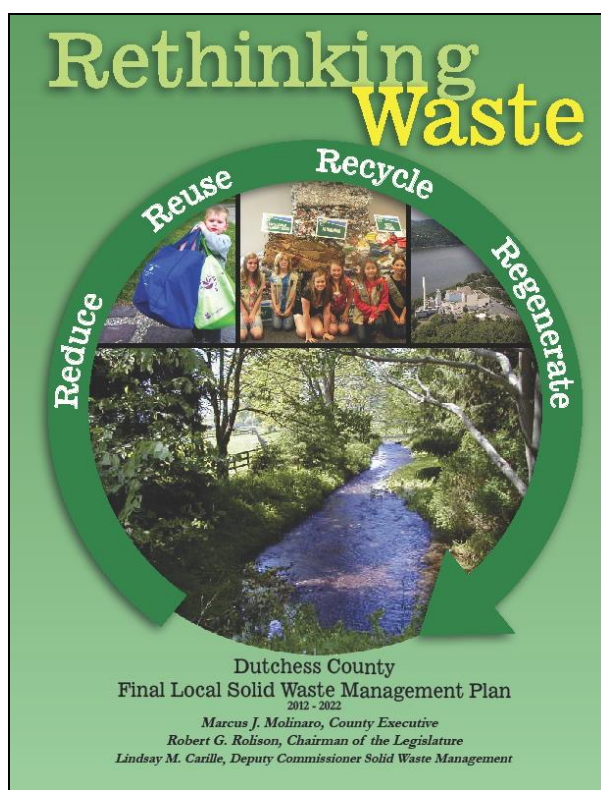


Dutchess County

Local Solid Waste Management Plan

2013 - 2014 Biennial Compliance Report



Marcus J. Molinaro, County Executive

Robert G. Rolison, Chairman of the Legislature

Reporting period: January 1, 2013 through December 31, 2014

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Bureau of Permitting and Planning**

**Submitted by: Lindsay Carille, Deputy Commissioner
Division of Solid Waste Management
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I. Executive Summary

Dutchess County Government is the Planning Unit for Dutchess County and is responsible for developing and implementing the Local Solid Waste Management Plan (LSWMP). In 2012 the County initiated the update to the 1990 Local Solid Waste Management Plan prepared by the Dutchess County Resource Recovery Agency (RRA), which served as the Planning Unit until 2012. In April 2013 Dutchess County adopted the Dutchess County Final Local Solid Waste Management Plan, [Rethinking Waste](#) (Plan) and the Plan was approved by New York State Department of Environmental Conservation (DEC) in June 2013. The Plan covers the period 2012 – 2022.

The main goals of the Plan have not changed since the adoption of the 1990 LSWMP: to reduce the amount of solid waste generated, increase reuse and recycling, and minimize the use of landfills for solid waste disposal. Dutchess County and the Division of Solid Waste Management (Division) have the responsibility to ensure compliance with the County's source separation law and solid waste management rules and regulations, and completing the reduction, reuse and recycling implementation tasks within the Plan. These tasks provide the means to manage solid waste materials and to achieve the Plan's projected recycling rate of 60% by 2022.

The 2010 base year of the Municipal Solid Waste (MSW) analysis within the Plan showed an approximate 23% recycling rate. Since the adoption of the Plan the County's annual recycling rate has surpassed the Plan's projections. It is believed this is due to several factors, including increased promotion and education of recycling and reuse, increased enforcement of solid waste regulations and the conversion to single-stream recycling collection beginning in 2012.

The methods and materials that are counted as recycling differ among planning units and states, therefore affecting recycling rates. Planning units that publish their rates generally include materials with a Beneficial Use Determination (BUD)¹ as recycling. Some examples are composted biosolids and materials used as Alternate Daily Cover (ADC)² for landfills. ADC materials can include Construction and Demolition (C&D) debris and waste-to-energy ash. Dutchess County is one of ten planning units in New York State with a waste-to-energy facility (WTE).

While it is customary for planning units to count materials used under BUDs as recycling, with very few exceptions, NYS DEC does not count BUD materials toward the New York State MSW recycling rate and requests that these materials not be included on the NYS DEC Annual Report Form – Planning Unit Recycling Report (DEC Report). Therefore, recycling figures given in this report will not directly match those on the submitted 2013 and 2014 DEC Reports.

Since the determination of recycling rates varies so widely across the country, the Division of Solid Waste Management has chosen what to include in the yearly reported rate to the County and has determined it will be reported several ways as outlined below:

- Rate for MSW only;
- Rate for MSW and C&D debris combined; and
- Rate when including waste-to-energy ash used as ADC (100% for Dutchess County), as recycling.

As stated above, these rates will not match the recycling rate of the DEC Reports, as recyclables that are reported to DEC directly, such as materials from the Returnable Container Act and data from Vehicle Dismantler Facilities, or are part of a Beneficial Use Determination such as C&D debris used as ADC, are not included in the DEC Report. These materials make up part of the County’s recycling rate, but DEC receives these numbers at the state level and directs individual planning units to not include them in the DEC Report.

Rethinking Waste Projections and Actual Rates							
	2010 Actual	2012 Projected	2012 Actual	2013 Projected	2013 Actual	2014 Projected	2014 Actual
MSW only recycling rate	22.9%	24.6%	31.1%	28.2%	31.8%	34.1%	36.4%
MSW and C&D debris recycling rate*	26.4%	27.6%	38.6%	31.6%	40.5%	37.2%	46.4%
Combined recycling rate with ADC ash**	N/A	N/A	51.9%	N/A	53.7%	N/A	60.7%
*Includes C&D debris used as ADC.							
** Ash used as ADC and ferrous metals were included in the recycling total and subtracted from the MSW incinerated total, to avoid counting this material twice.							
N/A = Not applicable.							

Throughout 2013 and 2014 Dutchess has strived to increase the amount and types of materials recycled and reused and will continue to do so. The following is an overview of what the County has done to complete the Plan’s tasks and achieve our solid waste management goals during the reporting period.

II. Dutchess County Planning Unit Description

The County has a land area of approximately 801.6 square miles and is located in the center of the Mid-Hudson Valley, halfway between New York City and Albany. Dutchess is one of seven counties that make up the Hudson Valley Region, along with Westchester, Putnam, Orange, Rockland, Ulster and Sullivan.

The Planning Unit consists of 30 incorporated municipalities, including two cities, twenty towns, and eight villages. Each municipality individually determines collection practices, whether it's municipal curbside collection, transfer stations, private collection or a combination of these methods.

There have been no changes to the membership of the Planning Unit. Since the adoption of the Plan there have been some changes to municipal collection practices, municipal transfer stations, and materials recovery facilities (MRFs). The Dutchess County dual-stream MRF closed in January of 2012 and the land, facility and equipment have been sold. The facility was out-of-date, in need of major repairs and no longer profitable. The majority of recyclable materials from the County now go to the privately-run ReCommunity Beacon single-stream facility. This change has allowed the County to promote countywide single-stream curbside collection.

The municipally-run residential curbside collection program in the Village of Rhinebeck ceased operations and collection is now done exclusively by private haulers. The Town of Rhinebeck transfer station went from being municipally-run to being contracted to a private company at reduced hours. The transfer stations in the towns of Dover, Amenia and Beekman have closed. Residents of Dover and Amenia have the option to use a privately-run facility within the respective towns. Residents of Beekman can use the neighboring Town of Union Vale transfer station at the non-resident rate.

Dutchess County, according to the U.S. Census, had an estimated population of 296,916 in 2013. This is a decrease of approximately 0.19% from 2010 (297,488). Out of the total population, the 2013 Census American Community Survey 1-year estimates showed that Dutchess County had a household population (not living in group quarters such as a correctional institution, nursing home or college dormitory) of 278,663, with an average household size of 2.59. Of the 118,648 housing units in the County, 107,752 are occupied. In terms of population, density, area attractions and large institutions, the description of the Planning Unit has remained relatively unchanged since the Plan's adoption.

III. LSWMP Status and Accomplishments

In 2013 the County's Local Solid Waste Management Plan (Plan), [Rethinking Waste](#), was adopted and approved. The three main goals of the Plan are to decrease solid waste generation, increase reuse and recycling, and minimize the use of landfills for solid waste disposal. Within the Plan, there is an Implementation Schedule with 52 tasks listed to be completed by 2022, and 55 sub-tasks. All but a few of the tasks have been completed or are ongoing. The following is an overview of what has been accomplished during the past two years in working towards the Plan's Implementation Schedule and to achieve the Plan's projected recycling rates.

a. Staff:

The [Dutchess County Division of Solid Waste Management](#), who is responsible for the formulation and implementation of solid waste programs, has a staff of three full-time employees; a Deputy Commissioner, a Senior Program Assistant and a Compliance Inspector. Additionally, there is a part-time Communications Specialist position assisting with recycling promotion and outreach, including private and public school recycling education.

b. Local Regulations:

Every task in this section of the Implementation Schedule has been accomplished. The Plan was completed, approved and adopted. It is available on the Division's website and at several libraries within the County.

The solid waste rules and regulations were updated with the Legislative adoption of [Local Law No. 3 of 2014, the Dutchess County Solid Waste Materials Management and Licensing Rules and Regulations](#) (Rules) in July of 2014. The Law provides for updated source separation provisions, recycling compliance enforcement, comprehensive hauler licensing requirements, and enhanced unlicensed hauler penalties. A copy of the Rules is available on the Division's website and notice of the Rules was mailed to 37 haulers, both licensed and known unlicensed haulers, and to 135 multi-family residence managers and/or owners in order to inform them of these updated Rules.

The increased enforcement by the Compliance Inspector position, along with the updated Rules and notification of the Rules to the public has resulted in two Notices of Violation issuances and payment of two fines for an unlicensed hauler, and the licensing of 10 new haulers, including the hauler who received the Notices of Violation. Two unlicensed haulers who received Notices of Violation warnings removed their equipment from the County within the specified time frame of ten days from Notice. Notice of Violation warnings for non-compliance with source

separation were sent to several multi-family residences resulting in compliance by the managers/owners. This is an ongoing endeavor.

The Division also maintains a [Recycling Complaint Form](#) on the website. This has resulted in only two complaints about a lack of recycling, which were promptly responded to. One concerned a local mall, who then invited us in to talk with their tenants about increasing recycling, and placing additional recycling receptacles within the mall. The other complaint was resolved by providing educational material to the multi-family tenants on what can be recycled.

c. Hauler Licensing and Data Management:

Every task in this section of the Implementation Schedule has been accomplished. The Division enforces the County's requirement that all haulers of solid waste who seek to dispose of solid waste within the County shall apply to the Deputy Commissioner for a license. The updated Rules, mentioned previously, outline the licensing requirements. The term of the license is two years and licensed haulers are required to submit an Annual MSW Report form to aid in tracking the County's recycling rate.

At the start of 2013 there were 18 licensed haulers, and currently there are 24 within the County and a current [list of haulers](#) and contact information is available on the Division's website. The website also has the [application](#) to obtain a license, which was updated in 2013, the [Annual MSW Report Forms](#), and the license [renewal forms](#). In 2013 the Division hosted an open house with licensed haulers to discuss current regulations concerning recycling and to identify barriers to increased recycling as encountered by the haulers. Another open house is planned for mid-2015.

The Division is required to provide the New York State Department of Environmental Conservation (DEC) an Annual Planning Unit Recycling Report and a Local Solid Waste Management Plan Compliance Report every odd number year. In 2013 the recently adopted Plan substituted for the Compliance Report. In 2014, in addition to submitting the Annual Recycling Report to DEC, the Division provided the County a [2013 Summary](#) and it was made available on our website. The summary outlined accomplishments and where the County was in terms of recycling and waste management. The 2015 Compliance Report, once submitted to DEC, will also be available on the Division's website.

d. Waste-to-Energy Facility:

The tasks in the Implementation Schedule are either ongoing or have been completed. In early 2014 a Request for Proposals was announced by the RRA for the operation and maintenance of the waste-to-energy facility (WTE). The 25-year Operator Agreement expired June 2014 and the

award of contract under the new agreement began July 1, 2014. The award of contract was given to Wheelabrator Dutchess County, LLC.

In 2013 the WTE processed 146,581 tons of Dutchess County solid waste, producing 33,607 net MWhs of electricity and recovering 6,213 tons of ferrous metals for recycling. In 2014 the WTE processed 151,541 tons of Dutchess County solid waste, producing 43,222 net MWhs of electricity and recovering 6,230 tons of ferrous metals for recycling. The process created ash residue, 50,460 tons and 54,557 tons in each respective year, of which 100% was used as alternative daily cover (ADC) at a New York landfill.

For the 2013 calendar year, the Net Service Fee payment to the RRA by the County was \$712,100. This was a decrease of \$3,426,582 from the 2012 calendar year payment of \$4,138,682. The main reason for the large decrease was the retirement of the Series 1999 Bonds. The Bonds were retired in 2014 by using the Bond Debt Service Reserve Fund for the last year of the Bond payments. The Series 2007 Bond payments continue until 2027.

For January through September of 2014, the Net Service Fee payments were \$893,194. The October through December 2014 figure has not been determined as of this date. The year included a mid-year switch to a new operator and the associated changes in the new Operator Agreement.

There has been no alternative method of ash disposal found, although a closer landfill was found for using the ash as ADC, so transportation costs have been lowered. An alternative beneficial use is being explored and staff plans to monitor the results of a Request for Information (RFI) for the Beneficial Use of Municipal Solid Waste Incinerator Ash issued by Marion County, Oregon in late 2014. The RFI received three interested responders, and a Request for Proposals is expected to be issued in 2015. If successful, the results can be studied for replication in Dutchess County.

e. Reduce and Reuse:

The pre-2015 tasks are ongoing. Through the Division's website and educational outreach, we have, and will continue to, promote compliance with Extended Producer Responsibility (EPR). We provide education on NYS's Electronic Equipment Recycling and Reuse Act, and increased our education to residents with the 2015 disposal ban of certain types of electronic equipment for all consumers. We provide information on how to properly dispose of single use plastic bags, cell phones, CFL's and other mercury-containing devices, and any waste that is covered under EPR or Product Stewardship.

Through the Hudson Valley Regional Council Solid Waste Committee we have met with the New Paltz Recycling Coordinator who runs a ReUse Center, as well as the Executive Director of the

very successful Finger Lakes ReUse Center, to help in understanding how to create and run a reuse center. While Dutchess County does not have a reuse center, we promote the numerous thrift shops within the County and have a listing of places to donate a variety of goods on our website. In addition, we have promoted the Repair Café initiatives in the area, including the Poughkeepsie location.

The Division has not initiated a municipal pilot program for Pay As You Throw (PAYT). So far there has been limited interest in this type of program. Within the County, the majority of curbside pickup is done through private haulers and the charge is the same whether the cart is full or half-full. Private haulers have no incentive to initiate a PAYT system, and would have difficulty switching to this type of system in terms of equipment and tracking for billing. Most haulers will provide a smaller garbage can at a reduced rate, when requested.

When one municipality, who provides curbside collection, proposed a bag purchase system for garbage with free recycling, the idea was strongly resisted by many residents and the proposal was not initiated. In another municipality that had municipal collection, where the residents had to purchase a sticker for a bag of garbage and no extra cost for recycling, the municipality became concerned when it noticed a large number of private hauler trucks were circulating the streets, also providing residential curbside pick-up. A study was conducted on solid waste practices in the community and it was found that an estimated 75% of residents were contracting with a private hauler. Residents were willing to pay extra to have the convenience of not having to purchase stickers, even though they were already paying for municipal collection. This municipality no longer provides collection services.

While the Division would be willing to initiate a pilot program for PAYT, it is not a task that has been scheduled at this time and a willing municipality has not been identified.

f. Recycling Education:

The main focus of the Division staff is to promote and educate the public about recycling in Dutchess County and every task has either been completed or is ongoing. We take any opportunity available to give a presentation on solid waste management in Dutchess County. Over the past two years presentations were given to the Dutchess County Planning Board (2), at a Dutchess County Planning Federation Short Course on [Planning for the Future of Recycling and Materials Management](#), at meetings of the Town of Poughkeepsie Town Board, League of Women Voters Mid-Hudson Region, LaGrange Environmental Action Forum, Arlington High School Research Club, Poughkeepsie Galleria Merchants, James Street Home Bureau, and Town of LaGrange Conservation Advisory Council.

Staff has taken part in numerous Earth Day events in 2013 and 2014, including at the Culinary Institute of America (3), Dutchess Community College, the Carey Institute of Ecosystem Studies,

and Marist College in order to promote recycling and backyard composting. Staff, along with the County Executive, has hosted [Earth Day Clean-up Events](#) with County employees for the past two years. County employees and volunteer residents collected garbage and recycling at the County Government complex and promoted recycling to the public during the events.

The Division published three Plan On It eNewsletters through the Dutchess County Planning Federation titled: [Rethinking Waste: A New Age of Recycling](#), [Reduce Pollution in Our Streams and Waterbodies](#), and [Don't Throw it Away – Alternatives to Landfills or Incineration](#), in order to promote reuse and recycling county-wide.

In 2013 the Division added a Greenway Guide to [Greenway Connections](#), a sourcebook for local officials and citizen groups, titled [Recycling and Waste Collection](#). The guide was created to promote the separation and collection of recyclable materials, as well as the proper placement and screening of containers, as an essential part of every site plan and development review.

The Division's [website](#) is regularly updated to provide current information, to promote what can be recycled in Dutchess County, to promote single-stream recycling, and to provide links to relevant information. We provide a link to the [ReCommunity Virtual MRF](#) tour for residents to learn about the recycling process. We also provide links to various donation sites for reuse of materials and to sites that provide information of composting, hazardous waste disposal and other useful and relevant solid waste management links.

In 2013, and continuing into 2014, we focused on the recycling practices of Dutchess County Government buildings, with the knowledge that any lessons learned and results obtained can be used for replication with other business entities. All of the buildings were assessed for current recycling and garbage disposal practices. Since all buildings went single-stream in 2012, we also promoted the ease of recycling and the materials that can be recycled to all County employees. Then we monitored the dumpsters at each building to see if the amount disposed in the garbage changed. Through increased recycling and a decrease in the amount of garbage disposed, we were able to reduce the number of garbage dumpsters needed and/or reduce the frequency of pick-ups, thereby reducing the cost to dispose solid waste. The County was able to reduce the cost of solid waste disposal by over \$35,000 per year. This success is promoted for replication by other entities, with offers to perform visual waste assessments as requested.

In late 2014, the Division obtained 30 ClearTainers to promote recycling at public events. The [Recycle Container Loan Program](#) provides containers for loan to residents for short-term events within the County. In 2014 containers were borrowed for two events, which resulted in collecting over 43 pounds of cans and bottles for recycling. To promote the use of the loan program over 100 letters were sent to not-for-profits, religious entities and civic organizations. Promotion of the program will continue in 2015.

Also in 2014, the County was awarded a [Dr. Pepper Snapple/Keep America Beautiful Public Park Bin Grant](#). Twenty-five bins were awarded for use in two County parks, Bowdoin Park and Wilcox Park. The bins were a great addition to existing recycling efforts in County parks and have helped to increase recycling at these locations.



To further promote recycling in public spaces the Division created a reuse project to create recycling barrels out of empty car wash soap barrels. The barrels are obtained for free from local car wash businesses and with minimal labor, turned into public space recycling bins. The Division obtained 30 barrels for use in County parks, and have also provided barrels to one municipality and one school to increase public space recycling. The promotion of this reuse and recycle project will continue.

We have met with various large event organizations, including the General Manager of the Dutchess County Fair, to discuss recycling efforts and organics diversion. This is an ongoing effort which will continue with other organizations in 2015.

The one task that has not been completed is developing a recycling contest or award program. The Division plans on initiating a program in 2015 to issue certificates to entities to recognize significant recycling activities and/or organics diversion programs.

g. Organics Management:

All of the tasks are ongoing. Existing larger composting facilities have been identified, and we continue to identify small-scale composters, including several elementary and secondary schools within the County. We work with Cornell Cooperative Extension Dutchess County (CCE) in promoting backyard composting and small-scale institutional composting. In 2013 and 2014 Dutchess County provided funding to CCE under the County's Agency Partner Grant program. The CCE programs funded include an education program for composting and organics recycling. This program supports one of the key goals of the Plan to increase recycling through organics diversion.

The staff of CCE has proved to be a great resource for help in starting or improving composting initiatives. They promote small-scale composting across the County, including training over 200 residents yearly on constructing a compost pile and by having a booth every year at the Dutchess County Fair. Last year information on recycling was added to the composting display Fair booth, and staff provided information to over 900 fair attendees.

In 2014 a tour was taken of the Red Hook Mill Road Elementary School garden and composting operation. A follow-up visit was undertaken, with both a CCE representative and DEC representative, to provide assistance in improving the compost initiative. The school is

currently using the food grown in the garden for the cafeteria, and taking the garden and cafeteria food scraps to the compost area. The schools program is a great example of small-scale composting and can be used as a model for other institutional initiatives.

Division staff will continue to attend seminars, meetings and discussions on organic waste management. There are several established and innovative programs in New York State that provide informative and innovative organic management ideas that Dutchess County can learn from.

There have been no new DEC permitted or registered composting facilities within the County since the adoption of the Plan, but there have been ongoing discussions, meetings and interest in developing an additional composting system for organics within the County. Recently, CCE was awarded a Cleaner, Greener Communities Grant through NYSERDA. The grant is to develop a feasibility plan to expand organics recycling in Dutchess County. The project includes an in-depth organic waste stream analysis, an economic analysis of the cost of different types of facilities and the potential costs to participants in organic diversion, a spatial analysis to identify preferred locations for a new facility, and outreach to the public to promote organics recycling and gauge attitudes and perceptions concerning organics diversion. The Division will provide assistance with the study as needed and will benefit from the results, which will help to address every task listed under this category.

Since the adoption of the Plan, several additional entities diverting food waste have been identified. Many of the grocery store chains in the area donate food and divert food scraps and spoiled food for composting. We collect this information for reporting purposes, but at this time the destination sites for the organics are not within the County.

h. Special Wastes:

The RRA hosted the Household Hazardous Waste (HHW) events within the County, and the County promoted and supported these events. The collection of hazardous waste from Conditionally Exempt Small Quantity Generators (CESQG) has not been added to the HHW events as of yet. It is a task that we hope to accomplish by adding one day for CESQG collection to a household collection event in 2015, but the date for HHW collection has not been determined by the RRA at this time.

Currently the County has five (5) permanent [medication drop boxes](#) within the County and has secured boxes for four additional drop box locations to be established. In addition, the RRA had medication collections at three (3) of the HHW events every year. In the past two (2) years over 2,000 pounds of medications from Dutchess County residents have been collected. All medications are taken to the RRA waste-to-energy facility and disposed of safely at no charge.

The RRA also accepts collected medications from surrounding counties for safe disposal, over 5,000 pounds in the last two (2) years.

Since the Plan's adoption there have been no additional animal mortality composting sites developed within the County and no formal survey of the need for additional animal mortality composting has been conducted. The Division has requested that CCE staff, in their conversations with local farmers, ask if there is a need. The consensus has been that there is not a need at this time. In addition, the Dutchess County Agricultural and Farmland Protection Plan, which was updated in 2014, did not address the need for additional animal composting, anecdotally suggesting this is not a concern of the farming community at this time. The County does continue to compost deer mortalities incurred on county roads. This composting program has been in effect since 2004 and approximately 400 deer carcasses per year are composted at the Department of Public Works outpost.

i. Partnerships:

The tasks in the Implementation Schedule are either ongoing or have been completed. The Division has maintained active participation with the Hudson Valley Regional Council Solid Waste Committee and has continued to remain up-to-date with regional initiatives concerning recycling and composting. The committee is a great resource for ideas and support from surrounding counties and learning from experts in the field of solid waste management.

The RRA continues to accept pharmaceutical wastes from surrounding counties, and the change in operators of the WTE in 2014 did not change this practice. It is a practice that benefits the whole region and is expected to continue.

Working with municipalities and transfer station operators is part of our ongoing activities. We maintain an up-to-date listing of all of the transfer stations and what is accepted at them. Since the adoption of the Plan, two (2) municipal transfer stations have closed (Dover and Amenia), but both have contracted with existing private facilities in the respective towns for use by residents. The transfer station in Beekman has ceased operations, and the Rhinebeck transfer station has changed from municipally-run to being run by contract with a private entity.

The Division maintains an email contact list for communications with local municipalities, as well as individual schools within the County. We use this list to inform appropriate entities of changes in federal, state or local law, updates concerning solid waste management in the County and notifications of grant opportunities.

In 2014 Dutchess County partnered with Ulster County Resource Recovery Agency (UCRRA) in a compost bin and rain barrel sale. The sale was held in Ulster County, and while successful, there was sparse turnout by Dutchess residents. The Division, due to staffing costs for the event and

possible limited participation, does not plan to hold a similar event within Dutchess County. We do promote the ability to purchase a bin or barrel directly from UCRRA. We will continue to explore other opportunities for sharing of services with Ulster and other surrounding counties.

Currently we are working with The Walkway Over the Hudson State Historic Park who is hosting a [Walkway Marathon](#) later this year. It will be the first marathon held in New York State to have taken the Pledge of Sustainability offered by Athletes for a Fit Planet. The race will be held with a focus on reducing, reusing and recycling every material possible, including old sneakers. The Division will be providing ClearTainers to help in the collection of materials for recycling and food waste for composting.

We plan to continue to work with entities and event organizers to promote reuse and recycling, and plan to reach out to other organizations such as the Dutchess Chamber of Commerce in the coming year. In 2014 the main focus was on schools and multi-family residences.

Staff continually maintains contact with private construction and demolition (C&D) recyclers in the County and in nearby counties. We promote C&D recycling in any presentations given and on the Division's website. We track the C&D recycling rate and periodically check with the facilities to see if materials have been, or could be added, to the list of C&D materials recycled.

In 2014 staff drafted model language to be added to municipal building permit applications. The model language would require a plan for recycling of C&D materials and a plan for possible reuse of materials for demolition projects with any building permit application. The draft model language, once finalized, will be sent to municipalities for consideration. There is also a draft eNewsletter article concerning the benefits of C&D recycling, which staff hopes to publish in 2015.

j. Education Sector:

The tasks from this section were a major focus for 2014. The Compliance Inspector, in conjunction with other job duties, has been visually verifying the availability of recycling equipment on-site at schools and the availability of outdoor recycling equipment at athletic fields. This task is expected to be completed in 2015.

In 2013 a presentation on recycling was given at an area high school and it was determined that one of the main obstacles to a successful recycling program was the custodial staff's unwillingness to keep the materials separated. We followed-up with a letter to the school concerning the benefits of recycling and how to overcome any obstacles. This visit provided a valuable lesson on addressing the entire recycling process, not just what can be recycled, when giving presentations or conducting waste assessments.

In 2014 forty-seven letters were sent to schools offering the school a free waste assessment and/or a recycling presentation to the school or a class. The letters were followed-up by a personal visit to the school by the Division's part-time employee. The letters and follow-up visits resulted in interest from numerous schools.

In 2014 two waste assessments were conducted at area schools, and recycling presentations are scheduled at these same schools in 2015. The assessments revealed that while recycling equipment was on-site, recycling could be improved. The lack of sufficient indoor containers, the lack of signage and proper labeling of containers, and no outdoor recycling containers were the main concerns. Staff is working with the schools to remedy this. As previously mentioned in the recycling education section, one school has requested, and been given, the car wash barrels needed for outdoor recycling.

Due to the severe weather in late 2014, many of the schools that expressed interest in a waste assessment or recycling presentation have asked that we contact them in the spring of 2015. Staff plans to continue this initiative.

The contact with the schools includes providing information on fundraising through collection of redeemable bottles and cans, and textile recovery programs. All schools are updated regularly concerning grant programs and the DEC poster contest.

Dutchess County is fortunate to have five colleges in the area, and they all have robust sustainability programs to be used as models for elementary and secondary schools. We maintain contact with the schools and have participated in sustainability events and programs over the past two years and will continue to do so.

k. Commercial/Institutional Sector:

All tasks are on-going. In 2013, in response to a submitted Recycling Complaint, a local mall was contacted concerning its recycling practices. We were invited to present at the monthly merchant meeting and used the opportunity to educate mall tenants on what, how and where to recycle. The mall has since added additional recycling containers and has made the conversion to single-stream recycling.

Part of the Compliance Inspectors job is to assess recycling at shopping centers and business centers while traveling throughout the County. This has resulted in personal contact with tenants and owners and has provided the opportunity for disseminating educational information concerning recycling and providing information on the Dutchess County Source Separation Law to individual businesses. We have found that most businesses provide the opportunity to recycle but need updated information on what can be recycled and how single-

stream works. While this information is also provided through presentations, brochures and the website, the personal contact works best. This effort is ongoing.

In 2014 we focused on multi-family recycling. We sent letters to 135 managers and/or owners of multi-family complexes to inform them of the law requiring them to provide tenants the opportunity to recycle, along with a recycling educational flyer (in both English and Spanish languages) to share with tenants. We had numerous responses, either saying they already provide recycling and/or asking how to improve tenant recycling. The Compliance Inspector was given the list of complexes and has been visiting each complex to ensure compliance as part of his duties. Non-compliant complexes receive a Notice of Violation and 10 business days to comply before incurring a fine. No fines have been issued as of this date, and compliance inspections are ongoing.

In 2013 every municipality was given several copies of our [Recycling Brochure](#) to make available to residents. The brochure can also be downloaded from our website and many municipalities provide a link on their websites to our information. Contact is maintained with all municipalities, and an email contact list is maintained to keep officials current on laws, events and grant opportunities. Presentations to local officials and residents are given whenever the opportunity arises.

We will continue to work with the commercial and institutional sectors on waste management. The focus in 2015 will be on commercial strip malls and gas stations/convenience stores.

I. Agricultural Sector:

Dutchess County provides funding for CCE environmental programs and the Division works closely with CCE concerning solid waste management and the agricultural community. When a local farm was interested in possibly adding an anaerobic digester to the farm operation, both the Division and CCE provided cooperative assistance in determining sources of organic materials and the associated costs. Unfortunately this project is on hold, but it illustrates the cooperation between CCE, the agricultural community and this Division. CCE is our main source of contact with farms, and CCE not only promotes composting and recycling within the farming community, but also provides information when there are specific initiatives or concerns.

m. Industrial Sector:

As with the commercial sector, staff collects data from industrial generators in the County. One of the largest industries is IBM, located in Poughkeepsie and East Fishkill. Every year they are asked to complete a MSW report, indicating what is recycled. The reports show that they recycle not only cardboard and commingled, but also materials such as electronics, wood,

asphalt and non-hazardous chemical waste. We will continue to monitor and work with the industrial waste generators to explore additional recycling and composting opportunities.

¹ A BUD is a jurisdictional designation made by DEC in regard to a material that has been used and is no longer usable for its original purpose but can be directed to an alternative use considered to be beneficial compared to disposal.

² ADC means cover material other than earthen material placed on the surface of the active face of a solid waste landfill at the end of each operating day to control vectors, fires, odors, blowing litter, and scavenging.