



## **2020 ANNUAL REPORT**

**WESTCHESTER COUNTY DEPARTMENT OF ENVIRONMENTAL FACILITIES  
DIVISION OF SOLID WASTE MANAGEMENT and RECYCLING OFFICE**

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## Executive Summary

The Solid Waste Division of the Westchester County Department of Environmental Facilities (DEF) serves as New York State's designated Planning Unit for Westchester's 43 municipalities and manages Refuse Disposal District (RDD) No. 1, to which 36 of the County's municipalities belong. DEF oversees several solid waste and recycling facilities, which handle about 90% of the County's residential waste stream. DEF also manages the County's many recycling and waste reduction programs and services.

During the past three decades, Westchester County and DEF have consistently been at or near the top of all waste management performance indicators, including waste reduction. Since 2003, the amount of residential solid waste disposed by the Refuse District has decreased from 495,915 tons to 376,097 tons, a reduction of over 119,818 tons or 24.2%. In 2020, the County continued to demonstrate that it's a regional leader in the field of environmental management by posting a recycling rate of 51.36%, far outpacing the EPA national average of 32.1%. The County's recycling rate includes a wide variety of materials collected and diverted from the solid waste stream beyond curbside collections of cans, bottles, plastics, cartons, cardboard and paper, such as roadway millings, large bulk metals, construction debris, and composted organic waste.

In December 2010, the New York State Department of Environmental Conservation finalized its Solid Waste Management Plan, which outlined a twenty-year course of action to reduce waste. The State's Plan, "Beyond Waste," challenged Planning Units to drastically reduce solid waste disposed (i.e., non-recyclable waste) to 0.6 pounds per person per day ("PPD") by 2030. Westchester is working very hard to meet the State's goal. In 2020, the County's average of 3.7 PPD outperformed the New York State average of 4.5 PPD, as well as the national average of 4.9 PPD (2018 rate). Moreover, while 50% of the waste generated in the U.S. is discarded in a landfill, it is estimated that more than 90% of Westchester's non-recyclable waste stream was processed at an energy-from-waste facility, producing clean energy, steam, and recovering recyclable metals. In comparison, the EPA estimates that only 11.8% of the nation's waste stream was delivered to an energy recovery facility in 2018 (the most recent year for which data is available).

Recycling in Westchester continues to make good economic, as well as environmental sense. In 2020, 77,444 tons of curbside recyclables collected by municipalities within the RDD were delivered to the Daniel P. Thomas Material Recovery Facility (MRF). Revenue from the sale of these recyclables totaled \$3,576,130.21.

The environmental programs in place in Westchester County and managed by DEF, including recycling initiatives and enforcement, tours of the County's Material Recovery Facility, the recycling of municipally-collected yard waste under the Organic Yard Waste Program, operation of the Household-Material Recovery Facility and Mobile Shredders, the Residential Food Scrap Transportation and Disposal Program, the Compost and Education Facility, and other programs that will be discussed in this report, all contribute to Westchester's excellent record of performance. The County, through the work of DEF, remains committed to serving as a leader in the environmental management field in 2021 and beyond.

## DEF/Recycling & Solid Waste Facilities

### **1. Daniel P. Thomas Material Recovery Facility (MRF):**

The MRF, located in Yonkers, serves as the primary recycling facility for the municipalities in the RDD. The items delivered and processed at the MRF, and sold to recyclers include: aluminum (cans and foil), ferrous metals, food and beverage cartons (gable top and shelf-stable aseptic), plastics (coded 1–7), plastic boat wrap, newspaper, corrugated cardboard, and assorted paper, including office paper and paper collected by the County’s two Mobile Shredders. In 2020, the MRF processed 77,444 tons of recyclables.



### **2. Charles Point Waste-to-Energy Facility:**



Operated by Wheelabrator Technologies, the Charles Point Energy-from-Waste Facility, located in the City of Peekskill, processes up to 2,150 tons of household and commercial waste per day. Refuse collected from Westchester municipalities and commercial customers is delivered to this fully enclosed facility, where it is transferred to utility-type boilers that recover thermal energy in the form of high-pressure steam. In 2020, RDD municipalities delivered 376,097 tons of solid waste to the facility. In total, the facility processed 659,116 tons of solid waste in 2020, using its steam-powered turbines generate approximately 60,000 kilowatts of electricity an hour—enough to power more than 60,600 homes. Additional steam not required for electricity generation is marketed to a nearby commercial customer, White Plains Linen, for use as a clean, reliable, and renewable energy source.

Another benefit of Energy-from-Waste is metal recovery for recycling. In 2020, the facility recovered 13,623 tons of ferrous metal through extraction from the ash residue and properly recycled the material.

### **3. County Transfer Stations:**

Three County Transfer Stations located in White Plains, Mount Vernon, and Yonkers offer RDD municipalities reduced costs for delivering the solid waste they collect by significantly reducing their travel time. The County provides transport of the waste from the transfer stations to the

Charles Point Facility in Peekskill. In 2020, RDD municipalities in the northern part of the County delivered 78,934 tons of solid waste directly to Charles Point, while District municipalities in the southern part of the County delivered 297,163 tons of solid waste to these three transfer stations.

#### **4. Household-Material Recovery Facility (H-MRF):**

The H-MRF, located on the County's Grasslands Campus in Valhalla, opened in April 2012 to provide a geographically centralized location for residents to dispose of hard-to-get-rid-of household wastes, including hazardous chemicals, cleaning products, tires, rechargeable batteries, Freon-containing appliances, electronic waste, propane tanks, and expired or unwanted medications. The H-MRF also offers confidential document shredding services. RDD residents are able to use the facility at no cost, while Westchester County residents that do not reside within the RDD are required to pay a small fee based on the type and amount of materials they deliver. Whenever possible, materials collected at the facility are recycled; all other materials are disposed of in a safe and environmentally sound manner. The H-MRF is open Tuesday–Saturday from 10 a.m. – 3 p.m., by appointment.



In 2020, 12,581 households visited the H-MRF and delivered a total of 948,711 lbs. of household wastes including:

- 111,947 lbs. of flammables
- 39,644 lbs. of pesticides
- 20,519 lbs. of corrosive liquids
- 21,614 lbs. of non-hazardous liquids
- 2,712 lbs. of fluorescent bulbs
- 473 lbs. of fire extinguishers
- 6,983 lbs. of universal waste
- 6,999 lbs. of cylinders
- 3,040 lbs. of mercury
- 133,550 lbs. of bulk metals
- 440 lbs. of rechargeable batteries
- 250,370 lbs. of electronic waste
- 133,580 lbs. of non-recyclables
- 216,840 lbs. of confidential documents for shredding

The H-MRF also accepts chemicals and fluorescent light bulbs from Conditionally Exempt Small Quantity Generators (CESQGs). This enables local schools, municipal and county departments and small businesses to dispose of these items properly. In 2020, CESQGs delivered 1,076 lbs. of hazardous waste and 848 ft. of fluorescent bulbs for safe and environmentally sound disposal.



# RECYCLING PROGRAMS

## **5. Recycling Education:**



The MRF Education and Conference Center allows visitors to observe the operation of a municipal solid waste and recyclables transfer station. MRF tours are free of charge, given on an appointment basis, and educate participants on the management of solid waste and recyclables management in Westchester. Groups are taken to an observation tower to view equipment that separates, sorts, and prepares materials for sale to third party recyclers. From an observation tower, visitors can see the tipping floor, where truckloads of recyclables are delivered. A brief presentation and educational video is shown to explain the benefits of recycling. Tours, given to students and persons of all age groups (kindergarten and above), typically last between 45 minutes to one hour.

The Center's *Recycled Material Art Gallery* was recognized with a Bronze Excellence Award in the Education Program category by the Solid Waste Association of North America (SWANA) in 2015. The Gallery features installments created by Westchester County artists from recycled and reused materials.

Recycling office staff are also available to attend environmental and local events, providing residents with current recycling information and best practice tips.

## **6. Medication Take-Back Program:**

Residents are able to drop off unwanted or expired medications at the H-MRF on the first Tuesday of every month. Following the close of business, Westchester County Department of Public Safety personnel supervise transportation of the collected medications to the Waste-to-Energy Facility in Peekskill for destruction.

In 2020, Westchester County collected 5,954 lbs. of medications at the H-MRF. A total of 133 households delivered 1,117 lbs. of medications directly to the H-MRF. In addition, 38 Westchester County Police Departments participated in the Medication Take-Back Program by hosting MedReturn Units at their stations. These MedReturn Units allow residents to drop off unwanted medications confidentially and conveniently, 24/7. The Police Departments deliver the collected medications to the H-MRF. Of the 5,954 lbs. of medication collected in 2020, 4,837 lbs. were collected by Police Departments and brought to the H-MRF on the first Tuesday of each month.



## **7. Mobile Shredder Program:**



In 2020, DEF continued to operate two Mobile Shredders, conducting shredding events at various locations throughout the County. Residents are permitted to bring up to four file-size boxes of personal papers to these events to be shredded and recycled. In 2020, over 18,000 households utilized the Mobile Shredder and over 522 tons of paper were shredded and sold to recyclers.

## **8. Boat Wrap Recycling Program:**

In 2020, Westchester County's Boat Wrap Recycling program collected about 74 tons of plastic used to protect boats during the winter from participating Long Island Sound and Hudson River marinas. An average boat can use as much as 14 lbs. of recyclable wrap (low-density polyethylene or LDPE), which would normally be thrown away in the Spring. The County sells the collected plastic to recyclers.

In 2020, 26 marinas and boat yards along the Long Island Sound and the Hudson River operated as designated collection points. DEF picks up and delivers the material to the MRF.



## **9. Westchester County's Recycling HelpLine:**

The County's Recycling HelpLine at (914) 813-5425 serves as an informational tool, assisting local residents and businesses by providing answers to questions regarding waste management and recycling. Residents can also call the HelpLine to book an appointment to deliver material to the H-MRF. The HelpLine is operated by staff from the United Way, trained to answer frequently asked recycling questions, and to transfer other questions to appropriate DEF staff. The Recycling HelpLine also provides residents with information on various County sponsored events such as residential shredding events featuring one of the Mobile Shredders. Additionally, the HelpLine assists residents with questions related specifically to their particular locale, since waste collection programs vary from one municipality to another. In 2020, the Recycling HelpLine handled 17,103 inquiries.

## **10. Electronic Waste Recycling Program:**

DEF provides electronic waste (e-waste) collection containers at 27 RDD municipal sites, where RDD residents can dispose of their unwanted electronics. In addition, residents can deliver e-waste to the H-MRF. In 2020, the County diverted about 2.16 million lbs. of e-waste from the solid waste stream through this program.

## **11. Organic Yard Waste Transfer Station IMA Program:**

Beginning in 1998, the Westchester County Board of Legislators authorized the County to enter into Inter-Municipal Agreements (IMAs) with RDD municipalities to operate the Organic Yard Waste Transfer Station Program. Participating municipalities collect yard waste at a municipal depot. The County arranges for collection from the depot and transport to commercial composting facilities. As an economic incentive to divert yard waste from the solid waste stream, RDD member municipalities pay less per ton for collected yard waste than for disposal of municipal solid waste. The program allows participating municipalities to increase local recycling rates and to save money by diverting yard waste from the waste stream. In 2020, the program collected 151,336 tons of material. Municipalities that currently host an Organic Yard Waste Transfer station include: Briarcliff Manor, Cortlandt, Croton, Eastchester, Greenburgh, Harrison, Irvington, Larchmont, Village and Town of Mamaroneck, Mt. Kisco, Mt. Vernon, New Rochelle, Ossining Village, Peekskill, Port Chester, Rye City, Scarsdale, Sleepy Hollow, Tarrytown, White Plains, and Yonkers. By hosting a site, these municipalities also agree to accept yard waste from neighboring municipalities.

## **12. Recycling Enforcement:**

In 2020, DEF inspectors continued to inspect loads tipped at both private and municipal transfer stations located within Westchester, looking for improperly mixed loads of garbage and recyclables in violation of the Source Separation Law (SSL). They also continued to inspect businesses, schools, multi-tenant facilities, and other institutions throughout the County to ensure compliance with the SSL.



In 2020, DEF issued 44 Notices of Hearing to haulers and waste generators for recycling violations. Of the violations issued, 10 were issued to municipal haulers, 16 were issued to private haulers, and 18 were issued to waste generators.

## **13. Household Recycling Days:**

In 2020, Westchester County held two Household Recycling Days (HRDs) which were tremendously popular. Events held at the Franklin D. Roosevelt State Park in Yorktown Heights and at Rye Playland, attracted over 2,440 households who delivered over 273,952 pounds of hazardous waste, medications, and electronic waste for proper recycling/disposal. An additional 36,820 lbs. of documents were collected for shredding.

## **New Initiatives**



#### **14. Food Waste Study:**

In 2019, DEF launched a Food Waste study of various food waste recycling technologies with the goal of formulating a food waste recycling plan for Westchester. The Study, completed in 2020, provided mid- and long-term options for handling food waste within the County. The County is continuing to explore these options and work with private companies to determine encourage investment in these projects.

#### **15. Residential Food Scrap Transportation and Disposal Program (RFSTAD):**

In furtherance of the County Executive and DEF's commitment to food scrap recycling, in 2020, the Solid Waste Division launched RFSTAD. After determining that the primary cost associated with food scrap recycling was the transportation and disposal of the scraps, the County Board of Legislators authorized DEF to enter into Inter Municipal Agreements (IMAs) with local municipalities to allow the County to manage the transportation and disposal of food scraps collected through local municipal programs. For municipalities that are part of the RDD, the cost of the transportation and recycling of food scraps is equal to or less than the cost to dispose of the food scraps as MSW. When paired with NYSDEC grant funding for recycling equipment, RFSTAD makes food scrap collections virtually cost neutral, and potentially cost saving, for local municipalities.

#### **16. Compost and Education Center (CompostED):**

Recognizing that composting food scraps and yard waste together in backyards, or in small-scale municipal facilities reduces greenhouse gas emissions from transportation to an appropriate recycling facility, DEF designed CompostED. Opening on Earth Day 2021, CompostED will be an operational small-scale compost facility in Valhalla. CompostED will offer educational tours and information on the environmental benefits of composting for students, as well composting information for home composting and small-scale municipal and community composting.

## **REFUSE DISPOSAL DISTRICT #1**

#### **17. Refuse Disposal District Advisory Board (RDDAB):**

The Laws of Westchester County established the RDDAB, which is composed of 14 volunteers and 2 *ex officio* members to advise the RDD on solid waste issues and policy. Six members are designated to represent the County's cities; five members are designated to represent the towns; and four to represent the villages.

The 2020 board members were:

1. George Mottarella-- City of Rye - Chair
2. Thomas Meier—Yonkers
3. Jeffery Coleman-- Cortlandt
4. Peter Liguori-- Town of Greenburgh

5. Benedict Salanitro-- Town of Rye
  6. Peter Sciliano-- Mt. Pleasant
  7. Stephen Altieri-- Town of Mamaroneck
  8. Rocco Circosta-- Village of Ossining
  9. Michael Gunther-- Hastings-on-Hudson
  10. Rick Hope— White Plains
- Two (2) vacancies

## Attachment 1: Westchester County Recycling Rate 2020

<b>MUNICIPALLY COLLECTED WASTE &amp; RECYCLING IN TONS</b>	
Curbside Commingled Containers and Mixed Paper	93,201
Yard Waste Recycled	201,953
Bulk Metal Recycled	18,861
Construction & Demolition Debris and Sewage Sludge Recycled	107,697
Other Recyclables: Tires, Electronics, Anti-freeze, Motor Oil, Vehicle Batteries, Textiles, and Deposit Beverage Containers	17,212
<b>TOTAL RECYCLED WASTE</b>	<b>438,923</b>
<b>TOTAL DISPOSED WASTE</b>	<b>402,133</b>
<b>TOTAL RECYCLED &amp; DISPOSED*</b>	<b>841,056</b>
<b>MUNICIPAL RECYCLING RATE</b>	<b>52%</b>

<b>PRIVATELY COLLECTED WASTE &amp; RECYCLING IN TONS</b>	
Source Separated Recyclables & Scrap Metal	97,330
Yard Waste Recycled	57,885
Construction & Demolition Debris (C&D) Recycled	390,732
Construction & Demolition Debris Disposed	281,246
Garbage Disposed	249,352
<b>TOTAL RECYCLED WASTE</b>	<b>545,947</b>
<b>TOTAL DISPOSED C&amp;D AND GARBAGE</b>	<b>530,598</b>
<b>TOTAL RECYCLED &amp; DISPOSED*</b>	<b>1,076,545</b>
<b>PRIVATE HAULER RECYCLING RATE</b>	<b>50.71%</b>

## Attachment 2: Municipally Collected Waste & Recyclables – 2020

	Recycled Waste	Disposed Waste	Total Solid Waste Generated (Recycled & Disposed)	Percent Recycled (Total)
ARDSLEY *	2,529	2,011	4,540	56%
BEDFORD	25,234	12,717	37,951	66%
BRIARCLIFF *	5,658	3,115	8,773	64%
BRONXVILLE	3,966	2,251	6,217	64%
BUCHANAN	284	1,398	1,682	17%
CORTLANDT *	6,553	15,440	21,993	30%
CROTON-ON-HUDSON *	4,389	3,464	7,853	56%
DOBBS FERRY *	2,101	5,042	7,143	29%
EASTCHESTER *	9,016	8,609	17,625	51%
ELMSFORD *	1,540	1,752	3,292	47%
GREENBURGH *	22,702	16,685	39,387	58%
HARRISON *	12,484	9,161	21,645	58%
HASTINGS-ON-HUDSON *	5,702	3,442	9,144	62%
IRVINGTON *	5,975	2,724	8,699	69%
LARCHMNT/M'MARNCK *	9,492	8,105	17,597	54%
LEWISBORO	4,753	8,550	13,303	36%
MAMARONECK- VILLAGE *	6,730	8,802	15,532	43%
MT. KISCO *	4,891	4,174	9,065	54%
MT. PLEASANT *	8,857	9,815	18,672	47%
MT. VERNON *	9,338	32,461	41,799	22%
NEW CASTLE	5,561	6,797	12,358	45%
NEW ROCHELLE *	47,333	30,248	77,581	61%
NORTH CASTLE	11,217	5,723	16,940	66%
NORTH SALEM	1,696	2,488	4,184	41%
OSSINING - TOWN *	1,459	2,245	3,704	39%
OSSINING - VILLAGE *	16,858	9,319	26,177	64%
PEEKSKILL *	6,409	8,563	14,972	43%
PELHAM *	2,980	3,029	6,009	50%
PELHAM MANOR *	10,896	2,288	13,184	83%
PLEASANTVILLE *	5,202	2,350	7,552	69%
PORT CHESTER *	11,568	12,475	24,043	48%
POUND RIDGE	2,036	1,742	3,778	54%
RYE BROOK *	4,039	3,597	7,636	53%
RYE CITY *	7,231	5,614	12,845	56%
SCARSDALE *	14,922	7,214	22,136	67%
SLEEPY HOLLOW *	2,934	4,237	7,171	41%
SOMERS (7)	3,474	7,633	11,107	31%
TARRYTOWN *	3,848	3,968	7,816	49%
TUCKAHOE *	5,342	2,703	8,045	66%
WESTCHESTER CO. PROGRAMS	15,955	2,812	18,767	N/A
WHITE PLAINS *	17,575	27,615	45,190	39%
YONKERS *	56,043	88,559	144,602	39%
YORKTOWN *	32,151	14,819	46,970	68%
<b>TOTAL</b>	<b>438,923</b>	<b>402,133</b>	<b>841,056</b>	<b>52%</b>

\*Included are materials recycled in Westchester County but cannot be allocated between municipalities: 13, 623 tons of metal from the WTE facility (extracted from the "Disposed Waste" column).