

Starting a School Recycling Program



A Guide to Recycling and Waste Reduction
for Rockland County Schools



Rockland County Solid Waste Management Authority

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Rockland County Solid Waste Management Authority

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Introduction

Green Schools of Rockland

Congratulations and thank you for making the commitment to support your community's recycling education initiative by becoming a leader of your school's green team.

Part of the Rockland County Solid Waste Management Authority's mission is to educate the public and create increased awareness of the importance of recycling and waste reduction. With your dedication and assistance, we can fulfill that mission and accomplish our broader goal of providing every citizen with the knowledge and the means to preserve and protect our precious environment.

In order for recycling to work effectively, people must first be made aware of the negative impacts to ourselves and our environment when we fail to manage our waste properly. Recycling helps control rising waste disposal costs, conserves resources and energy, and facilitates compliance with Rockland County and New York State recycling mandates.

This guide will provide you with most of the information, tools, resources and guidelines you will need to establish a comprehensive recycling program in your school and to educate your students about the value and long-term benefits of recycling, conservation and environmental stewardship.

You can download a free copy of this guide at www.rocklandrecycles.com. The Authority can also provide an educator at no-cost to your school, to assist with the development of a recycling program and position it for success.

**To schedule a visit to your school,
please call Kerri Scales at 845-753-2200 x22.**

Rockland County Schools

Population

New York State
19,746,227*

Rockland County
323,866*

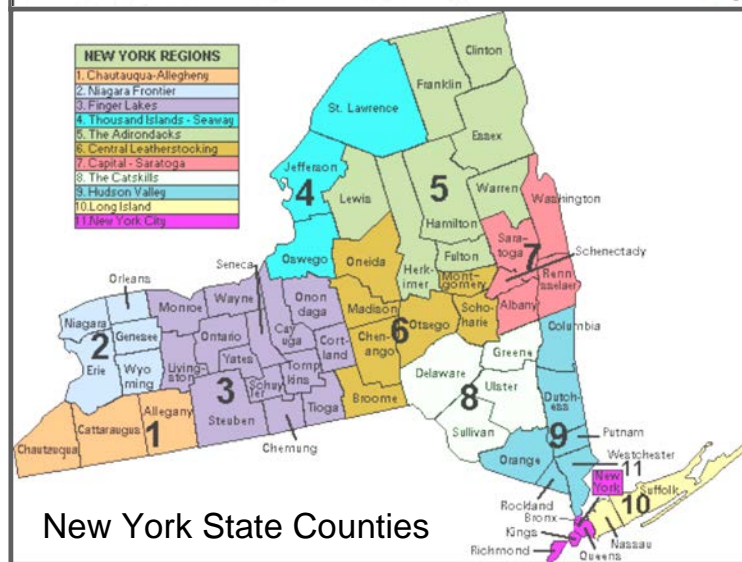
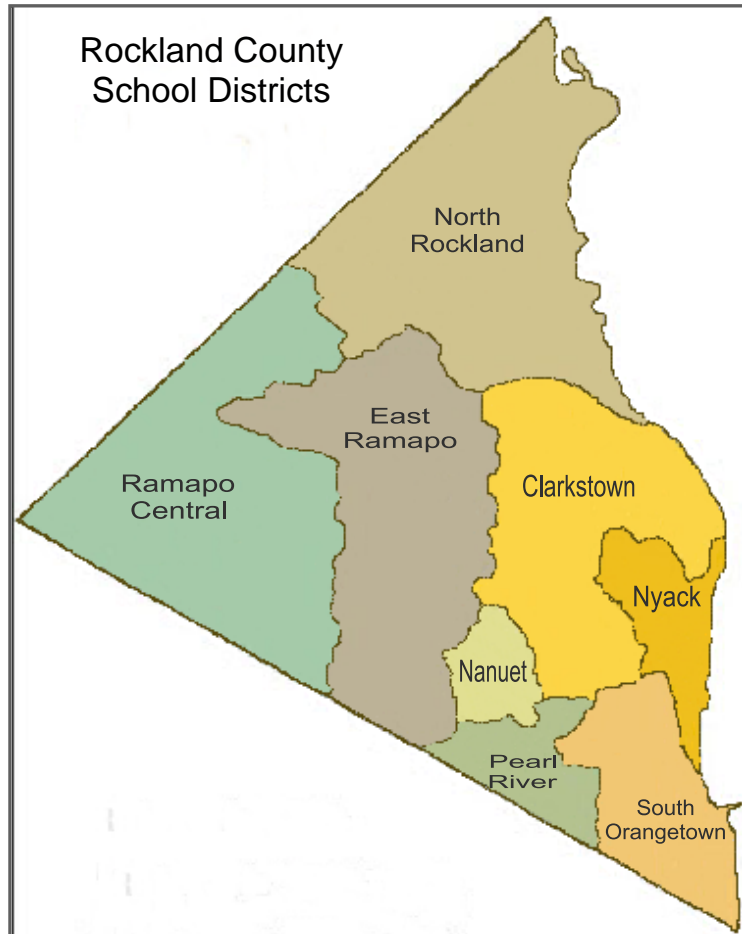
*2014 U.S. Census Bureau
Estimate

School Districts

- BOCES
- Clarkstown
- East Ramapo
- Nanuet
- North Rockland
- Nyack
- Pearl River
- Ramapo
- South Orangetown

Private Schools

Over 60





How to Use This Guide

A Hands-on Approach

The objective of this guide is to help schools and school districts of Rockland County develop sustainable recycling and waste reduction programs or expand an existing program. You are the key to creating a greener County by broadening your recycling efforts. Your participation in this County-wide initiative will reduce the amount of waste going into landfills. This guide will show how recycling benefits both the environment and your school.

This guide provides a ten step process for developing a recycling program. In most cases, evaluation and recommendations need to be site specific and require a hands-on approach, however, this guide will provide you with the tools you need to develop or expand a school recycling program.

1. Building a Team
2. Identifying Recyclables
3. Waste Assessment
4. Waste Hauling Services
5. Bins, Decals and Signage
6. Waste Reduction and Reuse
7. Collection and Tracking
8. Building Awareness
9. Implementation and Kick-off
10. Awards and Recognition

Developing a School Recycling Program

1. Building a Team

The first step in developing a successful school recycling program begins with developing a “Green Team”. The Green Team is responsible for coordinating all aspects of your school’s recycling and waste reduction program, which are included in this guide. The following is a list of tips for starting and maintaining an effective Green Team.

- Start by selecting or designating an enthusiastic and organized staff member to be the team leader.
- Your team should consist of a school administrator, teachers, the head custodian, students from every grade level (or the top two grades for elementary), parents, PTA representative and food service company.
- The team is responsible for the development, implementation and evaluation of the school’s recycling program.
- Roles and responsibilities of the Green Team members should be clearly defined.
- It is important to communicate your plan of action and on-going program results to your school and district administrators in order to gain and maintain their support.
- All members of the team must be enthusiastic and committed to developing and maintaining a successful recycling program.
- Recycling procedures and responsibilities should be the stated in the school policy or handbook.
- It is important, especially when you are first building your program, to have regularly scheduled meetings to discuss necessary tasks and progress.
- Determine who needs to attend the meetings by setting an agenda. Some representatives, such as food service, only need to be present when discussing food preparation elements.

Developing a School Recycling Program

2. Identifying Recyclables

Before you begin your waste assessment, refer to the checklist on the next page to determine what types of materials must be recycled in Rockland County and to make note of which materials are generated at your school.

Each type of waste has been mandated under local law for recycling/disposal at designated facilities within Rockland County. The chart below lists each type of waste and the designated facility for disposal. If there are any questions about waste disposal for your school, please contact Kerri Scales at 753-2200 x22.

| Type of Waste | Designated Facility |
|-----------------------|---|
| Trash | Authority's Transfer Stations |
| Paper & Containers | Authority's Materials Recovery Facility |
| Leaves, Grass & Brush | Authority's Composting Facility |
| Hazardous Waste* | Authority's Household Hazardous Waste Facility |
| Scrap Metal | Authority's Transfer Stations or Metal Recycler |
| Tires | Authority's Transfer Stations |
| Clean Wood Waste | Authority's Composting Facility |
| Concrete & Asphalt | Authority's C & D Facility |

** Schools may use the Authority's Household Hazardous Waste Facility to dispose of some hazardous wastes at no charge. Disposal of laboratory chemicals and some hazardous wastes must be handled through a hazardous waste contractor. For more information or to schedule a drop-off, please contact Jeremy Erlich at 364-3682.*

Developing a School Recycling Program

Recyclables Checklist

| Waste Type | Currently Generated | Recycle | Reuse |
|---|---------------------|---------|-------|
| Paper Recyclables | | | |
| Mixed office paper | | | |
| Computer/fax paper | | | |
| Envelopes | | | |
| Newspaper | | | |
| Cardboard | | | |
| Magazines/catalogs/workbooks | | | |
| Paperback books | | | |
| Craft paper | | | |
| Container Recyclables | | | |
| Plastic bottles | | | |
| Plastic containers #1-7 | | | |
| Aluminum cans | | | |
| Aluminum foil/trays | | | |
| Metal cans | | | |
| Glass bottles/jars | | | |
| Paper drink cartons | | | |
| Scrap Metal | | | |
| Desks, filing cabinets, chairs, etc. | | | |
| Green Waste | | | |
| Leaves, grass, brush | | | |
| Clean Wood | | | |
| Wood pallets | | | |
| Tree limbs | | | |
| Construction & Demolition Debris | | | |
| Concrete | | | |
| Asphalt | | | |
| Hazardous Waste | | | |
| Electronics (computers & accessories, televisions, cell phones, printer cartridges, etc.) | | | |
| Fluorescent light bulbs | | | |
| Batteries | | | |
| Waxes/polishes | | | |
| Paint/thinners | | | |
| Gasoline, antifreeze, motor oil & filters | | | |
| Pesticides, fungicides, herbicides | | | |
| Mercury containing items | | | |
| Small Freon appliances | | | |
| 20 lb. propane tanks | | | |
| Organics | | | |
| Food scraps | | | |
| Other | | | |
| Tires | | | |

Developing a School Recycling Program

3. Waste Assessment

Once you have determined what is generated at your school, your first task will be to conduct a waste assessment. The waste assessment can be done by visually inspecting waste receptacles to determine the type, quantity, and source of the school's waste. Information from the assessment is valuable for considering what items to recycle; bin types, sizes and placement; and collection services. Assessments should be performed periodically as part of an ongoing evaluation of the success of the recycling program. This is called "tracking" and is explained in greater detail in step 8.

The team should document the types of wastes that are generated in all areas of the school, such as classrooms, administrative offices, the cafeteria, library, faculty lounge and outdoor sports fields. This will help you determine what items can be reduced, reused, recycled, composted or eliminated.

Have the team make a list of existing waste containers. This will help you determine the quantity and type of waste containers that may need to be purchased and what can be repurposed. This will be useful for step 5 in this guide, *Bin Procurement and Placement*.

A sample Waste Assessment Form is on the following page to help you get started. This form is intended to serve as a sample. Consider creating your own form if you prefer a different format or need to document other items or supplies.

Developing a School Recycling Program

Sample Waste Assessment Form

| Room Type | Types of Waste Generated | # of rooms or stations | # of paper bins | # of container bins | # of trash bins | # of paper bins needed | # of container bins needed | # of food bins needed | # of trash bins needed | Notes |
|------------------------------------|--------------------------------------|------------------------|-----------------|---------------------|-----------------|------------------------|----------------------------|-----------------------|------------------------|---|
| Classrooms | Trash, paper, & few containers | 45 | 40 | 0 | 45 | 5 | 45 | 0 | 0 | Lots of bottles in with paper recyclables. Put container bins in each classroom. |
| Offices/Desks | Trash, paper, & few containers | 12 | 4 | 0 | 8 | 4 | 1 | 0 | 0 | Provide 1 bin for collection of containers. Provide 1 trash & 1 paper bin for entry |
| Copy Room | Some trash & lots of paper | 2 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | Need a large blue bin for collection of paper and a trash bin |
| Cafeteria | Trash, food & containers | 1 | 0 | 0 | 6 | 0 | 4 | 3 | 0 | Need large bins for collection of mixed containers, 3 for food scraps |
| Kitchen | Trash, food, containers, & cardboard | 2 | 0 | 0 | 3 | 1 | 2 | 2 | 0 | Need 2 bins for collection of containers, 1 for cardboard, 2 for food scraps |
| Faculty Lounge | Trash, food containers & paper | 1 | 1 | 0 | 2 | 0 | 1 | 1 | 0 | May need 2 bins for containers. 1 lg bin for food scraps. |
| Library | Trash & paper | 1 | 6 | 0 | 8 | 4 | 0 | 0 | 2 | Need 10 stations total. Pair paper and trash bins in various locations. |
| Activity Fields | Trash & lots of containers | 8 | 0 | 0 | 24 | 0 | 24 | 0 | 0 | Need container bins to pair with trash bins. Have 3 sets at each field. |
| Concession Stand | Trash, containers & cardboard | 1 | 0 | 0 | 4 | 1 | 4 | 0 | 0 | Need 1 set of trash/container /cardboard bins inside. 3 sets of trash/container bins outside. |
| Computer Lab | | | | | | | | | | |
| Nurse's Office | | | | | | | | | | |
| Conference Room | | | | | | | | | | |
| Auditorium | | | | | | | | | | |
| Gymnasium | | | | | | | | | | |
| Main Lobby | | | | | | | | | | |
| Total number of bins needed | | | | | | # of paper bins | # of container bins | # of food bins | # of trash bins | |
| | | | | | | 17 | 81 | 6 | 2 | |

Waste Assessment Form

| Room Type | Types of Waste Generated | # of rooms or stations | # of paper bins | # of container bins | # of trash bins | # of paper bins needed | # of container bins needed | # of Food bins needed | # of trash bins needed | Notes |
|-----------------------------|--------------------------|------------------------|-----------------|---------------------|-----------------|------------------------|----------------------------|-----------------------|------------------------|-------|
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| | | | | | | | | | | |
| Total number of bins needed | | | | | | # of paper bins | # of container bins | | # of trash bins | |
| | | | | | | | | | | |

Developing a School Recycling Program

4. Waste Hauling Services

Schools are required to contract with a waste hauler to handle the collection and transportation of waste and recyclables to their designated facilities. Typically, contracts for public schools are handled at the district level and private schools contract directly with a waste hauler.

In order to maintain appropriate waste dumpster quantities, size, type, placement and collection frequency, you will need to monitor the waste dumpsters outside of your school to determine if you are over or under capacity. This is where your custodians will be most helpful, since they are involved with the daily process of waste collection and separation.

It would be useful to review the existing waste hauling contract to determine the entire scope of services that are currently included. If separate dumpsters for the sorting of trash, paper and containers is not already included in your waste collection contract, a modification will be necessary.

It is recommended that your district or school discuss reduced fees for downsizing trash dumpsters or for scheduling less frequent collections.

Items to discuss with your waste hauler:

- Cost per pickup for recyclables versus trash.
- How to minimize the frequency of pickups with dumpster sizes.
- Cost for extra pickups not included in your regular collection schedule.

Tip:

*The **avoided cost** of trash disposal may equal or offset recycling costs, e.g., \$76.00 per ton for trash disposal versus no charge for the disposal of many recyclables.*

Developing a School Recycling Program

5. Bins, Decals & Signage

Your waste assessment will provide you with the information you need to develop a collection plan that will include types, quantities and locations of the waste containers. For easy identification, it is recommended that you color-code your waste bins and signage using the following colors.

- Blue → Mixed Paper
- Green → Containers
- Gray → Trash

Recycling Bin Selection and Placement

Your team should find the lowest cost option for your school’s recycling program, so consider repurposing existing equipment or even making your own containers. If it is determined that your school needs additional waste containers, a list of Recycling Bin Vendors with sample photos is included in this section.

To reduce contamination, waste and recycling bins should always be located next to each other. The following are recommendations for your consideration.

| | Paper Bin | Container Bin | Trash Bin | Food Bin |
|----------------------------------|-----------|---------------|-----------|--------------|
| Classrooms | √ | √ (optional) | √ | √ (optional) |
| Offices | √ | √ | √ | |
| Copy Area | √ | | √ | |
| Conference Rooms | √ | √ (optional) | √ | |
| Cafeteria | | √ | √ | √ |
| Restrooms | | | √ | |
| Kitchen | √ | √ | √ | √ |
| Entryways and Lobby Areas | √ | √ | √ | |
| Building Front | √ | √ | √ | |
| Activity Fields | | √ | √ | |
| Faculty Lounge | √ | √ | √ | √ |
| Library | √ | | √ | |
| Concession Stand | √ | √ | √ | √ |
| Computer Lab | √ | | √ | |
| Nurse’s Office | √ | | √ | |

Developing a School Recycling Program

Recycling Bin Vendors

The following list of vendors is provided for your convenience only and does not constitute or imply an endorsement, recommendation, or favoring by the Authority and the list is not meant to be exhaustive.

Rubbermaid Commercial Products
www.rubbermaidcommercial.com
800-347-9800

Grainger, Inc.
www.grainger.com
800-237-3174

Recycling Products, Inc.
www.recyclingproducts.com
800-875-1735

Jedstock, Inc.
www.jedstock.com
908-754-0404

SCL A1 Plastics
www.scla1.com
800-777-0979

The Fibrex Group
www.fibrexgroup.com
800-346-4458

Suburban Equipment Co.
www.subeq.com
888-832-8080

Busch Systems International
www.buschsystems.com
800-565-9931

Wausau Tile Pavers
www.wausautile.com
800-388-8278

Schaefer Systems International
www.ssi-schaefer.us.com
800-876-6000

Midpoint International, Inc.
www.midpoint-int.com
888-646-4246

Toter, Inc.
www.toter.com
800-424-0422

Norseman Plastics
www.norsemanplastics.com
888-675-2878

Tulip Corporation
www.tulipcorp.com
716-282-1261

Windsor Barrel Works
www.windsorbarrel.com
800-527-7848

Recy-Cal Supply

Also try these websites:
www.recycle.net

www.grn.com



Developing a School Recycling Program

Decals and Signage

Decals on your waste bins and corresponding posters help to identify the items to be recycled, the correct bins to place them in and serve as a reminder to faculty and students.

Consider using pictures and color-coding your decals and signage to coordinate with your waste bins. Below are some examples of simple decal and signage ideas. Remember to periodically check the condition of signs and decals and be sure they are visible at all times.



Developing a School Recycling Program

6. Waste Reduction & Reuse

A successful school recycling program must include waste reduction and reuse. They save energy, reduce landfill space and usually result in a cost savings.

Ways to reduce waste and reuse items include:

- Save paper by printing and copying on both sides (duplex); reduce spacing, margins, and type size; and eliminate unnecessary copies by utilizing the school's email system or by sharing documents
- Encourage the use of re-usable lunch bags and water bottles
- Host "litter-less" lunch days by encouraging students to eliminate disposable items
- Stock the teacher's lounge with re-usable cups, plates, and utensils
- Create a reuse office supply program to eliminate a supply surplus and excess purchasing
- Use rechargeable batteries for school equipment
- Save and reuse packaging items such as boxes, bags, foam peanuts, and shredded paper
- Have your cafeteria switch to reusable trays, utensils and crockery instead of throwaways whenever possible
- Start a food scrap composting program outside or a worm composting bin in the classroom

Developing a School Recycling Program

7. Collection & Tracking

A successful recycling and waste reduction plan must address the procedure for collecting recyclables and tracking the amount of recyclable materials diverted from your waste.

Developing a Collection System

It is up to the green team to determine where bins will be located and how they will be collected. Just like trash, recyclables from all areas of your school need to be collected from inside the school and brought outside to the appropriate dumpsters.

The most successful programs involve the students in the collection of recyclables. A combination of rolling carts and bags allow the students to collect the segregated recyclables and bring them to a centralized location inside the school. Typically, the custodians collect the trash and any materials generated in the cafeteria and kitchen.

Many schools establish a collection schedule, with rotating responsibilities. The collections can be done before school, during recess periods, or at the end of the day. To minimize classroom disruption, consider the time of day the recyclables are collected. If class is in session, consider having the teachers place their recycling bins outside their classrooms at a predetermined day or time.

Tracking Results

The team should maintain records of month-to-month tonnage of recyclables and trash. This information will help you evaluate the success of your program by calculating the schools' cost/benefit from the increasing volumes of recyclables; demonstrating proof of compliance with waste laws; reporting to the district to maintain support; calculating natural resource savings; and provide data for recognition and awards.

An easy way to establish good weight estimates is by using a bathroom scale to weigh the bins of recyclables. This can be done at the source, such as each classroom, or at the consolidation point. Included in this section, is a sample Tracking Form that can be completed by the students or custodians performing the collections. Visual inspections and estimates can be used as well.

Developing a School Recycling Program

8. Building Awareness

One way to assure that members of your school achieve ongoing participation in the recycling program is to communicate your plans and expectations.

Education and Training

- Provide staff and students with the School's recycling policy and remind them that everyone is required to participate
- Clearly define what each Staff member and students' role and responsibility will be in the school's recycling program
- Provide ongoing training for all staff and students (Schools may benefit by conducting training by department or grade.)
- Assure staff and students that their efforts and feedback will be encouraged, valued, and acknowledged
- Include periodic updates and reminders in company emails, memos, newsletters, bulletin boards and morning announcements

Publicity

- Be sure to communicate with members of your school, such as students and parents, as well as to the greater community
- Share the program's progress, successes, milestones, and special green events/activities when possible
- Keep members of the school informed through email, morning announcements, bulletin boards, school newspaper and website
- Involve the community by distributing press releases, inviting the local newspapers to your school during special events, and postings on your website

Developing a School Recycling Program

9. Implementation & Kick-Off

Once the foundation has been laid, its time to implement your recycling program. Planning a kick-off event is one way to engage the entire school and to help make the new program exciting. Some things to consider as you plan for the official start:

- Plan for a scheduled school or district-wide kick-off event to make an official start to your program
- The principal of the school should make an announcement of the “official start” of the school’s recycling program
- If you are phasing-in parts of your recycling program, be sure to announce future dates for new additions to the program
- Involve the entire staff and students from all grade levels
- Plan ways to engage the members of your school by having students make a banner for the entry way; wear green for a day; start the day with an environmentally-focused assembly; or encourage teachers to have special green lessons planned for their class
- And always remember to lead by example

Developing a School Recycling Program

10. Recognition & Awards

An easy way to boost participation is through recognition and awards. Remember to recognize those who are instrumental in the success of the program. Also be sure to showcase any recognition or awards given to the school for its green achievements.

Keep members of your school excited by recognizing them when they “do the right thing”.

- Consider providing a non-monetary way of recognizing or awarding those involved in the school’s recycling program
- Hold recycling contests between classes, grades and even teachers
- Display recycling awards proudly...it is good public relations and will send a positive message to everyone

About the Rockland County Solid Waste Management Authority

In 1994 the Rockland County Solid Waste Management Authority was created to achieve a coordinated approach to proper management of the waste produced by residents, municipalities, businesses, and schools in Rockland County. The Authority's seventeen member Board is comprised of the supervisors of the five towns in the County, eight County legislators, two village mayors within the County, and two members appointed by the County Executive.

The Authority also engages in an ongoing program of outreach to the people, businesses, and schools of Rockland County. To achieve its current goals and to meet the new demands created by the Rockland County Solid Waste Laws the Authority has formalized and expanded its outreach program with a greater focus on providing assistance to schools to improve their recycling programs.

Our vision includes County-wide successes in school recycling and initiatives to create programs such as a focus on sustainable waste reduction and recycling programs, food waste composting, responsible purchasing and other environmentally conscious efforts.

Over the years, the Authority and services have evolved into a network of integrated waste management facilities to properly manage waste produced by each municipality, business and school. Listed below is a description of the Authority's facilities, services and programs.

Integrated Waste Management Facilities



Materials Recovery Facility (MRF)

Torne Valley Road, Hillburn, NY

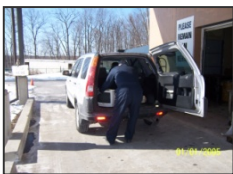
This facility sorts mixed paper and container recyclables and markets them to remanufacturing facilities to be made into new products and packaging. The recyclables are delivered from businesses, municipalities, and schools from Rockland County and outerlying communities.

Transfer Stations

Located in Hillburn, West Nyack, and West Haverstraw



In Rockland County, there are three public transfer stations where municipal solid waste (trash) can be brought for consolidation and transport to landfills. Our trash currently travels over 600 miles (roundtrip) for every load that needs to be disposed. A fee is charged for every ton of trash delivered to the transfer stations. We can all help offset disposal costs by recycling more, reusing what we can, and reducing what we buy.



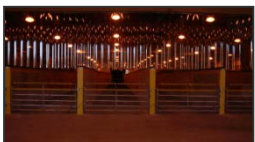
Household Hazardous Waste Facility (HHW)

Fireman's Memorial Drive, Pomona, NY

The HHW serves as a drop-off facility for various household hazardous wastes. Residents and schools can bring unwanted hazardous wastes to the HHW at no charge. Hazardous materials will be recycled or disposed of properly.

CoComposting Facility

Torne Valley Road, Hillburn, NY



This facility processes biosolids (sludge) from Rockland's wastewater treatment facilities into rich compost. The finished compost is sold to landscapers, sod growers, and for projects such as golf course remediation.

Integrated Waste Management Facilities



Yardwaste Composting Facilities

Green waste, such as leaves, grass and brush are processed into compost. This compost is both sold and provided back to Rockland municipalities. Compost benefits our soil by improving the quality and nutrient value. Residents and schools can compost green waste and food waste to further reduce our trash.



Herb Reisman Environmental Education Center

Torne Valley Road, Hillburn, NY

Located at the Authority's MRF, the Education Center provides tours for groups of various ages. School tours start at the 2nd grade level and include educational presentations, views of the recycling operations, and hands-on exhibits displaying the positive effects of waste reduction, responsible decision making, and saving resources.



Conference Center and Greenhouse

Torne Valley Road, Hillburn, NY

Our conference center is available to host your school's meeting and includes a complimentary tour of our native plants garden, recycling operations and education center.



