type="checkbox"/> yearly <input type="checkbox"/> on-call		
5. Yard Trim (includes leaves, grass, brush, and garden trimmings)						
Grasscycling (grass clippings left on lawn when mowed)				<input type="checkbox"/> acres <input type="checkbox"/> square feet		<input type="checkbox"/> Check here if done by property staff

Common collection container types and sizes:

Container (18, 22, 23, 50, 55 gallon)	Dumpster (1, 1.5, 2, 3, 4, 6, 8 cubic yard)	Wheeled hamper (1, 2 cubic yard)	Baler
Wheeled cart (40, 60, 64, 90, 96 gallon)	Compactor (2, 8, 10, 15, 20, 30, 34, 40 cubic yard)	Roll-off (10, 15, 20, 30, 40 cubic yard)	

For Property: _____

Calendar Year: _____

Solid Waste (Trash) (use additional page if necessary)						
Material Type	Container Type & Size (see below for types)	Total Number of Containers	Number of Collections	Collection Frequency	Total Annual Amount Collected (Pounds/Year)	Collector Name, Address, Phone Number
Solid Waste (Trash):				<input type="checkbox"/> weekly <input type="checkbox"/> monthly <input type="checkbox"/> yearly <input type="checkbox"/> on-call		<input type="checkbox"/> Same as above
Solid Waste (Trash):				<input type="checkbox"/> weekly <input type="checkbox"/> monthly <input type="checkbox"/> yearly <input type="checkbox"/> on-call		<input type="checkbox"/> Same as above
Bulk Trash:				<input type="checkbox"/> weekly <input type="checkbox"/> monthly <input type="checkbox"/> yearly <input type="checkbox"/> on-call		<input type="checkbox"/> Same as above
Bulk Trash:				<input type="checkbox"/> weekly <input type="checkbox"/> monthly <input type="checkbox"/> yearly <input type="checkbox"/> on-call		<input type="checkbox"/> Same as above

Voluntary Recyclable Materials (use additional page if necessary)						
OPTIONAL (Examples: carpeting, clothing, ink/toner cartridges, food scraps,...etc.)						
Specify Material Type:				<input type="checkbox"/> weekly <input type="checkbox"/> monthly <input type="checkbox"/> yearly <input type="checkbox"/> on-call		<input type="checkbox"/> Same as above
Specify Material Type:				<input type="checkbox"/> weekly <input type="checkbox"/> monthly <input type="checkbox"/> yearly <input type="checkbox"/> on-call		<input type="checkbox"/> Same as above
Specify Material Type:				<input type="checkbox"/> weekly <input type="checkbox"/> monthly <input type="checkbox"/> yearly <input type="checkbox"/> on-call		<input type="checkbox"/> Same as above
Specify Material Type:				<input type="checkbox"/> weekly <input type="checkbox"/> monthly <input type="checkbox"/> yearly <input type="checkbox"/> on-call		<input type="checkbox"/> Same as above
Specify Material Type:				<input type="checkbox"/> weekly <input type="checkbox"/> monthly <input type="checkbox"/> yearly <input type="checkbox"/> on-call		<input type="checkbox"/> Same as above

Common collection container types and sizes:

Container (18, 22, 23, 50, 55 gallon)	Dumpster (1, 1.5, 2, 3, 4, 6, 8 cubic yard)	Wheeled hamper (1, 2 cubic yard)	Baler
Wheeled cart (40, 60, 64, 90, 96 gallon)	Compactor (2, 8, 10, 15, 20, 30, 34, 40 cubic yard)	Roll-off (10, 15, 20, 30, 40 cubic yard)	

For Property: _____ Calendar Year: _____

WASTE REDUCTION/REUSE AND EDUCATION SUMMARY*This page must be included with Annual Recycling Report***Waste Reduction**

Describe the waste reduction and reuse efforts undertaken at your property in an effort to reduce the amount of solid waste generated:

Waste reduction activity examples include: resident yard sales, reusable mugs in the leasing office, double-sided printers, electronic notices/newsletters instead of paper, donation of gently used items to charitable organizations, ...etc.

Outreach and Education

Check boxes for activities conducted at your property during the past year.

- Included recycling information in move-in package
- Included recycling information in property newsletter # of times: _____
- Distributed County-provided educational recycling materials to residents
- Placed informative recycling posters at all collection sites
- Conducted resident outreach/education event(s)
 - with Montgomery County
 - without Montgomery County
 - both with and without Montgomery County
- Provided in-unit recycling bins for residents to use
- Conducted other outreach/education activities:

What new educational materials from the County would be helpful in your efforts to educate yourself, your staff, and your residents?



Printed on Recycled and Recyclable Paper

Appendix C

TRRAC Recycling/Trash Weight Calculator

	A	C	D	F	G	H	I	J	L	M	O	P	Q
1	Montgomery County Multi-Family Recycling/Trash Weight Estimate Calculator												
3	Recycling Estimate Weight Finder						Trash Estimate Weight Finder						
5	Container Size	*Enter* Number Of Containers	*Enter* Number of Pickups per Week	Total Yearly Pounds		Container Size	*Enter* Number Of Containers	*Enter* Number of Pickups per Week	Total Yearly Pounds				
7	60-64 gal Mixed Paper			0		50-55 gal Trash			0				
9	60-64 gal Commingled			0		60-64 gal Trash			0				
11	90-96 gal Mixed Paper			0		90-96gal Trash			0				
13	90-96 gal Commingled			0		2yd Trash Dumpster			0				
15	2yd Mixed Paper			0		4yd Trash			0				
17	2yd Cardboard			0		6yd Trash			0				
19	2yd Commingled			0		8yd Trash			0				
21	4yd Mixed Paper			0									
23	4yd Cardboard			0									
25	4yd Commingled			0									
27	6yd Mixed Paper			0									
29	6yd Cardboard			0									
31	6yd Commingled			0									
33	8yd Mixed Paper			0									
35	8yd Cardboard			0									
37	8yd Commingled			0									
39	10yd Roll-off Container Mixed Paper			0									
41	10yd Roll-off Container Commingled			0									
43	20yd Roll-off Container Mixed Paper			0									
45	20yd Roll-off Container Commingled			0									
47	30yd Roll-off Container Mixed Paper			0									
49	30yd Roll-off Container Commingled			0									
51		Acreage											
52	Yard Trim Grasscycling			0									
53		or Square Footage											
54	Yard Trim Grasscycling			0									
55		Cubic Yards											
56	Yard Trim Composting			0									

Available at: www6.montgomerycountymd.gov/content/dep/swsrecyc.asp

Montgomery County Multi-Family Property Recycling Materials Weight Conversion Factors

Storage Container	Volume Capacity (Cubic Yards)	Approx. Dimensions (Depth/Length/Height in Feet)	RECYCLABLE MATERIAL CAPACITY (In Pounds) These are estimates and are subject to change			
			Newspaper	Cardboard	Mixed Paper	Commingled Materials
60 - 64 Gallon Cart	0.3	2/2/3.5	88		87	36
90 - 96 Gallon Cart	0.5	2.5/2.5/4.0	132		106	56
Dumpster (1 yard)	1	3/3/3	297	55	223	143
Dumpster (2 yard)	2	3/4/4	595	109	447	286
Dumpster (4 yard)	4	4/4/5	1,189	218	893	572
Dumpster (6 yard)	6	4/5/6	1,784	328	1,340	859
Dumpster (8 yard)	8	6/6/6	2,378	437	1,787	1,145
Roll-off Container	10	6/22/4	2,973	546	2,234	1,431
Roll-off Container	20	6/22/5	5,946	1,092	4,467	2,862
Roll-off Container	30	6/22/6	8,919	1,638	6,701	4,294



**Montgomery County, Maryland
Department of Environmental Protection
Division of Solid Waste Services
Waste Reduction and Recycling Section
101 Monroe Street, 6th Floor
Rockville, MD 20850
www.montgomerycountymd.gov/recycling
311 or 240-777-0311 (phone)
240-777-6465 (fax)
301-251-4850 (TTY)**



Think Reduce and Recycle at Apartments and Condominiums

