ONONDAGA COUNTY RESOURCE RECOVERY AGENCY



ANNUAL REPORT ON RECYCLABLES RECOVERED: 2008

This report is submitted pursuant to NYSDEC Permit Number 7- 3142-00028/00002-0, Certificate to Operate the Onondaga County Resource Recovery Facility; NYSDEC Permit Number 7-3156-00047/00001-0 Permit to Construct and Operate the OCRRA Landfill; NYSDEC Permit Number 7-3148-00048/00001-0 Solid Waste Transfer Station-Ley Creek and NYSDEC Permit Number 7-3142-00036/00001-0 Solid Waste Transfer Station-Rock Cut Road.

Period reported: January 1, 2008 through December 31, 2008

Date: March 1, 2009

Planning Unit: County of Onondaga including the City of Syracuse,

excluding the Town and Village of Skaneateles

Contact Person: A.T. Rhoads, Executive Director, OCRRA

100 Elwood Davis Rd. North Syracuse, NY 13212-4312

1.0 Mandatory and Voluntary Recycling in 2008

OCRRA's volunteer board of directors established the following vision for the Agency: **By 2010**, **OCRRA will be recognized as a world leader in local waste disposal and recycling solutions**, **making our community one of the best places to live and work.** OCRRA is well on its way to achieving this vision by making great strides in 2008.



Onondaga County residents demonstrated their continued dedication to an outstanding recycling program this year. An impressive **41,000 tons** of material was collected from households through Blue Bin curbside recycling in 2008. This is the community's greatest team effort and creates a sense of pride for Onondaga County residents.

In 2008, approximately **681,000 tons were recycled** through mandatory and voluntary recycling (both residential and commercial) in the community, **for a recycling rate of 66%** (see Table 1). OCRRA is required by the NYSDEC to meet the permit goal of at least a 40% processible 1 recycling rate. For

the eleventh consecutive year, OCRRA met this goal, with a **45% reduction** in the processible Municipal Solid Waste (MSW). In this category, mandatory curbside and commercial recycling totaled **237,000** tons (see Table 2).

ABOVE: Children and parents were able to take Blue Bins and recycling instructions home along with free school supplies at the Annual Youth Day Barbecue in July 2008.

¹Processible materials are those which could have been disposed of in the Waste-to-Energy Facility.

OCRRA inventories and records recycling tonnages of all material, mandated and non-mandated, which is diverted for recycling through the efforts of the curbside program, private commercial and industrial entities, and public and private institutions. Material items include, but are not limited to: bulky metals (scrap autos are <u>not</u> counted), food waste (composted), textiles, unique plastics, sludge, oils and wood. Deposit beverage containers are also reported in the recycling tonnages.

Recycling	Tons (thousands)	Percent
Curbside Recycling (Primarily Residential)	41.4	
Commercial Recycling (Primarily Business)	639.5	
Total Recycling	681.0	66%
Solid Waste		
Incoming Municipal Solid Waste (MSW)	299.6	
Less MSW Ferrous & Nonferrous Recycling ¹	(12.0)	
Incoming Construction & Debris (C&D)	65.8	
Total Solid Waste	353.4	34%
Total Recycling and Solid Waste	1034.4	

Ferrous and nonferrous metals that are recovered from MSW and recycled are subtracted to avoid double counting.

Table 2 - OCRRA 2008 Processible Recycling and Municipal Solid Waste ¹			
Processible ² Recycling	Tons (thousands)	Percent	
Curbside Recycling (Primarily Residential)	41.4		
Processible Commercial (Primarily Business)	195.8		
Total Processible Recycling	237.2	45%	
Municipal Solid Waste (MSW)			
Incoming Municipal Solid Waste	299.6		
Less MSW Ferrous & Nonferrous Recycling ³	(12.0)		
Total MSW	287.6	55%	
Total Processible Recycling and Solid Waste	524.8		

¹Sources for these data include recycling companies, retail and commercial firms, and governmental organizations which voluntarily report to OCRRA. Reported data have been adjusted to eliminate known double-counting. For example: If Generator A ships 500 tons of scrap metal to Recycler B and both organizations report 500 tons to OCRRA; OCRRA credits the system-wide total with 500; not 1,000, tons.

²Processible materials are those which <u>could</u> have been disposed of in the Waste-to-Energy Facility.

³When calculating recycling rates, ferrous and nonferrous metals recovered from MSW are subtracted to avoid double counting.

Table 3 - Mandated Recyclables

Residential

- Newspapers, Magazines, and Catalogs
- Office Paper and Discarded Mail
- Milk and Juice Cartons, Gable-top Cartons, Aseptic Cartons
- Glass Food and Beverage Containers
- Metal Food and Beverage Containers including foil
- #1 and #2 Plastic Bottles
- Aerosol Cans
- Corrugated Cardboard, Brown Paper Bags, Paperboard, Pizza Boxes

Commercial

- All Office Paper
- Corrugated Cardboard
- Paperboard
- Other Blue Bin items (if economically justified)



ABOVE: OCRRA employee Michelle Loney gives a Blue Bin to Onondaga County resident Kristen Juliana at the July 2008 Blue Bin Giveaway at Savea-Lot grocery store in Syracuse.



ABOVE: OCRRA employees pose for a picture behind bags of trash they collected for the Annual Earth Day Clean-Up in April 2008.



ABOVE: OCRRA's Executive Director, Tom Rhoads, hands out Blue Bins at this year's Youth Day Barbecue in Syracuse.

Table 4 - OCRRA 2008 RECYCLING BY COMMODITY		
	TONS	
COMMODITY	(thousands)	Percent of Total
Organic Wastes (except Paper)		
Food - Industrial and Commercial	121.1	18%
Yard Waste	40	6%
Wood	29.5	4%
Textiles	5.2	1%
Plastics	7.1	1%
Total Organic	202.9	30%
Metal		
Ferrous Metals, except MSW Ferrous	139.8	21%
MSW Ferrous	11.8	2%
Non Ferrous Metals, except Aluminum	8	1%
Aluminum	8.9	1%
Total Metal	168.5	25%
Paper		
Corrugated Cardboard and Kraft Bags	90.4	13%
Newspapers and Magazines	27.4	4%
Office / Mixed Paper	33.4	5%
Total Paper	151.2	22%
Sludge (D/S and Papermill)	109.4	16%
Other		
Glass	13.7	2%
Special & Hazardous Wastes ¹	6.2	1%
Electronics and Batteries	6.1	1%
Appliances (most counted in Metal)	0.24	0%
Miscellaneous	22.8	3%
Total Other	49.0	7%
TOTAL	681.0	100%

¹Data reporting is voluntary. Many businesses consider the tonnage and disposal of their special processes wastes, (the category "Special and Hazardous Wastes") whether or not it is "hazardous", to be proprietary information. Therefore, the data concerning the recapture and recycling of waste, especially in this category, may likely be underreported.

Residential, or "Blue Bin", recycling tonnages in 2008 were roughly the same as 2007. This is impressive, considering some of the trends in production of recyclable materials. For example, many recyclable items are becoming thinner, as manufacturers are using less material, or they are being used less. In particular, newspapers have significantly decreased in size, as advertising has decreased; due in large part to an increase in internet use for news. Internet use not only causes advertisers to drop ads from newspapers, but it also causes decreases in circulation, as less people are buying them. This is not only true for Syracuse's local Post Standard, which has consolidated some of its sections, but also for papers with national circulation, like the New York Times and the Wall Street Journal. The trend of using less material, or "thinwalling", is also common among other materials, such as cardboard, plastic, and aluminum.

Economic factors also weigh heavily on waste and recycling totals. 2008 has been a tumultuous year for the global economy. Onondaga County residents are not immune to the effects of the recession that the US is experiencing. Loss of economic footing causes people to buy less discretionary items. This results in less material being thrown in the trash *and* the Blue Bin, as there is less packaging to be disposed of. This is a partial explanation for the reduction in trash tonnage from 2007 to 2008 (from 304,000 to 299,000 tons). In fact, the trash tonnage has not been this low since 2002.

While there are many factors that contribute to trash and recycling totals, the important thing to recognize is that this community has been very consistent with their excellent recycling rate. Despite the many reasons that recycling should be decreasing (poor economy, thinwalling, smaller newspapers), this community still manages to reach 65% or better recycling rate each year. This is something to celebrate!

2.0 2008 Program Costs and Recycling Market Trends

OCRRA manages the solid waste and recycling program for 33 municipalities in Onondaga County. Each municipality is unique in its solid waste collection. Some provide waste and recyclables collection through their own public employees, some contract with private waste hauling firms to provide services for their residents, and still others require residents to arrange for disposal and recycling by contracting with a private hauler or bringing their MSW and recyclables to one of the two OCRRA transfer stations.

OCRRA is not funded by taxation. The trash tipping fee revenue provides the financing for recycling program components essential to achieving the mandated recycling rate. OCRRA applies for government and private grants through competitive applications, as well.

Program costs include OCRRA's comprehensive public education program. The program consists of radio, TV, billboard, and print media campaigns; on-site visits to businesses by a staff of recycling professionals offering technical assistance; classroom presentations by a New York State certified school teacher; and numerous brochures and teaching materials.

OCRRA's recycling program covers costs necessary to assure waste haulers a zero tip fee for residential recyclables. OCRRA also manages two transfer stations that allow for the drop-off of Blue Bin recyclables at no cost. The transfer stations are also drop-off points for additional materials such as scrap metal, small appliances, and household batteries. In addition, OCRRA operates a Community Collection Center, where residents can drop off electronics (including TVs, computer components, old VCRs and stereos), fluorescent light bulbs, batteries, books, cell phones and smoke detectors for recycling.

During 2008, OCRRA's Recycling Program managed:

- Two yard waste compost sites, open to the public six days per week from April to November;
- A Community Collection Center (C3), where electronics, fluorescent light bulbs, batteries, books, cell phones and smoke detectors are collected for recycling year-round;
- Five Household Hazardous Waste (HHW) collection days;
- A television collection day;
- A collection day for air-conditioners, dehumidifiers and propane tanks;
- A "Shred-O-Rama", mobile shredding trucks shredded household confidential papers on-site;
- Year-long battery collection at local drop-off points, including curbside collection in July;
- A mercury thermometer and thermostat exchange program; and
- Special services and programs for businesses, schools, and apartment building managers and owners.

Direct program costs in 2008 (unaudited) associated with the recycling services are as follows:

Table 5 – Expenses by Program	Expense
Recycling Personnel	\$407,029
Material Recovery Facility (MRF) Fees	(\$74,316)
Public Education - Outside Service	\$559,071
Composting	\$96,541
Household Hazardous Waste (HHW) Collection	\$151,473
Blue Bin Expense	\$137,731
Computer and TV Collection	\$17,827
Other Recycling Programs	\$546,887 ¹
Total Cost – 2008	\$1,842,243

¹Approximately \$220,000 of "other" expenses in 2008 was a grant provided by OCRRA to the City of Syracuse Department of Public Works for a refuse collection truck. This is not a typical annual expense.

"Blue Bin" recyclables are collected at the curbside by private haulers, municipal haulers, and municipalities with private hauling contracts. The recyclables are taken for processing and marketing to a material recovery facility (MRF).

In 2005 OCRRA secured the renewal of a 5-year contract agreement, 2006 through 2010, with two private local MRFs. This contract reduces the Agency's annual risk in connection with payments to the MRFs for material processing, potentially generates income for the Agency under favorable market conditions, and provides certainty and stability for the community's recycling system during commodity market lows. As a result of OCRRA's contract, the MRFs accept the recyclables at no charge to the waste haulers.

The MRF contract is a valuable tool which allows OCRRA to formulate and maintain a uniform definition of "Blue Bin" recyclables. The contract also encourages stability in the local market for recyclable commodities by attenuating the variation in global market demand and pricing. This uniformity helps facilitate the successful education and enthusiastic cooperation of the public.

Taking into consideration the value of the commodities in the Blue Bin, OCRRA pays the MRF for processing and marketing residential recyclables using a formula adopted with the new contract. Each month, OCRRA pays the MRFs an administrative fee of \$1.50 per ton for the processing and marketing of the residential recyclables collected under the mandatory program. Additional payments may be made from or to OCRRA depending on the market prices of old corrugated cardboard (OCC) and old newspapers (ONP). Consistent prices below \$40 per ton may require an additional payment from OCRRA to the MRFs; while market prices above \$80 per ton may require a payment to OCRRA from the MRFs. Market prices for OCC and ONP were strong for most of 2008; with a major downturn at the end of the year (see Figure 2). Therefore, OCRRA received a net revenue share from the MRFs in the amount of \$58,250 (see Table 6).

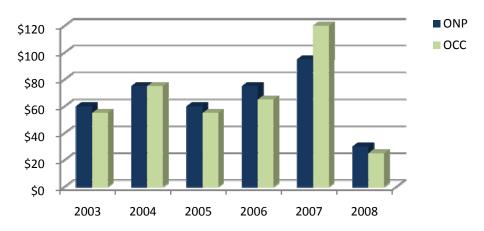
As can be seen in Table 6, the last several years of favorable market conditions for recyclable commodities required significantly lower MRF expenses than in 2001 to 2003. Fluctuations in the commodity markets are difficult to predict from year to year. Consequently, recycling program costs are vulnerable to rapid and unforeseen changes in MRF costs.

Table 6 – Total MRF Payments		
2001	\$432,000	
2002	\$334,970	
2003	\$173,347	
2004	\$19,804	
2005	\$74,727	
2006	\$68,668	
2007	(\$66,820)	
2008	(\$58,250)	

Prices for contractual commodities in December 2008 and prior years are shown in Figure 1. This demonstrates a spike in prices at the end of 2007 followed by a large drop at the end of 2008. To get a more detailed picture of OCC and ONP market behavior throughout 2008, Figure 2 graphs the monthly prices. As this reveals, prices for OCC and ONP were extremely high for most of 2008, dropping considerably in October, November, and December. There has been much debate on the factors causing these price slumps; however, it has been generally viewed as a result of the global economic downturn and the slow down of the Asian markets.

Figure 1

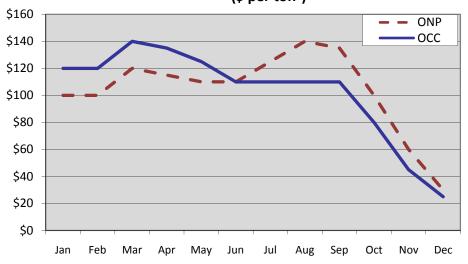
Year End Market Values (\$ per ton1)



¹Prices for ONP and OCC are based on the Official Board Markets (Buffalo)

Figure 2

2008 Transacted Stock Paper Prices— (\$ per ton¹)



¹Prices for ONP and OCC are based on the Official Board Markets (Buffalo)

3.0 Public Education, Program Outreach and Enforcement

OCRRA continues to enforce the local law mandating source separation for recycling through a system of public education and outreach.

Recycling Team

OCRRA employs a professional recycling team engaged in spreading the recycling message and bringing technical assistance to the residents, schools, and businesses in Onondaga County. OCRRA's three Recycling Specialists explore inquiries and complaints about business recycling. In 2008, the Recycling Specialists visited hundreds of local businesses and schools to offer assistance in designing recycling programs and free recycling containers and decals. In addition, OCRRA employs a New York State certified teacher, who spoke to over 12,000 local students in 500 classes in 2008.

When needed, an enforcement officer supplements the efforts of the business and apartment recycling specialists. An enforcement officer calls on businesses and apartment buildings when it is determined that other approaches have not resulted in cooperation. Each enforcement officer spends a significant portion of the week inspecting loads of solid waste at OCRRA's Waste-To-Energy facility to ensure that those containing recyclables are issued warnings and/or violations. Recycling specialists will visit any waste generator that may be in violation to determine the source of the problem and assist in designing a recycling program which will capture the mandated recyclables.

OCRRA Communications

Each year a significant percentage of the population needs to hear the recycling message for the first time and those who are familiar with it may need it reinforced. And, every year we need to inform the public of our special events. OCRRA utilizes many different means of investigating the public's recycling knowledge and uses this information to effectively tailor and direct the Agency's recycling message.

In 2008, OCRRA asked the public about recycling in order to better understand peoples' familiarity with Onondaga County's recycling program. A phone survey was conducted, in which 500 households were contacted and asked a set of questions concerning recycling. From these data, we learned a significant amount of information, including: most households know what to recycle, women are generally more tuned into recycling than men, and the internet is the most used media outlet. This information allows OCRRA to direct its advertising to address these issues; i.e., to focus on the "why" of recycling, to target the male demographic, and to utilize internet advertising more often.

OCRRA also utilized an online survey tool, Survey Monkey (www.surveymonkey.com), in 2008 to gather information from email blast subscribers, as well as more specific audiences such as teachers and compost site users. Response rates for each survey were generally high.

In 2008, approximately \$378,000 was spent on direct public education through radio, TV, and print media campaigns. OCRRA continued its BlueBinIt® public education campaign, which focused on humor and basic recycling instructions.

In addition to paid media advertising, OCRRA also publishes a quarterly newsletter, the *OCRRA Update*. This contains articles written by OCRRA staff highlighting special recycling events and informing the public about specific recyclable materials. OCRRA distributes the newsletter as an insert in the local Pennysaver, which reaches over 155,000 people on a quarterly basis. About 5,000 newsletters each quarter reach the public via public libraries and special events.

OCRRA also has an extensive and user-friendly website. It boasts easy navigation and enhanced search features to allow users to quickly find recycling options for their unwanted items. It also allows users to make online reservations for household hazardous waste days. In 2008, OCRRA added the Business Supply Order Form to the website, which allows businesses, schools, and apartment buildings to order

free recycling containers and decals with a few simple clicks of button. The new form has helped Recycling Specialists streamline the ordering process and serve customers faster and more efficiently.

OCRRA continues to use email as an important means of communication with the public. Through our email blast system, emails covering various recycling topics and upcoming events are sent twice a month to approximately 13,000 people.

Blue Bin Distributions

OCRRA enforcement officers periodically measure Blue Bin set-out rates (frequency of Blue Bins at the curb on trash day) in neighborhods throughout the county. These measurements give an estimation of how much residential recycling is occurring in particular neighborhoods. This, in turn, allows OCRRA to focus its public education campaign on certain areas that may need improvement.

In 2008, OCRRA coordinated three Blue Bin giveaways in areas where a low curbside set-out rates were observed. These events occurred on different Fridays at two participating grocery stores and a community center. Approximately 750 Blue Bins, along with recycling instructions, were distributed to residents through this program.



Another way in which OCRRA reaches out to neighborhoods with low set-out rates is to carry out neighborhood Blue Bin drops. During these events, recycling staff drive through neighborhoods on trash day and place a Blue Bin at the curb at residences that do not have one out. In 2008, OCRRA did three of these drops in suburban and urban neighborhoods, distributing a total of about 1,000 Blue Bins. Set-out rates generally improved following the Neighborhood Blue Bin drops. (At left: OCRRA's Recycling Team prepares to drop off Blue Bins in an urban neighborhood)

OCRRA's staff participated in the Annual Youth Day Barbecue in August 2008, which was a large community event focused on providing children in need with school supplies. Thousands of parents were encouraged to take a Blue Bin and recycling instructions home along with their child's free school supplies. OCRRA gave out over 2,000 Blue Bins in the span of just a few hours. This was the largest single Blue Bin distribution event in OCRRA's history. OCRRA staff will

continue to participate in this event in the coming years.

OCRRA's Recycling Specialists regularly call on businesses and apartment buildings in Onondaga County to help them design effective collection systems for recyclables. During 2008, OCRRA continued to provide free consultations, as well as free containers and highly visible decals to all types of businesses and apartment buildings. Recycling Specialists conducted hundreds of business visits, delivered thousands of recycling containers to businesses, and over 2,000 apartment-sized Blue Bins (*see picture at right*) to apartment renters.



Recycling at Schools

Schools generate a significant portion of the recyclables in a community, in the form of paper, cardboard, and containers. Because of this and the importance of educating children early about recycling, schools were a major focus of OCRRA's public education in 2008. OCRRA provided many presentations and assemblies for schools throughout the county in 2008, including a "Magic of Recycling" show. In addition, the Agency gave out its annual Vonnell Mastri award, honoring the school with the best recycling program in the city of Syracuse.

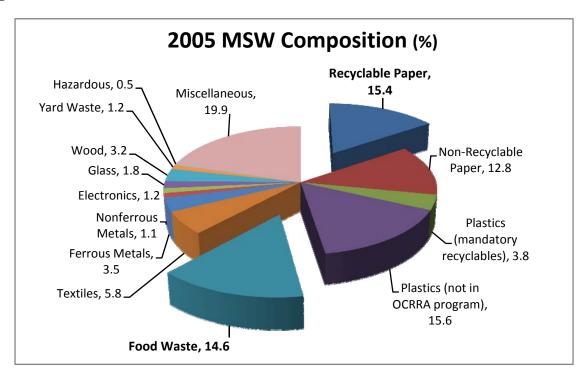
OCRRA's largest school recycling program in 2008 was the "School Recycling Pledge". Community-based social marketing research indicates that people who sign a pledge to perform a particular behavior will be more likely to actually do the behavior. Because of this, OCRRA had large, framed pledges custom-printed for each of the approximately 160 schools in Onondaga County. These encourage a teamwork approach to recycling and illustrate each school's commitment to keeping recyclables out of the trash. As of the end of 2008, one-third of the pledges were distributed, with very positive feedback from those schools. The goal is to have all pledges to their respective schools by December of 2009.

2005 Waste Quantification & Classification

In September 2005, OCRRA conducted a Waste Quantification & Classification study to measure the composition of curbside recyclables and municipal solid waste (MSW), brought to the Waste-to-Energy plant operated by Covanta Energy. Samples from these streams were sorted, as delivered, into 50+categories. Similar studies in 1993 and 1998 have been used to inform decisions concerning the expansion of the list of mandatory recyclables and public communications. The 2005 study allowed us to explore trends and to baseline the Agency's initiatives to Reduce, Reuse and Recycle.

According to the findings of the study, the majority of mandatory recyclable materials (78%) are indeed being recycled. However, approximately 15% of MSW is recyclable fiber (cardboard, office paper, newspaper, and magazines) and 14% is food waste (see Figure 3). These constitute the largest volume by far of potentially recyclable material that ends up in the trash. This information has allowed OCRRA to focus its efforts on capturing more recyclable paper through its business and school recycling campaigns and more food waste through the expansion of its composting program.

Figure 3



4.0 Highlights of the 2008 OCRRA Recycling Program

> COMMUNITY COLLECTION CENTER

In 2007, OCRRA officially opened the Community Collection Center (C3), a 9,000 ft² commercial warehouse-type space that allows for year-round collection of certain recyclable materials (*see picture at right*). This facility continued to operate three days per week in 2008.

At C3, residents are offered the opportunity to drop-off electronics, including televisions, computer components, old VCRs and stereos; books; batteries; fluorescent light bulbs; cell phones; and smoke detectors three days a week at no charge. The materials go to various facilities for processing and recycling. The following highlights the amount of each material collected in 2008.



Books

Over 260,000 pounds of books were sent for recycling from C3 in 2008. In an effort to encourage reuse, groups from libraries, schools and non-profits are invited to sort through old books at C3 and harvest volumes for their own enrichment and literacy missions in the community before they are shipped out and recycled.

Electronics

To encourage the safe management of old electronics, OCRRA takes the environmentally sound approach of removing computer equipment from the waste stream by implementing a household computer recycling program. The program ensures that any recyclable or reusable material will be properly recycled or refurbished and those that cannot be will be disposed of safely at an approved site. Since the program's inception, OCRRA has collected over 2.2 million pounds of e-waste. (Below: An Onondaga County resident drops off a computer monitor for recycling at C3.)



Onondaga County residents were able to drop off old computer equipment at C3 throughout the year. In anticipation of the upcoming federally-mandated switch to digital signals for televisions, OCRRA realized the need to accept televisions, in addition to computers, for recycling. In April 2008, OCRRA held a "TV Recycling Day" at Alliance Bank Stadium, where residents were able to drop off unwanted televisions for recycling. OCRRA, in response to a great demand for television recycling options, began accepting televisions at C3 in September of 2008.

Over 480,000 pounds of old computer equipment and TVs were collected in 2008 at C3 and the April "TV Recycling Day".

Fluorescent Light Bulbs

Fluorescent light bulb use is on the rise due to high energy costs. However, these energy efficient bulbs contain mercury, a potentially harmful chemical. To encourage residents to dispose of these properly and keep mercury out of the trash, OCRRA allows residents to drop off old bulbs at C3. In 2008, over 4,000 bulbs were collected at C3 and disposed of properly.

OCRRA has also partnered with local hardware stores to provide residents with alternative locations to drop off old bulbs. There are 16 participating stores throughout the county. Over 5,000 bulbs were collected in 2008 at these stores.

By bringing fluorescent bulbs to C3 or a to a participating hardware store, Onondaga County residents kept over 9,000 mercury-containing items out of the trash.



Cell Phones

Working and non-working cells phones are collected at C3 for recycling. All of the cell phones collected at C3 are sent to "Cell Phones for Soldiers", a program which has the phones remanufactured into new components or recycled. The proceeds are then sent, in the form of pre-paid cell phone cards, to US soldiers currently serving overseas. In 2008, OCRRA collected and sent over 600 pounds of cell phones to this organization.

Smoke Detectors

Smoke detectors contain minuscule amounts of hazardous chemicals. To ensure proper disposal, OCRRA accepts these items at C3. In 2008, approximately 500 smoke detectors were collected and properly disposed of.

Batteries

Alkaline and various non-alkaline batteries are accepted at C3 year-round. Residents can also drop off old batteries at all Onondaga County Wegmans grocery stores, the Tully Kinney drug store, and the Noble Ace Hardware store in Elbridge. In addition, OCRRA maintains two drop-off centers at its transfer stations and an annual July curbside collection of batteries. In 2008, almost 110,000 pounds of batteries were collected and recycled; 2,800 of which were collected at C3.

> YARD AND FOOD WASTE COMPOSTING

OCRRA's two compost sites offer a convenient service for residents, and municipal and commercial entities to drop-off their yard waste from April to November. Finished compost from the previous year is available for residents to take home as well. Residents purchase a car-window sticker for \$10 which allows them to drop off yard waste and take away compost for the full season. In 2008, over 3,000 residential compost passes were sold, in addition to the commercial users.

Approximately 10,000 cubic yards of compost and 13,000 cubic yards of mulch were produced at the two sites. The program's direct costs were approximately \$96,000; excluding allocated salaries of permanent employees.



In 2004, 15-year leases were established between OCRRA and Onondaga County for the Agency's compost sites. Dilapidated structures were removed from the Amboy compost site and asbestos was safely abated as part of the plan to redevelop the site as an institutional food waste compost operation. In 2008, one of the old hangar buildings was completely renovated to serve composting operations for the long term (see picture at left).

In 2008, OCRRA began exploring the feasibility of composting institutional and commercial food waste through a pilot project at its Amboy Compost Site. The

pilot project consists of several hundred cubic yards of preconsumer food waste from various participating grocers and institutions. The food waste is covered with finished compost and injected with air, using a static aerated system, which allows the pile to maintain aerobic conditions. The pile is monitored continually for temperature and odor issues. (At right: Pre-consumer food waste is unloaded at the Amboy compost site.)

The Agency's goal is to compost thousands of yards of food waste from groceries, hotels, restaurants, hospitals and schools by 2015. Achieving this goal would yield significant environmental benefits, such as eliminating the



need to dispose of thousands of tons of organic waste and creating a value-added product that, as a soil amendment, reduces the need for water, fertilizers, and pesticides. If the pilot project is shown to be successful, this goal has a high probability of being realized.

> HOUSEHOLD HAZARDOUS WASTE DAYS

Household Hazardous Waste (HHW) Days continue to be one of the most popular services the Agency offers. These events allow residents to safely dispose of their hazardous waste, thus keeping these materials out of the waste stream. Five HHW Days were held in 2008, serving approximately 2,500 households. Direct costs included the fee charged by the vendor to conduct the event; battery and propane cylinder handling; lab fees for testing the paint collected; and Strathmore Paint's charges to reformulate and package the paint for the paint give-away to municipalities and human service agencies. Indirect costs included OCRRA personnel for the day of the event as well as the countless hours beforehand; advertising, taking reservations, recording and sending out information/confirmation packets to each of the more than 1,000 households who made appointments for each event.

Among the hazardous waste collected at these events in 2008 were approximately 12,700 gallons of adhesives and resins; 3,000 gallons of paint; 10,000 feet of fluorescent light bulbs; 300 compact fluorescents; and 2,200 gallons of flammable liquid.

> MERCURY THERMOMETER EXCHANGE PROGRAM

OCRRA continued a mercury thermometer exchange program at the Rock Cut Road Transfer Station. The Agency teamed up with Bristol Myers Squibb, Onondaga County Department of Water Environment Protection, and Covanta Energy to provide residents with non-mercury thermometers in exchange for mercury thermometers. The mercury thermometers collected were properly disposed of as part of the Agency's household hazardous waste collection program. This exchange program helps prevent mercury contained in household thermometers from escaping into the environment when the thermometers are broken or thrown away. In 2004, mercury thermostat collection was added to this program.

> RECYCLED PAINT GIVE-AWAY

This year, the Agency again reached out to hundreds of community organizations, inviting them to use recycled paint from OCRRA's Household Hazardous Waste Collection. As a result, over 700 gallons of recycled and reprocessed paint were provided to dozens of non-profit agencies, municipal entities, park systems, and other human service organizations. Organizations that received the recycled paint included:

Westcott Community Center, Boy Scouts of America, Habitat for Humanity, the Onondaga Nation, and the Villages of Fayetteville, Minoa, and Jordan.

> FIFTH ANNUAL COMMUNITY SHRED-O-RAMA



In response to an increasing public concern over identity theft, OCRRA held its Fifth Annual Shred-O-Rama at Alliance Bank Stadium in Syracuse. At this October event, approximately 500 residents dropped off over 16 tons of confidential documents to be shredded. Paper was shredded on site and then recycled by two local shredding companies: ProShred and Confidata. OCRRA also continues to operate a commercial shredding machine for residential use at the Rock Cut Road transfer station. (At left: OCRRA employee Bob Magari helps residents unload their confidential papers at the 2008 Shred-O-Rama)

> AIR CONDITIONER AND PROPANE TANK COLLECTION DAY

OCRRA held its fifth no-charge collection day for air-conditioners, dehumidifiers and propane tanks in June, 2008. Approximately 1,000 residents brought in a total of 1096 air conditioners and dehumidifiers for safe removal of refrigerants (chlorofluorocarbons [CFCs]). Over 900 propane tanks were collected as well. OCRRA partnered with NYSERDA (New York State Energy Research and Development Authority) to stage this event and share the costs. A local company, Oneida Lake Energy Products collected the propane tanks as well as helped with the event.

> FREE ONLINE MATERIAL EXCHANGES AND RESTORE

What if "E-Bay" was free? It would probably work a lot like the **Onondaga County Freecycle Network, ReUseIt, or Around Again**. The goal of these online material exchanges is to reduce waste by connecting individuals who are throwing away goods with others who are seeking them, all at no cost. These sites are set up to be easy to use whether someone is looking to discard or acquire an item. A wide variety of items are listed and their availability changes frequently.

In 2004, Syracuse Habitat for Humanity, Inc. began accepting donations of recycled building materials for the Restore, a home improvement resale store. Leftover home improvement and construction materials are donated by people remodeling their homes or just cleaning out their garages. The idea is to help others improve their standard of living while keeping usable materials out of the trash.

OCRRA strongly supports the goals and programs of the Freecycle Network, ReUseIt, Around Again and ReStore. Residents are able to link to these sites through our website, www.ocrra.org. OCRRA also promotes ReStore and the online exchanges at our community events and in our newsletter.

➤ WASTE DISPOSAL COST RELIEF FOR LOCAL CHARITIES

In 2008, OCRRA again provided a "recycling credit" to the Rescue Mission, Salvation Army, and Catholic Charities for each documented ton of material (clothing, furniture, etc.) recycled through these human service organizations. These recycling credits, in the amount of \$10.00 per ton, were credited towards these organizations' monthly waste disposal fees through the OCRRA system, with certain limitations. In 2008, OCRRA provided these organizations with approximately \$66,000; effectively

relieving them of most of their waste disposal costs. OCRRA's Board also approved a mini-grant program of up to \$300 per year for the purchase of commercial recyclables collection services by small charities and non-profits. Baltimore Woods Nature Center, Girl Scout Council of Central New York, and Huntington Family Centers were among the groups that benefited from this program.

> BOTTLE BILL LAW EXPANSION

The return rates for deposit cans and bottles in Onondaga County ranged from 77% to a whopping 95% percent in a 1998 study. But the *discard* rates for non-returnable containers in Onondaga County, a national recycling leader, ranged from 68% to 87%.

OCRRA is taking a proactive role to change the discard statistics by supporting an expanded New York State bottle bill deposit law to include non-carbonated products such as water, juices, teas and sports drinks. In 2008, OCRRA obtained thousands of signatures from residents who support the expansion of the bottle bill through



petition signings at various local events, such as the New York State Fair. OCRRA also encourages visitors to go to its web site to show their support of an expanded bottle bill by completing an online petition and writing their State Assembly member and Senator.

The Agency's Board resolution to expand the "bottle bill" underscores the Agency's commitment to the New York State solid waste management hierarchy, which emphasizes waste reduction, reuse, and recycling first, and then waste to energy, followed by landfilling. By creating a deposit for the additional bottles, we hope to see more of them recycled and fewer littering our neighborhoods and roadways.

> OCRRA'S COMMUNITY EVENTS AND PUBLIC OUTREACH



OCRRA is committed to maintaining high levels of community participation through the BlueBinIt® recycling program. In 2008, OCRRA's recycling team participated in numerous area events and fairs, including the New York State Fair (see picture at left), the Home and Garden Show, Taste of Westcott Street, and the Chamber of Commerce Business Show. A variety of recycling information was distributed including Blue Bins, recycling instructions, battery bags, and numerous recycling-related promotional items. Thousands of people were contacted through these events. The most attended event that OCRRA participated in was The

New York State Fair, with thousands of visitors to the OCRRA booth over the course of 12 days. To help staff the booth, approximately 40 volunteers worked with OCRRA employees to hand out information and answer recycling questions.

In addition to events, OCRRA Recycling Specialists conducted many presentations to a wide variety of audiences, including school-age children, business office staff, teachers, Rotary Clubs, and neighborhood groups. These presentations all provided information to the public on recycling instructions, as well as the

importance of environmental stewardship. OCRRA Recycling Specialists also shared their expertise with the recycling community by presenting at various conferences in 2008, including the Go Green Initiative Summit in Syracuse, the New York State PTA Conference in Rochester, and the Solid Waste Association's Recycling Conference in Lake George.

Recycling Containers

OCRRA continued to distribute free recycling containers to hundreds of schools, businesses, restaurants and parks to encourage separation and recycling of paper and beverage containers in 2008.

In late 2005, OCRRA selected a vendor to provide 180,000 new Blue Bins to the community over the next two years. By the end of 2008, the majority of these bins were delivered to residents, schools, and local towns and villages, including the City of Syracuse. A new Blue Bin order will be made in early 2009.

Earth Day

OCRRA's Annual Earth Day litter clean is a community-wide two-day event. The clean-up took place on Friday, April 25 and Saturday, April 26, 2008. OCRRA ran numerous print and radio ads promoting the clean-up. The event enjoyed excellent community support, with over 117,000 pounds of litter and 1,460 tires collected by over 9,000 volunteers.

Beyond these noteworthy activities, a host of other services continued to be provided through the recycling program, including the following:

- A recycling drop off six days/week, year round for mandatory recyclables at the Agency transfer stations. This service includes a no-charge drop-off for household scrap metal and office paper from small businesses;
- Submitted grants to support a variety of Agency programs, including advertising and public education, household hazardous waste collection, computer recycling and recycling personnel costs;
- Participated in solid waste associations. All members of the Agency's recycling team are members of the New York State Association of Recycling, Reduction and Reuse (NYSAR³).

OCRRA's recycling team members are:

- Andrew Radin; Director of Recycling and Waste Reduction
- Greg Gelewski; Recycling and Waste Reduction Operations Manager
- Ann Fordock, David Nettle and Sarah Stewart; Recycling Specialists
- Jeff Singer, Allison Stuart and Amy Berger; Recycling Aides
- Elaine Van Avery; Recycling Educator (Contracted Service Provider)
- Tom Furgeson; Compost Site Technician
- Seasonal Compost Site gatekeepers