Onondaga County Final Comprehensive Solid Waste Management Plan Update

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OCRRA.org

Onondaga County Resource Recovery Agency

ONONDAGA COUNTY SEAL

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ACRONYMS AND ABBREVIATIONS

ASP	Aerated Static Pile
BRC	Battery Recycling Corporation
BUD	Beneficial Use Determination
C&D	Construction and Demolition Debris
CEMS	Continuous Emissions Monitoring System
CNY	Central New York
CSWMP	Comprehensive Solid Waste Management Plan
CSWMS	Comprehensive Solid Waste Management System
CTR	Council for Textile Recycling
DEC	New York State Department of Environmental Conservation
ENB	Environmental Notice Bulletin
EPA	United States Environmental Protection Agency
EPR	Extended Producer Responsibility
HDPE	High-density polyethylene
MBT	Mechanical / biological treatment
MRF	Material Recovery Facility
MSW	Municipal Solid Waste
MWC	Municipal Waste Combustion
MWCs	Municipal Waste Combustors
NYCRR	New York Codes, Rules, and Regulations
NYPSC	New York Product Stewardship Council
NYS	New York State
NYSAR3	New York State Association for Reduction, Reuse, and Recycling
OCRRA	Onondaga County Resource Recovery Agency
PAYT	Pay as you throw
PET	Polyethylene terephthalate
PSI	Product Stewardship Institute
PVC	Polyvinyl chloride
RCRA	Resource Conservation and Recovery Act
RDF	Refuse-derived fuel
RFP	Request for Proposal
SEQR	State Environmental Quality Review
SMART	Secondary Materials and Recycled Textiles
STA	Seal of Testing Assurance
SWDA	Onondaga County Solid Waste Disposal Authority
US	United States
USCC	United States Composting Council
WEP	Onondaga County Department of Water Environment Protection
WSE	Waste Stream Environmental
WTE	Waste-to-Energy

EXECUTIVE SUMMARY

Onondaga County is the local planning unit for 33 of the 35 municipalities in the County. Like many other local planning units, Onondaga County developed its first Solid Waste Management Plan in the early 1990s. Since that time, OCRRA, a public benefit corporation, has implemented a Comprehensive Solid Waste Management System (CSWMS) on behalf of Onondaga County. As a public benefit corporation, OCRRA is not an arm of county government and it does not rely on county taxes for funding.

This CSWMP update carefully examines every element of OCRRA's existing CSWMS. It discusses opportunities for program improvement and considers alternatives to the current programs. This CSWMP update also examines major historical changes impacting solid waste management over the past quarter century and sets forth reasonable future projections.

In addition to re-evaluating the current programs, identifying new opportunities, projecting future changes, and considering alternatives, this CSWMP update reassesses OCRRA's CSWMS for consistency with the State's goals. Several years ago, the NYS Department of Environmental Conservation (DEC) developed a new state plan, termed the "Beyond Waste" Plan. The "Beyond Waste" Plan lays out the State's priorities for sustainable materials management. In developing Onondaga County's CSWMP update, Onondaga County carefully evaluated the strategies and priorities encompassed in the State's "Beyond Waste" Plan.

This CSWMP update is structured as follows:

Section 1 sets forth objectives, provides background regulatory information, and discusses the process for public participation and DEC review.

Section 2 presents a historical overview of solid waste management in Onondaga County and describes the characteristics of the planning unit.

Section 3 lays out an overview of OCRRA's existing CSWMS.

Section 4 identifies other regulated solid waste facilities within Onondaga County.

Section 5 quantifies the amount of waste and recyclables generated in Onondaga County and analyzes opportunities for increasing recycling.

Section 6 considers waste generation and recycling trends and makes reasonable projections.

Section 7 evaluates alternatives to OCRRA's existing CSWMS.

Section 8 describes the selected CSWMS and identifies major priorities.

Section 9 sets forth an implementation schedule.

Section 10 presents the process for plan finalization.

While OCRRA's CSWMS is already highly consistent with the State's solid waste management hierarchy, OCRRA strives for continuous improvement for even greater consistency with the hierarchy (i.e., increased waste reduction, reuse, recycling, and composting). The priorities identified by this CSWMP update present an opportunity to set the bar even higher:

- Extend public-private partnership for Waste-to-Energy (WTE) Facility
- Expand food waste composting
- Increase textile recycling
- Develop interactive and engaging school curriculum
- Perform another waste quantification and characterization study
- Advocate for extended producer responsibility (EPR) initiatives
- Evaluate alternative transfer station processing technologies
- Explore alternatives for biosolids management

Onondaga County and OCRRA strive to serve the community and member municipalities with an economically, environmentally, and socially sustainable system for comprehensive solid waste management over the next 10-year planning period; this CSWMP update provides the road map.

1.0 INTRODUCTION

In New York State (NYS) and across the nation, recycling and solid waste management have traditionally been local government responsibilities and that continues to be the case today. In NYS, solid waste management is usually performed at the county level, although there are many exceptions. Providing services at the county level allows for program customization to meet specific community needs and characteristics, while still achieving significant economies of scale as compared to program implementation by individual municipalities. State regulations, plans, policies, and goals govern and guide local planning units and provide the "umbrella" framework under which the local planning units operate.

Onondaga County is the local planning unit for 33 of the 35 municipalities in the County; the town and village of Skaneateles are not part of the Onondaga County planning unit. Like many other local planning units, Onondaga County developed its first Solid Waste Management Plan in the early 1990s. Since that time, the Onondaga County Resource Recovery Agency (OCRRA), a public benefit corporation, has implemented a Comprehensive Solid Waste Management System (hereafter referred to as "CSWMS") on behalf of Onondaga County. Over the years, OCRRA's programs have demonstrated innovation, resilience, adaptation and creativity. Many of OCRRA's programs have been recognized nationally and state-wide as among the best. These accomplishments place OCRRA at the forefront of economic, environmental, and operational sustainability and OCRRA intends to stay ahead of the curve. OCRRA strives to serve Onondaga County with a top performing comprehensive system for decades to come.

1.1 PURPOSE AND SCOPE OF COMPREHENSIVE PLAN UPDATE

It has been nearly 25 years since the development of Onondaga County's Comprehensive Solid Waste Management Plan and, although the 1991 Plan is still quite relevant today, it is time to take another hard, strategic look at solid waste management policies and practices in Onondaga County. This Comprehensive Solid Waste Management Plan (hereafter referred to as the "CSWMP") update carefully examines every element of OCRRA's existing CSWMS. It discusses opportunities for program improvement and considers alternatives to the current programs. This CSWMP update also examines major historical changes impacting solid waste management over the past quarter century and sets forth reasonable future projections.

In addition to re-evaluating the current programs, identifying new opportunities, projecting future changes, and considering alternatives, this CSWMP update reassesses OCRRA's CSWMS for consistency with the State's goals. Several years ago, the NYS Department of Environmental Conservation (DEC) developed a new state plan, termed the "Beyond Waste" Plan. The "Beyond Waste" Plan lays out the State's priorities for sustainable materials management. In developing Onondaga County's CSWMP update, Onondaga County carefully evaluated the strategies and priorities encompassed in the State's "Beyond Waste" Plan.

Last but not least, this CSWMP update charts a new course for the next decade. This includes identifying the optimal system framework for Onondaga County, explaining the critical elements and programs, and laying out an implementation schedule for new program priorities.

It is not enough to simply ensure that the waste generated in Onondaga County has a place to go; Onondaga County and OCRRA are committed to administering and implementing a top-performing, environmentally sound, cost-effective, financially sustainable, and comprehensive resource recovery

system that is a model for other planning units. That, in a nutshell, is the purpose of this CSWMP update.

1.2 NEW YORK WASTE SOLID WASTE MANAGEMENT FRAMEWORK

1.2.1 FEDERAL RESOURCE CONSERVATION RECOVERY ACT (RCRA)

The Resource Conservation and Recovery Act (RCRA), enacted by the United States (US) Congress in 1976, is the principal federal law governing the disposal of solid and hazardous waste. It was enacted to address the increasing problems the nation faced as a result of growing volumes of municipal and industrial waste. RCRA amended the Solid Waste Disposal Act of 1965 and set national goals for:

- Protecting human health and the environment from the potential hazards of waste disposal;
- Conserving energy and natural resources;
- Reducing the amount of waste generated; and
- Ensuring that wastes are managed in an environmentally-sound manner.

With respect to municipal solid waste (MSW), RCRA:

- Banned all open dumping of waste;
- Encouraged source reduction and recycling;
- Set criteria for MSW landfills and other solid waste disposal facilities; and
- Required states to develop comprehensive plans to manage non-hazardous industrial solid waste and MSW.

As a result of RCRA, the DEC, charged with implementing the new law, began a process of requiring closure of old, unlined municipal and private dumps.

1.2.2 1987 SOLID WASTE MANAGEMENT PLAN AND SOLID WASTE MANAGEMENT ACT OF 1988

NYS's 1987 Solid Waste Management Plan and subsequent Solid Waste Management Act of 1988 were undertaken as a result of RCRA. DEC's recent "Beyond Waste" Plan explains the history of the State's solid waste policy developed in 1987 and 1988:

> *THE 1987 SOLID WASTE MANAGEMENT PLAN (1987 PLAN)*
> *DEC drafted the 1987 Plan in response to several laws and concerns that arose in the 1980s. First, in 1983, the Long Island Landfill Law mandated the phaseout of landfills in the deep flow aquifer recharge zones on Long Island, thereby encouraging the transition to "resource recovery" through a combination of municipal waste combustion (MWC) and recycling and the development of infrastructure to transfer waste for long-haul export. Across the state, groundwater contamination and operational deficiencies at many older unlined landfills became a primary concern. By June 1986, New York State had 358 active landfills, only 47 of which had valid permits, and 7 operating MWCs with another 6 under construction. At that time, available disposal capacity in New York State, not including New York City's waste or the Fresh Kills landfill, was estimated to be four years. This all led to the concern of a looming disposal crisis in the state.*

In response, Governor Mario Cuomo called for the preparation of a state solid waste management plan, which DEC issued in March 1987. The 1987 Plan articulated an integrated waste management system approach to the impending crisis, and implementation of Part 360 finally brought New York State into compliance with the provisions of RCRA and the state's own Chapter 425 of the laws of 1977 and Chapter 552 of the laws of 1980.

About the same time, on March 22, 1987, the Mobro 4000 barge set sail from Islip, New York carrying 3,168 tons of baled MSW destined for a pilot project in Morehead, NC to be converted to methane. Once in Morehead City, North Carolina officials began an investigation and ultimately ordered the now infamous "garbage barge" to find another home for its rotting cargo. This began a months-long odyssey that took the barge all the way to Belize and back to New York State until October 1987, when, under an agreement with the New York City Department of Sanitation, the garbage was incinerated in New York City and the ash disposed of in Islip. Although the saga was an embarrassment, the garbage barge incident was widely publicized across the nation and became emblematic of what was considered at the time to be a solid waste disposal crisis that led to significant improvements in solid waste management.

The 1987 Plan was not intended as a panacea for the state's disposal problems at the time, but, rather, represented the beginning of a change in solid waste management practices to meet both current and future needs. It was explicitly intended to be the first step of what was envisioned to be a long-term, ongoing, solid waste management planning process. The state was to update the plan annually (which was subsequently amended in a 1992 law to biennially) to address emerging issues and recommend actions to improve solid waste management in New York State. This iterative approach was intended to provide a dynamic solid waste management planning process. The 1987 Plan contained important goals, including a goal to reduce, reuse, or recycle 50 percent of the waste stream (using 1988 as a base year) and a recommended hierarchy of preferred solid waste management methods. The 1987 Plan set what were seen at that time as visionary and aggressive, yet achievable, goals for a ten-year planning period with the intent of using annual updates to adjust policies, programs, plans and goals to ensure continued progress.

THE NEW YORK STATE SOLID WASTE MANAGEMENT ACT

In response to the 1987 Plan, the Solid Waste Management Act (ECL 27-0106, the Act) was signed by Governor Mario Cuomo, establishing in law the Plan's preferred hierarchy of solid waste management. The hierarchy established the following priorities to guide the programs and decisions of DEC and other state agencies:

a) *First, to reduce the amount of solid waste generated;*

b) *Second, to reuse material for the purpose for which it was originally intended or to recycle the material that cannot be reused;*

c) *Third, to recover, in an environmentally acceptable manner, energy from solid waste that cannot be economically and technically reused or recycled; and*

> d) *Fourth, to dispose of solid waste that is not being reused or recycled, or from which energy is not being recovered, by land burial or other methods approved by the department.*
>
> *In addition to the hierarchy, the Act established:*
>
> - *Structure and expectations for regional solid waste management planning units to encourage regional cooperation;*
> - *Requirements and funding for local solid waste management plans in accordance with the hierarchy of solid waste management methods;*
> - *A mandate that municipalities adopt and implement source separation laws or ordinances for recyclables from all generating sectors by 9/1/92 (less than five years from enactment); and*
> - *DEC's role in fulfilling these requirements.*
>
> *The Act's requirements were intended to ensure that both state and local governments work actively toward establishing environmentally sound solid waste management systems that integrate the hierarchy of solid waste management methods and emphasize waste reduction and recycling, using landfills only for materials that could not be managed in a more productive way.*

The 1987 NYS Solid Waste Management Plan and NYS Solid Waste Management Act of 1988 set aggressive standards for local solid waste management planning and provided the framework for the local comprehensive solid waste management systems that exist today. Onondaga County's CSWMS is highly consistent with the State's hierarchy.

1.2.3 BEYOND WASTE: A SUSTAINABLE MATERIALS MANAGEMENT STRATEGY FOR NEW YORK

In late 2010, twenty three years after the State's initial Plan, the DEC released its "Beyond Waste" Plan, which reinforces the 1988 solid waste management hierarchy and lays out new, even more aggressive, materials management strategies to guide the DEC and local planning units. The "Beyond Waste" Plan emphasizes the "upstream" sustainable management of materials to fully capture their economic value, maximize use of natural resources, conserve their embedded energy, minimize environmental impacts, and, ultimately, reduce the reliance on "end-of-pipe" waste disposal options.

NEW YORK STATE SOLID WASTE MANAGEMENT HIERARCHY

The “Beyond Waste” Plan sets the bar very high with its quantitative and qualitative objectives. The quantitative goal is fairly straightforward – to progressively reduce per capita waste disposal from an estimated 4.1 pounds/day in 2010 to 0.6 pounds/day by 2030. The “Beyond Waste” Plan identifies numerous qualitative goals:

- Minimize Waste Generation
- Maximize Reuse
- Maximize Recycling
- Maximize Composting and Organics Recycling
- Advance Product and Packaging Stewardship
- Minimize Waste Disposal
- Create Green Jobs
- Maximize the Energy Value of Materials Management
- Minimize the Climate Impacts of Materials Management
- Reemphasize the Importance of Comprehensive Local Materials Management Planning
- Minimize the Need for Long-range Export of Residual Waste
- Engage all New Yorkers—government, business, industry and the public—in Sustainable Materials Management
- Strive for Full Public Participation, Fairness and Environmental Justice
- Prioritize Investment in Reduction, Reuse, Recycling and Composting Over Disposal
- Maximize Efficiency in Infrastructure Development
- Foster Technological Innovation
- Continue to Ensure Solid Waste Management Facilities are Designed and Operated in an Environmentally Sound Manner

While the “Beyond Waste” Plan itself is not legally enforceable, it provides a new framework for solid waste management in the State and makes legislative, regulatory, and programmatic recommendations for advancing the objectives. It importantly acknowledges that goals can only be achieved with strong and cooperative participation from many key players, including the State, local governments, planning units, private sector solid waste managers, product manufacturers, distributors, retailers, and individual consumers.

1.2.4 SOLID WASTE (PART 360) REGULATIONS

NYS's Solid Waste Management Facilities Regulations, Title 6 of the New York Codes, Rules, and Regulations (NYCRR) Part 360 (hereafter referred to as “Part 360 regulations”) are the authority by which the State sets design standards and operational criteria for all solid waste management facilities. The Part 360 regulations are administered on a regional basis with assistance from the Albany Central Office. Onondaga County is located in DEC’s Region 7; therefore DEC’s Region 7 staff is responsible for permitting, facility inspection and assessment of facility compliance. The Part 360 regulations became effective in 1988 and have since been revised multiple times, most recently in 2003. These regulations require that, as part of applications for initial permits to construct and operate, as well as for permit renewals, the applicant describes how the proposed or existing solid waste management facility is consistent with an approved local solid waste management plan. Part 360-15 addresses comprehensive solid waste management planning and describes the required content for local solid waste management plans.

1.2.5 HISTORY OF LOCAL SOLID WASTE MANAGEMENT PLANS / PLAN CONTENTS

The Solid Waste Management Act of 1988 (Chapter 70, Laws of 1988) authorized a one-time $7.5 million grant program to assist planning units in developing local solid waste management plans. During 1990-1999, the development of this statewide network of local plans helped NYS move from an "out-of-sight, out-of-mind" approach to a planned system of integrated solid waste management that considers waste as a resource with value to be recovered.

Local solid waste management plans must contain a viable solution to the planning unit's solid waste management needs. Specifically, local plans must:

1) take into account the objectives of the State's solid waste management policy;
2) provide for, or take into account, management of all solid waste within the planning unit; and
3) embody sound principles of solid waste management, natural resources conservation, energy production, and employment creating opportunities.

Plans must provide clear, specific guidance, including selection of appropriate solid waste management technologies and timetables to provide a smooth transition, which does not interrupt the environmentally sound management of solid waste generated in the planning unit.

At a minimum, the local solid waste management plan shall:

1) characterize the planning unit;
2) characterize the solid waste stream to be managed;
3) assess existing and alternate solid waste management programs and facilities;
4) address comments and views expressed by concerned governmental, environmental, commercial and industrial interests and the public on the waste reduction, recycling, reuse and disposal alternatives;
5) provide a Comprehensive Recycling Analysis;
6) describe the management plan and systems to be implemented for each of the various waste streams;
7) identify the parties with responsibility to implement each element of the plan and the steps which must be undertaken by each;

8) set forth a timetable for implementing the plan;
9) describe the participation in the preparation of the plan of each municipality which has chosen to participate in such preparation; and
10) describe:
    a) measures to secure participation of neighboring jurisdictions,
    b) limitations imposed by the proposed plan on the solid waste management programs of such neighboring jurisdictions, and
    c) additional alternatives which would be available if a plan including such jurisdictions were prepared.

These requirements are described in greater detail further in 6 NYCRR Subpart 360-15 regulations.

1.3 ONONDAGA COUNTY'S 1991 COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN

Approved by DEC in 1991, the Onondaga County Comprehensive Solid Waste Management Plan has provided the framework for solid waste management in Onondaga County for more than two decades. The 1991 Plan had several objectives:

1) to assess the existing solid waste management practices in Onondaga County,
2) to evaluate alternative strategies and technologies relative to the County's charted course, and
3) to document an economically and environmentally sound integrated solid waste management plan for an initial period of 20 years.

The 1991 Plan was, and continues to be, highly consistent with NYS's Solid Waste Management Policy (as specified in Section 27-0106 of the Environmental Conservation Law), which specifies the following elements in descending order of preference:

- Waste reduction;
- Reuse and recycling;
- Energy recovery; and
- Landfilling.

The waste stream categories identified within the 1991 Plan were: MSW, which included construction and demolition debris (C&D); sludge (currently referred to as "biosolids"); regulated medical waste; industrial waste; and other wastes (which included agricultural, food processing, and household hazardous wastes). OCRRA was designated as having responsibility for MSW and household hazardous waste (HHW) management. The Onondaga County Department of Drainage and Sanitation (currently the Department of Water Environment Protection) would maintain responsibility for sludge (biosolids) management. Regulated medical waste, industrial waste, agricultural waste, food processing waste, and other wastes were to be handled by the private sector.

The following chart is the original "Implementation Plan" as described in the 1991 Onondaga County Comprehensive Solid Waste Management Plan:

1991 IMPLEMENTATION PLAN

WASTE	TREATMENT	ACTION	TARGET DATE
Municipal Solid Waste	Waste Reduction	Public Education Initiatives	Ongoing
	Recycling	Program Initiation	July 1, 1990
		Full implementation	1997 or sooner
	Waste to Energy	Permit application submitted	August 1990
		Permit issued	1991 or 1992
		Facility startup, operation	1994
	Landfill	SEQR process begins	January 1991
		Permit expected	1993
		Facility start-up, operation	1994
Sludge	Technology Selection & Implementation	Issuance of RFP	January 1991
		Selection of vendor	Mid-1991
		Permit expected	1992
		Start-up of services	Late 1992
Regulated Medical Waste		Private initiatives	Ongoing
Industrial Waste		Private initiatives	Ongoing
Other Wastes	Agricultural	Private initiatives	Ongoing
	Food Processing	Private initiatives	Ongoing
	Household Hazardous	Program Initiation	Ongoing

As described in the biennial compliance reports, the actions identified in the 1991 Plan have been satisfactorily put into practice. OCRRA has implemented an award-winning CSWMS that includes public education, recycling, composting, waste-to-energy (WTE), waste transfer, and landfill disposal. It is described in great detail in Section 3. Over this time frame, OCRRA has adapted its programs to address changes in the waste stream, regulations, and community needs.

As is also described in the biennial compliance reports, there is essentially only one deviation from the 1991 Plan, specifically related to the construction of an in-county landfill. Although OCRRA has secured the required permits to construct and operate an in-county landfill, the current economic climate has allowed OCRRA to benefit from competitive landfill disposal pricing at privately owned landfills and thereby defer construction. Construction of the permitted, in-county "Site 31" Landfill in the Town of Van Buren makes economic sense only if it can be done at a lower unit cost than that for transport to and disposal at an out-of-county landfill, or in the event that out-of-county disposal capacity becomes unavailable. This has not been the case to date, however, OCRRA continues to evaluate the costs, risks, and benefits associated with construction of the "Site 31" Landfill.

1.4 PLANNING UNIT OBJECTIVES AND PLANNING PERIOD TERM

For almost a quarter century, OCRRA has provided an award-winning CSWMS. This system relies on many key contractual relationships between member municipalities, waste haulers, recycling facilities, and the operator of the Onondaga County WTE Facility. Maintaining these public-private relationships is a fundamental objective of Onondaga County and OCRRA.

Based on the need for these long-term contractual relationships, this CSWMP update, in conjunction with biennial compliance reports/updates, will cover a 10-year planning period (2015 through 2024). This meets the requirements of Subpart 360-15, which requires that all solid waste management plans provide for the management of solid waste within the planning unit for a minimum of a ten-year period.

While OCRRA's CSWMS is already highly consistent with the State's solid waste management hierarchy, another major planning unit objective is continuous improvement for even greater consistency with the hierarchy (i.e., increased waste reduction, reuse, recycling, and composting). Ultimately, Onondaga County strives to serve the community and member municipalities with an economically, environmentally, and socially sustainable system for comprehensive solid waste management over the next 10-year planning period.

A publication released by Onondaga County in June 1989 (included in this CSWMP update as Appendix A) to introduce residents to the County's new Solid Waste Management Program still rings true today. The publication clearly explained the challenges and sensitivities associated with solid waste management programs, as well as their importance:

> *"There are no easy answers when it comes to disposing of our trash, and some portions of this program have become highly emotional issues. This publication is being distributed because, as a resident of Onondaga County, you need to know the facts surrounding the program and how it affects you, your family, and your community. You need to know how to start your own 'solid waste management plan' of trash reduction and recycling. And you need to understand the importance of facilities like the landfill and the waste-to-energy plant.*
>
> *Trash disposal is not just a temporary problem. It promises to be as difficult and demanding an issue tomorrow as it is today. And we owe it to future generations to take a step forward in controlling our trash, before it controls us."*

Fast forward more than twenty years and this is still 100% accurate. In fact, it's the reason for this CSWMP update – to systematically address the challenges associated with solid waste management and identify solutions, to communicate the proposed solutions to the community and gather feedback, and to plan carefully now so as to not create problems for future generations.

1.5 OPPORTUNITIES FOR PUBLIC PARTICIPATION

Public participation on the draft CSWMP update was encouraged through a public comment period held from December 4, 2014 through January 17, 2015 and a public hearing held on December 16, 2014 (6:30pm) at the Onondaga County Legislative Chambers (401 Montgomery Street, 407 Courthouse, Syracuse, NY). Onondaga County ensured that the draft CSWMP update was readily accessible for public review. All comments were thoroughly reviewed and incorporated, as appropriate, into the final CSWMP update. A responsiveness summary, which summarizes the public comments and provides Onondaga County's response to the comments, is provided in Appendix B.

1.6 STATE ENVIRONMENTAL QUALITY REVIEW

The State Environmental Quality Review (SEQR) Act, as set forth at 6 NYCRR Part 617, establishes a process for the systematic consideration of environmental impacts in the planning stages of actions that are directly undertaken, funded, or approved by local, regional, and state agencies. SEQR requires the approving or sponsoring entity to fully evaluate the environmental impacts of the activity it is proposing, funding, or permitting and make a determination as to whether the action will have a significant adverse impact on the environment. Onondaga County undertook a thorough environmental review of this CSWMP update, in accordance with the SEQR regulations. SEQR documents are provided in Appendix C.

1.7 DEC REVIEW PROCESS

All local solid waste management plans must be submitted to DEC in draft for approval. DEC reviews the draft plan to determine whether it effectively addresses all matters required by 6 NYCRR 360-15.9

If it does not, DEC will specify the matters in which the draft plan is deficient (review letter). The draft plan must then be revised based on DEC comments. It is possible that more than one round of comments and revisions may occur to the document.

Once DEC determines that the draft plan adequately addresses the elements in 360-15.9, DEC provides notice to the local planning unit of its intent to approve the plan. This notice is colloquially known as the "approvable letter." The approvable letter indicates that the local planning unit must submit to DEC:

- A final stand-alone plan;
- A resolution of adoption of the plan from the local planning unit's legislative board; and
- Documentation of its SEQR determination.

Once received, DEC formally approves the plan. This notice is colloquially known as the "final approval letter." At this point, the approved plan is officially in effect for the local planning unit.

2.0 PLANNING UNIT HISTORY & DESCRIPTION

2.1 HISTORY OF SOLID WASTE MANAGEMENT IN ONONDAGA COUNTY

The 1980s were a period of transition for solid waste management. In the early 1980s, Onondaga County waste was being collected by both private and municipal haulers and disposed of in a number of small, unlined "dumps," both within and outside the County. The in-County dumps were located in Clay, Van Buren, Elbridge, Camillus, DeWitt, Manlius, Pompey, Salina, and Syracuse. When private and municipal haulers did not have a designated dump depository, they would generally drop off the waste at the Onondaga County Solid Waste Disposal Authority (SWDA) facilities (Rock Cut Road and Ley Creek Transfer Stations). In the early 1980s, SWDA hauled waste primarily to the Tripoli Landfill, which was officially closed in 1985. By the mid-1980s, SWDA was hauling waste to Seneca Meadows Landfill in Seneca Falls. Seneca Meadows Landfill was, at that time, unlined, although some environmental protection was afforded by an underlying clay layer.

As the DEC aggressively closed down dumps that were posing long-term threats to safe drinking water and clean air, Onondaga County needed to develop a plan to deal with the community's mounting solid waste crisis. At that time most of the community's waste was being hauled to Seneca Meadows Landfill, with the remainder taken to four small municipal landfills within the County, each under pressure from the DEC to close. It was thought that the Seneca Meadows Landfill, in Seneca Falls, would close shortly after the end of the County's contract in 1990. If that happened, the waste generated within the County (more than a thousand tons per day) would have nowhere to go. The County was desperate to identify a solution; to design a safe, reliable, and cost-effective program of waste management that would become an integral part of the citizens' lifestyle in Onondaga County.

Onondaga County carefully analyzed the environmental impacts of different waste disposal alternatives and determined that no single method of disposal would solve the dilemma. Ultimately, a comprehensive, finely balanced, and integrated solid waste management system was required to manage the County's waste. After extensive research, the County identified a Solid Waste Management Program consisting of four essential components: a waste reduction program, a recycling program, a WTE facility, and a lined landfill.

2.2 RELATIONSHIP BETWEEN ONONDAGA COUNTY & OCRRA

To implement Onondaga County's 1989 Solid Waste Management Program, the County looked to a public authority that the State had created in 1981 at the request of Onondaga County – OCRRA. To implement the Program through the Agency, the County and the Agency, in June 1990, entered into a Solid Waste Management Program Agreement. Under the Program Agreement, the Agency is responsible for administering, planning, developing, acquiring, financing and constructing a CSWMS for the County. The Agency is further responsible for operating the CSWMS or causing the CSWMS to be operated in a sound and economical manner so as to properly recycle and dispose of all solid waste generated in the 33 participating Onondaga County municipalities.

OCRRA picked up where the County's Solid Waste Management Program left off and assumed responsibility for a CSWMS in Onondaga County. This included implementing a fledgling recycling program; contracting with a vendor and bonding for the construction and operation of a WTE facility; and moving forward on plans to develop the "Site 31 Landfill" in the Town of Van Buren.

As a public benefit corporation, OCRRA is not an arm of county government and it does not rely on county taxes for funding. OCRRA is governed by a 15-member Board of Directors. The Board of Directors is a group of citizen volunteers that devote countless hours to the development of programs and policies for the proper management of solid waste. It is responsible for adopting a budget that ensures there will be sufficient revenues to cover expenditures.

Just as it has successfully done for the past 20+ years, OCRRA will implement and advance the CSWMS on behalf of the local planning unit, Onondaga County, for the duration of this CSWMP update.

2.3 ONONDAGA COUNTY SOLID WASTE LEGISLATION

There are three primary local waste and recycling laws in Onondaga County – the Source Separation Law, a law prohibiting the importation of waste for disposal in Onondaga County, and a flow control law modeled after the Oneida-Herkimer Law, which was found valid by the US Supreme Court.

2.3.1 SOURCE SEPARATION

In 1989, the Onondaga County Legislature adopted Local Law No. 12 of 1989, better known as the County Source Separation Law or County Recycling Law. It was recently updated in 2012 by Local Law No. 2 of 2012 (see Appendix D). The purpose of the Onondaga County Source Separation Law is to: encourage and facilitate the maximum recycling practicable on the part of each and every household, business, apartment complex, industry, and institution within Onondaga County; to establish, implement, and enforce minimum recycling practices and procedures to be applicable to all waste generators, waste haulers/recyclable collectors, and material recovery facilities (MRFs) located within Onondaga County; and to require onsite source separation by each and every waste generator within Onondaga County and to ensure that source separated recyclables are recycled properly and kept separate from other solid waste. This law provides a list of items that must be recycled in Onondaga County.

2.3.2 PROHIBITION OF WASTE IMPORTATION

In 1989, the Onondaga County Legislature also adopted Local Law No. 10 of 1989, which prohibits the importation of waste generated outside of Onondaga County into Onondaga County for disposal in a landfill within Onondaga County without authorization of the Onondaga County Legislature. This law was amended in 1992 by Local Law No. 9 of 1992 (see Appendix E) to expand the importation restrictions such that they would also apply to WTE facilities within Onondaga County. That is, the amendment prohibited the importation of waste generated outside of the County for landfilling or processing in an incinerator within Onondaga County, without express written consent of the Legislature.

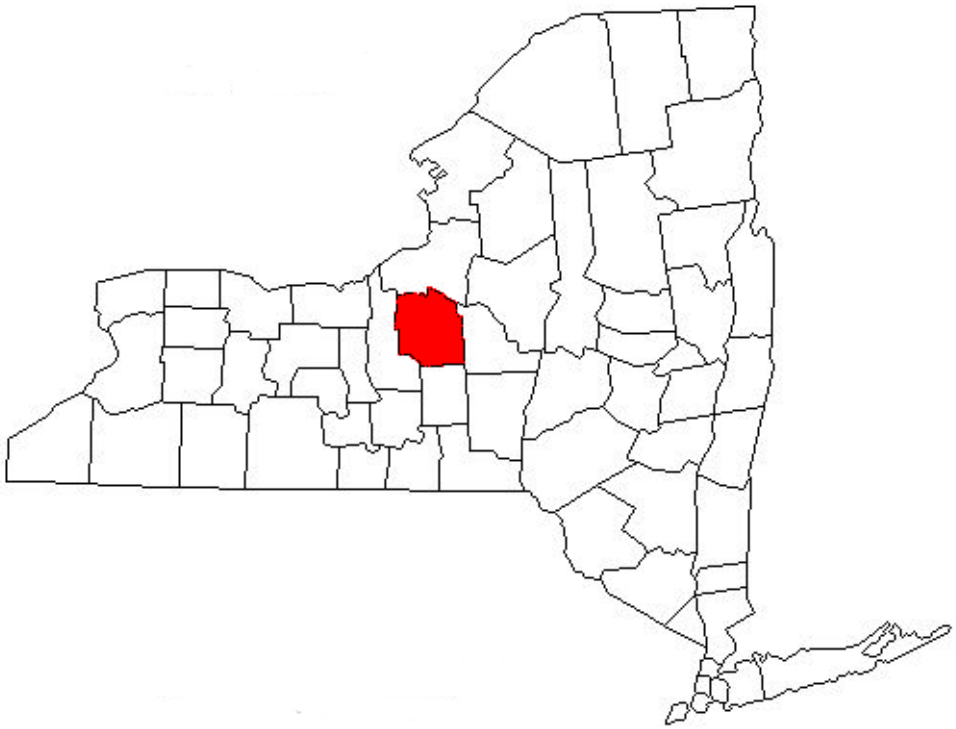
2.3.3 FLOW CONTROL

In 2003, the Onondaga County Legislature adopted a “flow control” law that required solid waste generated in Onondaga County (with the exception of the Town and Village of Skaneateles) be disposed of at an “Approved Disposal Site,” namely the WTE Facility and OCRRA’s Ley Creek and Rock Cut Road Transfer Stations. This Local Law No. 5 of 2003 was modeled after the Oneida-Herkimer Law, which was found valid by the U.S. Supreme Court in the 2007 United Haulers vs.

Oneida-Herkimer case. As discussed in the local law itself, in order to secure and achieve the public benefits of OCRRA's CSWMS, it is necessary to implement and enforce a regulatory system governing waste generated within the planning unit. Local Law No. 3 of 2012 (see Appendix F) made minor amendments to Local Law No. 5 of 2003, however it maintained the primary requirement that all solid waste generated in Onondaga County be delivered to the WTE Facility or OCRRA's Transfer Stations. This law specifically excludes recyclables, yard waste, and C&D.

2.4 LOCATION AND GEOGRAPHY OF THE PLANNING UNIT

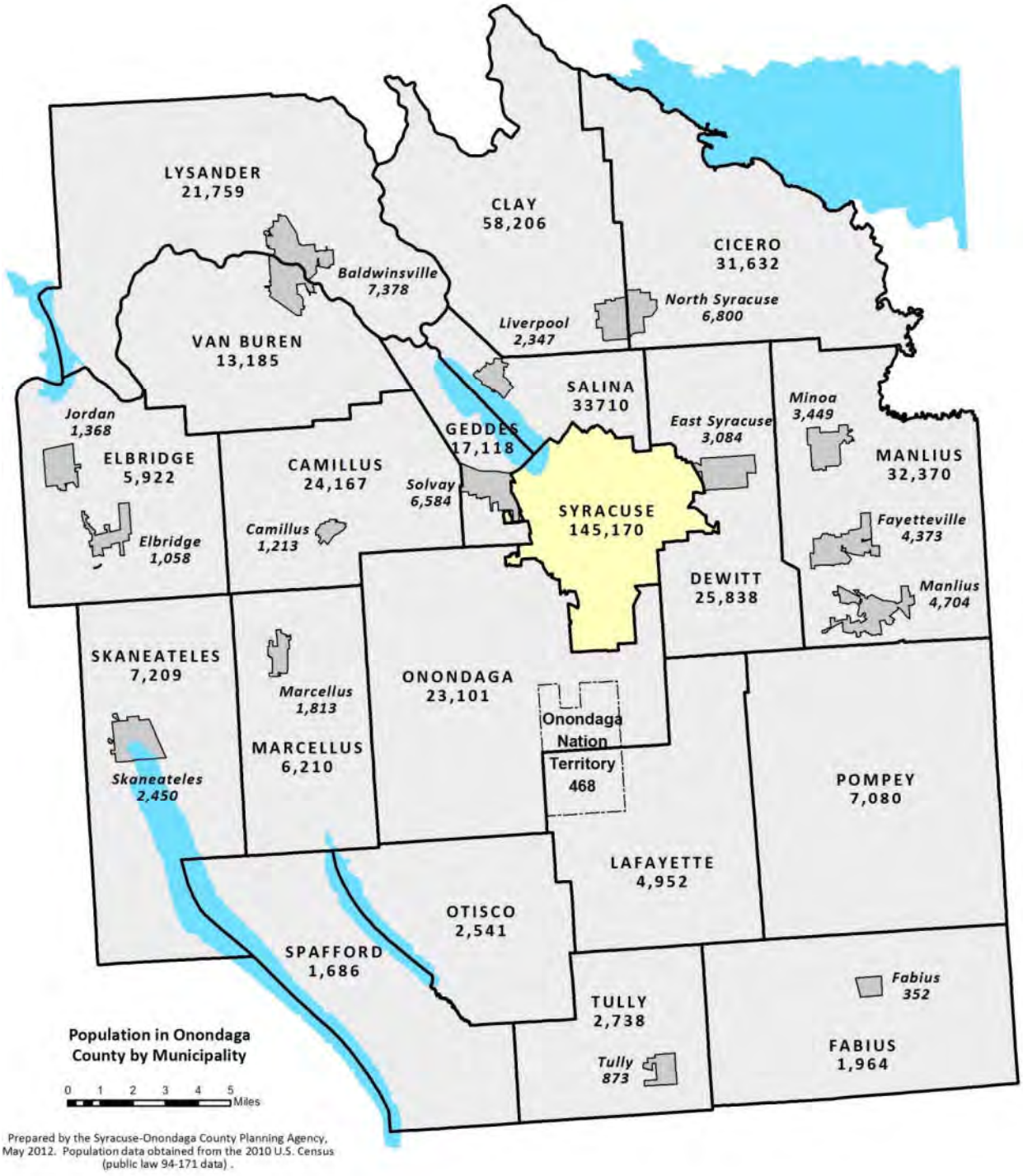
The County of Onondaga is located geographically in the center of NYS, in the Central New York (CNY) Region. The County encompasses approximately 800 square miles and is approximately 35 miles in length and 30 miles in width. The NYS Thruway (Interstate 90) bisects the County into northern and southern areas and Interstate 81 bisects the County into eastern and western areas. The northern portion of the County is fairly level lake plain ("Lake Ontario Plain"), while the southern portion is quite hilly ("Appalachian Uplands").



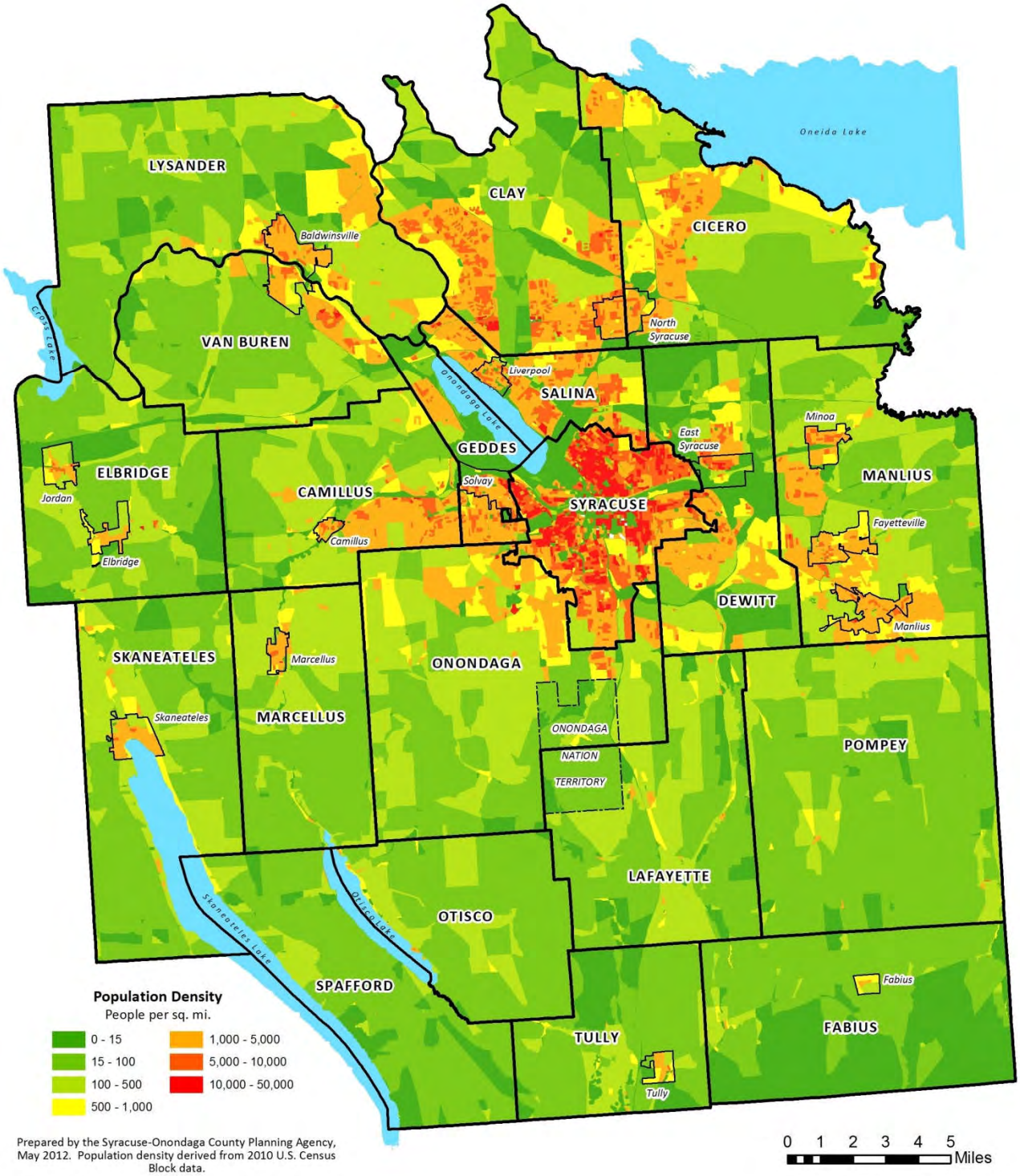
2.5 DEMOGRAPHICS

According to the most recent (2010) data from the U.S. Census Bureau, there are approximately 467,000 people residing in Onondaga County and 187,500 households. The City of Syracuse is at the center of the 800-square mile area, with approximately 145,000 people and 57,000 households. Excluding the Town and Village of Skaneateles (population of roughly 7,000 with about 3,000 households), OCRRA's programs serve approximately 460,000 people and 184,500 households.

The following figure, prepared by the Syracuse-Onondaga County Planning Agency shows the population by township/city.



While the average population density for the County is approximately 600 people per square mile, the City of Syracuse and surrounding suburbs are the most densely populated areas. The following figure, also prepared by the Syracuse-Onondaga County Planning Agency, shows this well.



Based on the U.S. Census Bureau's 2010 New York Report on Population and Housing Unit Counts (available at: http://www.census.gov/prod/cen2010/cph-2-34.pdf), the split between rural (<325 people

per square mile of land area), suburban (325-5,000 people per square mile of land area, and urban (>5,000 people per square mile of land area) is 10.8%, 57.6%, and 31.6%, respectively, on a population basis.

2.5 OTHER PLANNING UNIT CHARACTERISTICS

Listed below, by category, are some of the major employers and waste generators in Onondaga County. While somewhat comprehensive, this list may not be all-inclusive; OCRRA will continue to develop this list throughout the planning period as part of the goal to improve data collection and management systems.

Major Colleges/Universities:

- Syracuse Univesity
- LeMoyne College
- SUNY Upstate Medical University
- SUNY College of Environmental Science and Forestry
- Onondaga Community College
- Bryant and Stratton College

School Districts within the Planning Unit:

- Baldwinsville Central School District
- East Syracuse Minoa Central School District
- Fabius-Pompey Central School District
- Fayetteville-Manlius Central School District
- Jamesville-Dewitt Central School District
- Jordan Elbridge Central School District
- Lafayette Central Schools
- Liverpool Central School District
- Lyncourt Union Free School District
- Marcellus Central Schools
- North Syracuse Central School District
- Onondaga Central School District
- Solvay Union Free School District
- Syracuse City School District
- Tully Central Schools
- West Genesee Central School District
- Westhill Central School District

Hospitals:

- Upstate University Health System
- St. Joseph's Hospital Health Center
- Crouse Hospital
- Syracuse VA Medical Center

Large Skilled Nursing Facilities

- The Hearth at Greenpoint Senior Living
- Loretto

Elderwood at Birchwood
James Square Health and Rehabilitation Centre
St. Camillus Health and Rehabilitation

Correctional Facilities:
- Jamesville Correctional Facility
- Onondaga County Justice Center

Major Government Employers:
- Onondaga County
- City of Syracuse

Other Community Facilities:
- OnCenter
- Rosamond Gifford Zoo
- Regional Market
- NBT Stadium
- Carrier Dome
- Everson Museum of Art

Industry / Distribution:
- Byrne Dairy
- Carrier Corporation
- Lockheed Martin MS2
- Welch Allyn
- SRC, Inc.
- L&JG Stickley, Inc.
- Eaton Corp.
- Tessy Plastics
- Anaren
- Bristol Myers Squibb
- Anheuser-Busch InBev
- Saab
- Rock Tenn
- Sysco
- McLane Northeast
- Paul De Lima

Grocery / Convenience / Retail:
- Wegmans
- Tops Friendly Markets
- Walmart
- Raymour & Flanigan
- Price Chopper
- Kinney Drugs
- Lowe's
- Target
- Nice N Easy Grocery Shoppes
- CVS Caremark
- Fastrac Markets
- Destiny USA

Major Employers within Service Industries:
- Verizon
- National Grid
- Time Warner Cable
- United Parcel Service
- Sutherland Global Services
- AXA Advisors
- Aspen Dental
- POMCO
- Excellus Blue Cross/Blue Shield
- M&T Bank
- Community Bank
- First Niagara
- Key Bank
- O'Brien & Gere
- Rapid Response Monitoring

Based on data from the U.S. Census Bureau, the following is a breakdown of industry in Onondaga County.

Industry	%
Agriculture, forestry, fishing and hunting, and mining	0.40%
Construction	4.80%
Manufacturing	8.60%
Wholesale trade	3.20%
Retail trade	11.60%
Transportation and warehousing, and utilities	5.10%
Information	2.30%
Finance and insurance, and real estate and rental and leasing	7.20%
Professional, scientific, and management, and administrative and waste management services	9.70%
Educational services, and health care and social assistance	29.80%
Arts, entertainment, and recreation, and accommodation and food services	8.20%
Other services, except public administration	4.80%
Public administration	4.40%

2.6 PARTICIPATING MUNICIPALITIES AND COLLECTION PRACTICES

The service area covered by the Onondaga County planning unit consists of Onondaga County, with the exception of the Town and Village of Skaneateles. Should there be an interest from the Town and/or Village of Skaneateles, Onondaga County and OCRRA are interested in incorporating them into the CSWMS. The current 33 participating municipalities are as follows:

MUNICIPALITIES INCLUDED IN ONONDAGA COUNTY'S PLANNING UNIT

Residential collection method: M = Municipal; MB = Municipally-bid collection; PC = Privately-contracted

City of Syracuse (M)	Town of Camillus (MB)	Village of Baldwinsville (PC)
	Town of Cicero (MB)	Village of Camillus (M)
	Town of Clay (MB)	Village of East Syracuse (MB)
	Town of Dewitt (MB)	Village of Elbridge (MB)
	Town of Elbridge (MB)	Village of Fabius (MB)
	Town of Fabius (MB)	Village of Fayetteville (M)
	Town of Geddes (MB)	Village of Jordan (MB)
	Town of Lafayette (MB)	Village of Liverpool (M)
	Town of Lysander (PC)	Village of Manlius (MB)
	Town of Manlius (MB)	Village of Marcellus (MB)
	Town of Marcellus (PC)	Village of Minoa (M)
	Town of Onondaga (PC)	Village of North Syracuse (MB)
	Town of Otisco (PC)	Village of Solvay (MB)
	Town of Pompey (MB)	Village of Tully (MB)
	Town of Salina (MB)	
	Town of Spafford (MB)	
	Town of Tully (MB)	
	Town of Van Buren (PC)	

During the period 1988 – 1990 all 33 participating municipalities executed delivery agreements with Onondaga County agreeing, in substance, to participate in the Onondaga County Solid Waste Management System. These twenty-five year delivery agreements were later assigned to OCRRA in accordance with OCRRA's contract with Onondaga County. The delivery agreements require each participating municipality to (1) deliver or cause to be delivered to the System all processable, non-recycled, non-hazardous solid waste collected within their municipality regardless of whether the waste is collected by the participating municipality or by a privately-engaged hauler; (2) actively participate in the source separation recycling program; (3) require any privately engaged hauler providing collection services in the participating municipality to have a validly issued Agency Permit and a municipal license requiring the hauler to deliver the solid waste it collects in that municipality to the System and (4) take any action necessary to effectuate the foregoing requirements, including the enactment of necessary local laws. Under the delivery agreements, the Agency agreed to establish all necessary disposal and recycling facilities and to bill haulers on a per ton basis for those services.

All municipalities served by the planning unit have also adopted an intrastate waste site designation law directing that all waste (except C&D and heavy industrial waste) generated within their municipality and bound for in-state (*i.e.*, NYS) disposal must go to the OCRRA WTE Facility as the designated disposal

facility. The Federal Appeals Court in the Midwest (Eighth Circuit) has found such laws valid if they are adopted for a proper and properly documented local purpose, such as for environmental benefits afforded by a CSWMS like OCRRA's. See Appendix G for the standard form of the local intrastate waste site designation laws.

Within the Onondaga County planning unit, residential collection of trash and recyclables is managed at the municipal level; OCRRA plays no role in collection. There are several residential collection practices used in Onondaga County. Five municipalities (City of Syracuse, Villages of Camillus, Fayetteville, Liverpool, and Minoa) offer municipal collection for residents. Six municipalities (Village of Baldwinsville; Towns of Lysander, Marcellus, Onondaga, Otisco, and Van Buren) do not offer residential collection services; in those municipalities residents must privately contract for collection services. The remaining 22 municipalities offer municipally-bid residential collection by a private hauler. Commercial collection is privately-contracted.

In addition to the agreements and laws in place with the participating municipalities, OCRRA also established multi-year contracts with all of the private and municipal haulers operating within the CSWMS. These hauler contracts include a provision that the hauler will deliver all MSW picked up from Onondaga County generators in the 33 participating municipalities to OCRRA's CSWMS. These hauler contracts also include recycling requirements and standards. Contract violations result in stipulated contractual damage penalties. There is a very significant stipulated contractual damage penalty for taking solid waste out of the County for disposal. The large hauler contracts do not cover C&D and heavy industrial wastes.

2.7 SOLID WASTE TYPES

The Onondaga County planning unit manages the following types of solid waste: MSW including yard waste and HHW; C&D; and light industrial waste. The Onondaga County Department of Water Environment Protection (WEP) manages biosolids, or wastewater treatment plant sludge. Other waste streams including regulated medical waste, heavy industrial waste, and agricultural waste are independently managed through private initiatives and are therefore not addressed by this CSWMP update.

MSW – more commonly known as trash and recyclables – consists of the everyday items that are thrown away at homes (residential), schools and hospitals (institutional), and businesses (commercial). This includes a variety of items including durable goods (*e.g.*, tires, carpeting, furniture), non-durable goods (*e.g.*, tissues, plastic cups, office paper), containers and packaging (*e.g.*, milk cartons, plastic film), and other goods (*e.g.*, yard waste, food scraps). This category includes recyclable materials, as well as materials that require special management, such as HHW, yard waste, fluorescent bulbs, batteries, electronics, and white goods (*e.g.*, refrigerators, microwaves).

C&D is generated by the residential, commercial, industrial, and institutional sectors and typically consists of wood, masonry, plumbing and electrical fixtures, siding, roofing materials, asphalt, drywall, incidental metal, and other construction related items.

Light industrial waste refers to materials generated at manufacturing facilities that are acceptable waste at OCRRA's Transfer Stations and/or the WTE Facility. This includes typical office and cafeteria waste streams, as well as any manufacturing byproducts that are considered "acceptable waste" at OCRRA's facilities.

Biosolids and wastewater treatment plant sewage sludge are often used interchangeably, however, under NYS regulations, biosolids means sewage sludge that can be beneficially reused. WEP generates and manages wastewater treatment plant sludge at the Metropolitan Syracuse Wastewater Treatment Plant, as well as the Baldwinsville Seneca Knolls Wastewater Treatment Plant. This CSWMP update focuses only on WEP's biosolids management program; the details of the other facilities managing biosolids are not included in this plan update. Moving forward, Onondaga County and OCRRA will collect additional information regarding other biosolids management within the planning unit.

2.8 SOLID WASTE MANAGEMENT SYSTEM FUNDING

OCRRA's entire CSWMS is primarily funded by per-ton trash fees (*i.e.*, tipping fees) and WTE Facility electricity revenues. Smaller sources of revenue include recovered scrap metal, DEC grant funds, and compost sales. OCRRA does not receive any direct tax funding from Onondaga County or local municipalities. OCRRA is responsible for setting a tipping fee that sufficiently supports the programs offered to the community, and while the Agency is fortunate to have a reserve fund for financially challenging years, the per-ton trash fee needs to be set at a level that allows the CSWMS to be financially-sustainable. OCRRA strives to offer cost-effective programs at a reasonable rate and is able to achieve significant economies of scale, as compared to program implementation by individual municipalities.

2.9 NEIGHBORING PLANNING UNITS

The Onondaga County planning unit is neighbored by four other planning units: Oswego County to the north, Madison County to the east, Cortland County to the south, and Cayuga County to the west.

Two (Oswego County and Madison County) of the four planning units have self-sufficient comprehensive solid waste management systems that direct waste flow (via a flow control law) to their municipally-owned waste disposal facilities and restrict waste importation. Madison County has a municipally-owned landfill, MRF, and several transfer stations. Oswego County has a municipally-owned WTE facility, landfill, and several transfer stations, as well as a contractual arrangement with a privately-owned MRF.

Cortland County also has a comprehensive solid waste management system that restricts waste importation; however, Cortland County does not require that waste be directed to its municipally-owned landfill. Cortland County also has a municipally-owned MRF that is currently operated by a private vendor.

Cayuga County does not have its own disposal facility, nor does it require that waste be directed to a specific facility. The majority of waste generated in Cayuga County is conveniently disposed of at the Auburn Landfill, owned by the City of Auburn. Cayuga County has a law mandating the source separation of recyclables, although the planning unit does not play an active role in the management of recyclables.

3.0 OVERVIEW OF OCRRA'S COMPREHENSIVE SYSTEM

OCRRA provides a comprehensive resource recovery (solid waste management) system to participating municipalities in Onondaga County. Ultimately, OCRRA's programs consolidate services so that the 33 member municipalities do not need to provide these services individually, and that means increased efficiency, economies of scale, cost-effectiveness, value, and stability. OCRRA's CSWMS is highly consistent with DEC's and the US Environmental Protection Agency's (EPA's) recommended solid waste management hierarchy. Through program evolution and adaptation, OCRRA's CSWMS has garnered national recognition and continues to serve the community with new initiatives for increasing waste reduction, reuse, recycling, and composting.

3.1 PUBLIC EDUCATION

If asked to identify just one element of OCRRA's CSWMS that distinguishes it from the rest, OCRRA's public education would be a solid pick. OCRRA's investment in public education is among the highest in NYS. On average, OCRRA invests about half a million dollars annually to spread information about OCRRA's CSWMS. This ongoing investment has resulted in strong community familiarity with OCRRA and OCRRA's programs. Yet, despite strong recognition, frequent and consistent ongoing communication is essential to achieving permanent recycling behavioral changes.

OCRRA's extensive public education program consists of the following elements:

- Paid advertising campaign including television commercials, radio spots, print and online advertisements, and billboards;
- Website: www.OCRRA.org;
- Quarterly newsletter;
- Email list of 7,000+ subscribers;
- Social media presence;
- Printed posters, brochures and decals.

OCRRA's advertising campaign has evolved over time to address the most critical community needs; initially focusing on "what" to recycle, then focusing on "why" to recycle, and currently highlighting the importance of OCRRA's CSWMS. The CSWMS is the compilation of all that OCRRA provides the community: recycling, composting, WTE, and the associated environmental experience and leadership that OCRRA has been lending to the community for decades. OCRRA strives to keep the creative content of the advertisements fresh and in tune with the times. For examples of the current ad campaign, please visit: https://ocrra.org/news-and-events/media/ad-campaign.

To better understand the needs of the community and adapt the messaging accordingly, OCRRA invests in professionally conducted and statistically-representative community surveys. The current campaign's focus on the OCRRA CSWMS was a direct result of the latest survey that revealed a limited understanding of OCRRA's CSWMS beyond recycling. An earlier community survey was used to identify how best to promote the "why" to recycling; OCRRA learned that the key was promoting the difference one person can make in preserving natural resources for future generations. OCRRA still uses the slogan "Save the World a Little Each Day," demonstrating that the simple act of regular recycling can help the environment in a meaningful way.

In the fall of 2012, the Agency launched a revamped website, (www.OCRRA.org), providing enhanced search features to allow users to quickly find recycling options for their unwanted items, along with waste reduction and reuse tips for those items, when appropriate. It also allows users to make online reservations for HHW drop off, and purchase both compost passes and trash disposal stickers online. In addition, it houses a recycling supply order form, which allows businesses, schools and apartment buildings to order free recycling containers and decals with a few simple clicks (see: https://ocrra.org/shop/supply-order-form).

In addition to paid media advertising, OCRRA continues to publish its quarterly newsletter (see: https://ocrra.org/news-and-events/newsletters) which contains articles written by OCRRA staff and guest columnists that highlight special events, recognize stand-out businesses and schools, and inform the public about OCRRA's programs. OCRRA distributes the newsletter to approximately 110,000 people as an insert in Syracuse Media Group's Sunday Post-Standard and the Onondaga County Eagle Newspapers. Additionally, about 5,000 newsletters reach the public via public libraries, government offices (village and town clerks), and special events.

Another essential and extremely effective means of communication is email. Over many years, OCRRA has built an email list of more than 7,000 subscribers. Through a web-based system, emails covering various topics and upcoming events are sent twice a month. In addition to the main list, OCRRA has the ability to create smaller sub-lists and send targeted information. Emails are an inexpensive and effective way of reaching thousands of people and are growing in popularity as the email address list grows each year.

OCRRA continues its social media presence, currently with its Facebook page (www.facebook.com/OCRRA), allowing people to actively engage in discussion about OCRRA's services. New information about upcoming special events, highlights of local recycling and waste reduction achievements, and links to recycling-related news articles are posted on a regular basis.

Lastly, OCRRA provides numerous posters, brochures and decals at no charge to businesses, residents and institutions. These items act as prompts to remind people to recycle, as well as to inform them of the recycling rules.

The Agency has been recognized with numerous awards for its innovative public education campaigns.

3.2 RECYCLING

Onondaga County's per capita recycling rate is second to none in NYS thanks to community participation in OCRRA's award-winning recycling program. The foundation for OCRRA's recycling program is the extensive curbside and commercial recycling program.

OCRRA's professional recycling team works tirelessly to spread OCRRA's recycling information and bring technical assistance to residents, schools, and businesses in Onondaga County. Annually, the Recycling Specialists visit hundreds of local businesses, apartment complexes, and schools to offer assistance in designing recycling programs, as well as to offer free recycling containers and decals.

3.2.1 MANDATORY SOURCE SEPARATION OF RECYCLABLES

As discussed in 2.3.1, the Onondaga County Legislature passed a local law mandating source separation of recyclables by all waste generators, as well as proper management by haulers and MRFs, in Onondaga County. It applies to residents, commercial entities (businesses), institutions, industrial facilities, and governmental entities. This law was recently updated in 2012 and includes the following list of mandatory recyclables.

Mandatory Recyclables
• Office Paper and Discarded Mail • Newspapers and Magazines • Corrugated Cardboard, Brown Paper Bags, Paperboard, Pizza Boxes • Milk and Juice Cartons, Gable-Top Cartons, Aseptic Cartons • Glass Food and Beverage Containers • Metal Food and Beverage Containers • Aluminum Foil • Aerosol Cans • #1 and #2 Plastic Bottles • #5 Plastics • Soft cover books

OCRRA continuously evaluates opportunities for expanding the list of mandatory recyclable materials with the goal of diverting municipal solid waste from the waste stream. A key determining factor is long-term market stability. Information about OCRRA's recycling rules is available at: https://ocrra.org/resource-pages/resource-page-category/recycling-rules.

3.2.2 CONTRACTUAL ARRANGEMENTS FOR RESIDENTIAL RECYCLING

Residential recyclables are collected curbside by private haulers, municipal haulers, and municipalities with private hauling contracts. The recyclables are then taken to a MRF for processing and marketing. In order to ensure the proper management of residential recyclables, OCRRA has established contractual arrangements with the local private MRF(s). Basically, the contract requires that the MRF accept source separated residential recyclables at no charge to the haulers delivering the material, regardless of market conditions. To ensure this zero tip fee for residential recyclables, OCRRA provides a measure of financial support to the MRF, depending on market commodity prices. This arrangement ultimately provides certainty and stability for the community's recycling system during commodity market lows. It also allows OCRRA to formulate and maintain a uniform definition of "blue bin" recyclables.

Historically, there were two privately-owned and operated MRFs in Onondaga County – Syracuse Recycling and Recovery (formerly Naef Recycling) and Recycle America. In July of 2013, Syracuse Recycling and Recovery suffered a major fire and is no longer in operation. It is currently unknown if Syracuse Recycling and Recovery will reestablish operations in Onondaga County. The other private MRF, Recycle America, has accepted the recyclable materials that were being processed at Syracuse Recycling and Recovery.

3.2.3 RESIDENTIAL RECYCLING AND BLUE BIN DISTRIBUTION

The "blue bin," a 14-gallon curbside recycling container, is one of the most well recognized aspects of OCRRA's recycling program. To support residential source separation, OCRRA purchases, stores, and distributes blue bins free of charge. Each year, tens of thousands are given to Onondaga County residents that need a replacement bin, need additional bins to handle increased recycling, or are receiving a bin for the first time.

Every few years, OCRRA invests about half a million dollars in a large supply of blue bins for the community. The 33 participating municipalities house a supply of blue bins at their individual highway department facilities or town clerk's offices. This allows residents to have easy access to blue bins when needed. In addition, OCRRA keeps blue bins at many of its own facilities for users and hosts blue bin distribution events throughout the County.

Because single-stream recycling is now the norm in Onondaga County, residents do not have to separate recyclable papers from recyclable containers. Due in a large part to easy access to blue bins, as well as OCRRA's public education efforts, OCRRA's curbside recycling program successfully captures about 40,000 tons of recyclables annually. More information about OCRRA's blue bins is available at: https://ocrra.org/how-do-i/recycle/recycle-at-home#BlueBins.

3.2.4 SCHOOL RECYCLING OUTREACH

Schools generate a significant amount 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 are a major focus of OCRRA's public education program. OCRRA provides services to the 18 school districts and approximately 137 schools within the planning unit.

Recycling Specialists regularly visit school custodians, teachers, and administrators to help them design and improve their recycling programs, and to offer free recycling containers, decals, and other support materials. Recycling Specialists also conduct classroom presentations upon request. This amounts to more than a hundred visits annually.

To encourage more recycling in Onondaga County schools, OCRRA developed the School Recycling Pledge Program in 2008. The pledge is a large, custom-printed, framed poster with a statement for the school (administrators, custodians, teachers, and students) to sign. The pledge highlights school-wide commitments to recycling and has been effective in increasing recycling and raising awareness in the schools. This program is ongoing; 116 schools have signed the pledge to date.

Annually, OCRRA also recognizes outstanding school recycling achievement through the Vonnell Mastri Award, which honors a school recycling program in the City of Syracuse.

As discussed further on in Section 8.6.3, OCRRA is developing a new, innovative, and cost-effective school recycling education program for County-wide implementation. Based on input from local teachers, the new approach will include a series of five, professionally-produced videos, each several

minutes in length, highlighting our community's various recycling and waste system elements (including source separation, MRFs, WTE, and composting) that teachers may access online at their convenience. The new program will also provide supplemental enrichment activities, such as interactive, touch-screen games that students may access online or through Smart Board technology, as well as more traditional support materials that do not require special technology.

More information about OCRRA's school recycling program is available at: https://ocrra.org/how-do-i/recycle/recycle-at-school.

3.2.5 BUSINESS RECYCLING OUTREACH

OCRRA's Recycling Specialists regularly provide local business with free consultations to assist them in designing effective collection systems for recyclables and to offer free containers and decals to improve success rates. OCRRA's team makes close to 200 business visits annually.

In 2009, OCRRA launched the Blue Ribbon Recycler Program to recognize businesses that demonstrate recycling excellence in the workplace. Each applicant to the program must meet specific criteria in regards to recycling, such as providing recycling containers for all employees and purchasing recycled paper. Once a Recycling Specialist determines that a business qualifies, it receives a certificate from OCRRA and recognition on the OCRRA website and newsletter. If a business does not meet all criteria, OCRRA identifies areas for improvement. The Blue Ribbon Recycler Program is an incentive for businesses to achieve recycling excellence by offering them recognition that they can then share with their clients and customers. To date, there are about 66 certified Blue Ribbon Recyclers. More information about OCRRA's Blue Ribbon Recycler Program is available at: https://ocrra.org/about-ocrra/services/blue-ribbon-recycler-program.

In 2011, OCRRA also began offering *Recycler of the Year* awards to recognize businesses that go above and beyond the requirements of the Blue Ribbon Recycler Program.

More information about OCRRA's business recycling services is available at: https://ocrra.org/how-do-i/recycle/recycle-at-work.

3.2.6 APARTMENT RECYCLING OUTREACH

Onondaga County has hundreds of multi-unit apartment buildings, which present a unique set of challenges to recycling, such as space constraints and inconvenient community recycling bin locations. To assist residents, OCRRA Recycling Specialists visit apartment complexes and speak with landlords and property managers to ensure that the proper recycling infrastructure is in place. To help facilitate a great recycling system, OCRRA provides complementary brochures, magnets, decals, and special containers, as well as presentations at group meetings. More information about OCRRA's apartment recycling services is available at: https://ocrra.org/resource-pages/resource-page-category/apartments.

3.2.7 COMMUNITY EVENTS AND PUBLIC OUTREACH

OCRRA is committed to maintaining high levels of community outreach and annually participates in more than 100 local events and fairs, including the Taste of Westcott Street (for Syracuse University students), Huntington Family Center Picnic (for Syracuse's Near Westside residents), the Home and

Garden Show, and CNY Blooms. At these events, OCRRA distributes blue bins, recycling instructions, and numerous recycling-related promotional items. It is a great way for OCRRA to interact with thousands of residents and familiarize the community with OCRRA's programs.

3.3 ENFORCEMENT

When needed, OCRRA's Enforcement Officers supplement the efforts of OCRRA's Recycling Team. An Enforcement Officer calls on businesses and apartment buildings when it is determined that other approaches have not resulted in recycling cooperation. Enforcement Officers also spend a significant portion of their week inspecting loads of solid waste at the WTE Facility to ensure that loads do not contain more than 5% of recyclables. Haulers of loads containing more than 5% of recyclable materials are issued warnings and/or notice of violations. Once a problem is identified, Recycling Specialists are available to assist waste generators in designing a recycling program that will capture the mandated recyclables.

OCRRA's Enforcement Officers also regularly inspect the County's borders to identify waste that may be leaving OCRRA's CSWMS (in violation of the County's flow control law – see section 2.3.3). They follow up on tips/complaints regarding waste exportation, open dumping, and improper/non-existent recycling and then conduct investigations as appropriate. Other responsibilities include conducting curbside recycling checks, scale reviews, and MRF inspections, and providing support at OCRRA's special events. Ultimately, their efforts result in keeping waste in OCRRA's CSWMS and increasing the recycling rate.

3.4 COMPOSTING

Since 1992, OCRRA has provided municipalities, commercial entities, and residents the opportunity to conveniently recycle their yard waste at two compost sites in Amboy and Jamesville. The residential season runs from April to November, whereas the municipal and commercial services have grown into a year-round program. Annually, these sites have more than 30,000 user visits. The goal of OCRRA's program is two-fold: 1) provide an environmentally sound system for managing the community's organic wastes, and 2) provide high quality compost and mulch to residents of Onondaga County.

3.4.1 INFRASTRUCTURE/FACILITIES

The Jamesville Compost Site, located at 4370 Route 91 in Jamesville, generally services the east, south, and central portion of Onondaga County, while the Amboy Compost Site, located at 6296 Airport Road in Camillus, generally services the north and western portions of Onondaga County. The Jamesville Compost Site is a "registered" compost facility with the ability to process up to 10,000 cubic yards of yard waste and 1,000 cubic yards of food waste, annually. The Amboy Compost Site is a "permitted" compost facility and is designed to handle over 9,600 tons of commercial and institutional food wastes and 48,000 cubic yards of yard waste, annually.

3.4.2 YARD WASTE

For more than 20 years, OCRRA has been providing yard waste composting services to residents, municipalities, and commercial entities. The Amboy and Jamesville Compost Sites accept all types of yard waste materials including brush, grass clippings, and plant materials. Finished compost and mulch are available for residents to take home as well. Residents may purchase annual site passes that allow them to drop off yard waste and take a specified amount of mulch or compost. Annually, thousands of residential compost passes are sold, in addition to the commercial traffic (*i.e.*, municipalities and landscaping companies). OCRRA annually offers a free Christmas tree recycling program to the community. The facilities are open for a two-week period in January for residents and municipalities to drop off their Christmas trees for composting at no charge. More information is available at: https://ocrra.org/how-do-i/compost/compost-let-ocrra-help.

3.4.3 FOOD WASTE

Following OCRRA's 2005 Waste Quantification and Characterization Study, which identified food waste as the next major opportunity for increasing recycling, OCRRA began exploring the feasibility of composting institutional and commercial food waste. After researching many different technologies, OCRRA ultimately identified the Aerated Static Pile (ASP) method as the best fit for the Agency, considering cost-effectiveness and efficiency.

In 2008, OCRRA implemented an ASP pilot project at the Amboy Compost Site, enlisting assistance from a national ASP expert. Several hundred cubic yards of pre-consumer food waste from various participating grocers and institutions were mixed with yard waste at a 1:3 ratio, covered with finished compost, and injected with air using a basic ASP system. The pilot project was a huge success and clearly demonstrated the effectiveness of an ASP system for composting food and yard waste in the CNY climate. From 2009-2013, OCRRA continued using the basic ASP system while planning to develop the Amboy Compost Site into a state-of-the art food and yard waste composting facility.

In November 2013, OCRRA opened the largest municipal food scrap composting facility in NYS. The $2.4 million ASP compost system is designed to process nearly 10,000 tons of local institutional and commercial food scraps a year, and will ultimately generate over 30,000 yards of premium compost annually. Compared to a windrow approach, OCRRA's ASP system reduces the processing time by 60%, from nine months to less than 90 days for finished product. The facility was designed by engineers in GHD's Cazenovia, NY office.

Just six months after opening, OCRRA's new Amboy Compost Site is already processing over 50 tons of food scraps on a weekly basis (about 25% of the facility's capacity), all of which are turned into a soil amendment that meets the United States Composting Council's (USCC's) Seal of Testing Assurance (STA). The material is sold back to the community for use in gardens and landscapes, as well as for green infrastructure projects, including green roofs and wetland construction.

The list of local commercial and institutional generators sending their food scraps to the Amboy Compost Site for recycling into nutrient-rich compost is long and growing. Byrne Dairy, restaurants throughout Destiny USA shopping center, LeMoyne College, Marcellus School District, the OnCenter, Onondaga Community College, Pastabilities Restaurant, Paul De Lima Coffee, Syracuse Ramada Inn, The Centers at St. Camillus, SUNY Upstate Medical Center, Crouse Hospital, Community General Hospital, Syracuse University, the Sheraton Syracuse University Hotel and Conference Center, Syracuse Banana, and Wegmans supermarkets in Onondaga County are some of the early adopters.

The project is squarely aimed at meeting OCRRA's vision of maintaining a world class CSWMS that makes our community a more sustainable, healthier place to live. Currently, the community disposes of at least 40,000 tons of food scraps annually, based on OCRRA's 2005 waste composition study. DEC's waste composition calculator suggests this number may be even higher; OCRRA plans on refining this estimate through future waste studies.

OCRRA's food scrap compost system will help reduce waste and "close the loop" by recovering organics currently in the trash to generate a premium soil amendment that returns valuable nutrients to local soils. In 2014, OCRRA began bagging and selling the 1/4" screened compost at local garden stores throughout CNY, in addition to selling the material in bulk at the Compost Sites.

OCRRA's organics recovery efforts are recognized with Environmental Excellence Awards from both the DEC and the USCC.

More information about OCRRA's food waste composting program is available at: https://ocrra.org/about-ocrra/services/food-waste-composting.

3.5 SPECIAL COLLECTION PROGRAMS AND EVENTS

In addition to OCRRA's standard recycling and composting programs, OCRRA offers a variety of special collection programs and events to the community. Some of these programs, such as the HHW drop off, help to keep undesirable materials out of the waste stream. OCRRA's annual Earth Day litter cleanup beautifies the community and raises awareness about OCRRA's programs.

3.5.1 HOUSEHOLD HAZARDOUS WASTE

In 2013, OCRRA made a major change to the HHW program. In response to resident suggestions, OCRRA made its HHW program even more convenient. Instead of three Saturday events per year, OCRRA switched to a continuous Monday-Friday drop-off at Environmental Products and Services of Vermont, Inc. *(see photo, left of a resident utilizing the new, more convenient drop off).*

This popular environmental service allows residents to safely dispose of their hazardous waste, keeping these materials out of the waste stream. Among the hazardous wastes collected are adhesives and resins; oil-based paint; paint thinner; solvents; thermometers, thermostats, and other mercury containing products, pesticides and fluorescent light bulbs. This program is offered free of charge to residents of the participating municipalities; OCRRA pays the vendor based on the amount of hazardous waste dropped off by the resident.

To learn more about the program, visit: https://ocrra.org/resource-pages/resource-page-category/toxics.

3.5.2 HOUSEHOLD BATTERIES

OCRRA's household battery collection program includes year-round drop-off at ten local Wegmans grocery stores, a curbside collection each July, and a partnership with the ARC of Onondaga for battery sorting. Annually, OCRRA's programs remove about 90 tons of batteries from the waste stream.

To comply with federal regulations regarding battery transport, OCRRA designed new collection containers for the grocery stores that allow for the separation of alkaline, rechargeable, and button batteries. This new system began in 2010. In addition, the annual July curbside collection changed to only allow alkaline batteries in the special bags distributed by OCRRA. To improve sorting accuracy, OCRRA collects the batteries from the grocery stores and brings them to ARC of Onondaga where they are further sorted, for a modest fee.

For the recycling of rechargeable batteries, OCRRA uses Call2Recycle®, a no-charge rechargeable battery recycling organization funded by the battery industry. This is an example of an Extended Producer Responsibility (EPR) program that is beneficial to both the environment and solid waste planning units. Residents in the OCRRA service area are now recycling more rechargeable batteries per capita than any other large community in NYS. For its efforts, OCRRA was recognized with a Community Sustainability Award by Call2Recycle® in 2012.

As a result of its innovative residential battery collection program, OCRRA was invited in 2013 to serve as a "Foundation Program" by the Battery Recycling Corporation (BRC), one of only a handful of communities across the country invited to do so. As a result of this public-private partnership, BRC covered the expenses to transport and recycle the thousands of pounds of household alkaline batteries that OCRRA collected. The partnership is continuing in 2014, and is aimed at ultimately developing best practices for a nationwide collection system managed by alkaline battery manufacturers. More information about OCRRA's battery collection program is available online at: https://ocrra.org/resource-pages/resource-page-category/household-batteries

3.5.3 FLUORESCENT BULBS

Fluorescent light bulbs are a popular household item because of their energy saving potential. However, these energy efficient bulbs contain mercury and should not be mixed with regular household trash at the end of their life. To encourage residents to dispose of these properly and keep mercury out of the trash, OCRRA partners with local hardware stores to provide residents with convenient locations to drop off old bulbs. From the stores they are shipped off for proper disposal. There are more than a dozen participating stores throughout the county and, since the program launched in 2007, about 50,000 bulbs have been collected through 2013. Further information about this environmental program is available online at: https://ocrra.org/resource-pages/resource-page-category/fluorescent-bulbs

3.5.4 MERCURY THERMOSTATS AND THERMOMETERS

In partnership with Covanta, OCRRA offers a mercury thermometer exchange and thermostat collection program at the Rock Cut Road Transfer Station. Annually about two hundred thermometers and thermostats are dropped off for recycling. This exchange program keeps mercury out of the waste stream. OCRRA provides residents with a $5 Home Depot gift card in exchange for their old mercury thermometers and thermostats. OCRRA also sends Onondaga County residents a mercury-free thermometer after they drop-off their old thermometer. Thermometers are properly disposed of through OCRRA's HHW vendor. Thermostats are handled through the Thermostat Recycling Corporation, a

national industry-funded program that provides proper disposal of mercury-containing thermostats at no cost. More information is available at: https://ocrra.org/resource-pages/resource-page-category/mercury-thermometers-and-thermostats.

3.5.5 RESIDENTIAL DOCUMENT SHREDDING

In response to increasing public concern over identity theft, OCRRA launched its first Shred-O-Rama event in 2004. OCRRA continues to hold events at NBT Bank Stadium in Syracuse, where over a thousand residents drop off confidential documents to be shredded. Paper is shredded on site and then recycled by local shredding companies. OCRRA generally holds two events per year. More information is available at: https://ocrra.org/about-ocrra/services/paper-shredding.

3.5.6 EARTH DAY LITTER CLEANUP

This two-day event enjoys excellent community support, with over 5,000 volunteers each year. Since OCRRA began the effort in 1994, more than 2 million pounds of litter have been removed from the community's streets, streams, and public spaces. Groups of all ages and sizes can volunteer to clean up any public area in the county they want. OCRRA provides special stickers to place on the bags of litter. The stickers enable free trash disposal. More information is available at: https://ocrra.org/about-ocrra/services/earth-day-litter-cleanup.

3.6 DROP-OFF LOCATIONS AND TRANSFER OPERATIONS

OCRRA operates two convenient drop-off locations – the Ley Creek and the Rock Cut Road Transfer Stations for contractors/small businesses, haulers with mixed MSW/C&D loads, and residents without curbside collection. The Ley Creek Transfer Station primarily caters to large haulers and contractors/small business users with C&D and mixed MSW/C&D loads, while the Rock Cut Road Transfer Station specializes in residential and small business trash and recycling drop-off services. Both facilities are permitted by the DEC to receive, process, and subsequently haul materials to the appropriate destination for disposal or recycling.

3.6.1 INFRASTRUCTURE/FACILITIES

The Ley Creek Transfer Station is located at 5158 Ley Creek Drive (off Seventh North Street) in the Town of Salina. It is centrally located in Onondaga County and offers easy access from both Interstate 81 and the NYS Thruway (Interstate 90). The site is approximately 9.5 acres and consists of an open metal building used primarily for temporary waste storage, vehicle loading, and vehicle maintenance; an attached concrete block office building; two waste processing areas; a small scale house adjacent to inbound/outbound scales; and a vehicle refueling area. The Ley Creek Transfer Station is permitted to accept up to 800 tons per day of MSW, C&D, and recyclables. For more information visit: https://ocrra.org/resource-pages/resource-page-category/ley-creek-drop-off-site.

The Rock Cut Road Transfer Station is located at 5808 Rock Cut Road in the Town of Onondaga, directly across the street from the WTE Facility. It offers easy access from both Interstate 81 and Interstate 481. The site is approximately 17.5 acres, of which only about 0.5 acres is used for transfer and recycling activities. The Transfer Station consists of two adjoining buildings used primarily for vehicle maintenance. The area immediately behind the buildings is used as a drop-off center for recyclables and trash. There is also a small scale house building to the west of the main buildings with

two truck scales that are not currently in operation. The scale house building is used for administrative purposes. Additionally, there is an underground storage tank and vehicle refueling area in front of the building. For more information visit: https://ocrra.org/resource-pages/resource-page-category/rock-cut-road-drop-off-site.

3.6.2 TRANSFER STATION OPERATIONS

At the Ley Creek Transfer Station, incoming MSW and C&D is mechanically and manually separated into three streams: recyclable materials (mainly scrap metal and cardboard), "processable material" that can be processed at the WTE Facility, and "bypass waste" that must be diverted to a DEC-permitted solid waste landfill. Processable material is crushed and compacted by a landfill compactor in the building. The crushed and compacted processable material is then loaded into transfer trailers for delivery to the WTE Facility. Bypass material is pushed into a separate area of the building, crushed and compacted, and then loaded into transfer trailers for delivery to an out-of-County landfill. Recovered cardboard is loaded into a closed top trailer for delivery to a MRF. Scrap metal is stored in an open-top roll-off for pick-up by a scrap metal vendor.

At the Rock Cut Road Transfer Station, residential customers bring bagged MSW and loose recyclable materials. Mixed loads of MSW and C&D from contractors and businesses are also delivered. MSW and other materials that can be sent to the WTE Facility are put into a hydraulic packer, which compacts the material directly into a transfer trailer. Materials that cannot be sent to the WTE Facility are immediately loaded into an open top trailer for delivery to a DEC-permitted solid waste landfill. Recovered cardboard is also put into a hydraulic packer and compacted directly into a transfer trailer. All other recyclables are put into the closed containers for pick-up by a recycling vendor. Scrap metal is stored in an open-top roll-off for pick-up by a scrap metal vendor. The Rock Cut Road Transfer Station is also used for maintenance of OCRRA's fleet for ash transportation.

3.7 ENERGY RECOVERY

Trash in Onondaga County is used resourcefully. Once it leaves the curb, or one of OCRRA's drop-off sites/transfer stations, it is sent to the local WTE Facility where it is turned into electricity. The proceeds from trash drop-off fees and the sale of electricity are what fund OCRRA's many recycling programs.

The WTE Facility is owned by OCRRA and operated by Covanta. The OCRRA-Covanta partnership has served the community well since the WTE Facility began operating in 1994. If Onondaga County did not have a WTE facility, all of the County's non-recyclable trash would be destined for an out-of-county landfill.

Although reducing, reusing, and recycling are unquestionably preferable, the reality is that we still need alternatives for managing non-recyclable materials. To provide some perspective on the quantity of non-recyclables (or trash) generated in Onondaga County, if they were put into the Carrier Dome, the Dome would overfill in less than one year.

WTE facilities add a 4th "R" to "reduce, reuse, recycle" hierarchy – RECOVER. After maximizing reduction, reuse, and recycling, WTE facilities recover energy from the remaining trash and generate substantial amounts of electricity.

3.7.1 WASTE-TO-ENERGY FACILITY OVERVIEW

The local WTE Facility, located just off of Route I-481 in Jamesville (Town of Onondaga), is a key component of OCRRA's CSWMS. This Facility processes all of the community's non-recyclable trash, while also generating enough electricity for about 30,000 households and reducing the volume of material that needs to be landfilled by 90%.

In addition to recovering energy, WTE facilities recover metals from the waste stream; the Onondaga Facility recovers about 9,000 tons of ferrous and non-ferrous metal each year. These facilities reduce transportation impacts and save landfill space because only one truck load of ash is sent to the landfill per ten loads of trash processed.

WTE also reduces greenhouse gas emissions relative to other waste management systems. The rule of thumb is that for each ton of waste processed at a WTE facility, one ton of greenhouse gas emissions (carbon dioxide equivalents) is offset. WTE facilities reduce greenhouse gas emissions in four ways: they reduce the amount of organic material going to landfills, which in turn reduces methane emissions from landfills (methane is a potent greenhouse gas); they recover ferrous and non-ferrous metals from the waste stream for recycling, which is more energy efficient than mining virgin materials for the production of new metals; the electricity generated utilizing trash offsets electricity generated from fossil fuels; and only 10% (by volume) of the incoming waste is ultimately transported to an out-of-county landfill in the form of non-hazardous ash residue, which significantly reduces vehicle emissions.

WTE facilities are often thought to compete with recycling. However, study after study has shown that communities with WTE facilities have higher recycling rates than communities that landfill their trash, both in Europe and in the US. Onondaga County has one of the highest recycling rates in the State, and possibly in the nation, making it clear that WTE and recycling are complementary systems.

3.7.2 WASTE-TO-ENERGY OPERATIONS

Each year, OCRRA posts detailed annual WTE reports, as well as all of the annual air and ash testing results. Air emissions are carefully monitored, with oversight by OCRRA and the DEC, to ensure that the WTE Facility is in complete compliance with its strict Title V Air Permit. The annual testing and continuous emissions monitoring system (CEMS) have consistently shown that the WTE Facility meets all permit requirements. OCRRA and Covanta take great pride in the WTE Facility's strong operational and environmental track record.

The WTE Facility consists of three independent combustion units each capable of processing 330 tons of trash per day. It operates 24 hours a day, 7 days a week, 365 days a year except during periods of scheduled maintenance. Similar to other power plants (just using trash rather than other fuels like coal, oil, or natural gas), the fuel is burned in a combustion chamber (where temperatures reach 1,800 degrees Fahrenheit) to heat tubes of water in boiler walls. The water is heated until it turns into steam, which is then used to drive a turbine generator that produces electricity.

The byproduct of the combustion process is a non-hazardous ash residue, which is about 10% of the original volume of the trash, and 25% of the original weight of the trash, processed at the WTE Facility. The ash residue is sent to a landfill for disposal or use as alternative daily cover under a DEC-approved Beneficial Use Determination (BUD). This beneficial reuse of the ash means that other finite materials, such as clean soil, do not need to be used for landfill cover. The WTE Facility generates approximately 80,000 tons of ash residue annually.

Metals that would otherwise have gone to a landfill are recovered from the WTE Facility for recycling. The ferrous (magnetic) and non-ferrous (non-magnetic) metal recovery systems extract metal from the ash residue. Approximately 9,000 tons of metal are recovered annually.

The WTE Facility's air pollution control system is comprised of several stages to treat, capture, and remove contaminants before they are released.

The first step consists of a selective non-catalytic reduction system in which ammonia is injected into the boiler to control nitrogen oxide emissions.

The next phase of treatment occurs in a vessel called a dry scrubber. Lime slurry and activated carbon are injected via an atomizer into the dry scrubber where they react with the flue gases leaving the boiler, neutralizing acid gases and controlling mercury emissions.

The final phase is the fabric filter baghouse, which works like a vacuum cleaner, where thousands of cylindrical bags filter out and remove tiny particulate matter not visible to the eye. The filtered air then exits the stack at 278 feet above ground level.

Since its start-up, the WTE Facility's operational and environmental performance has exceeded expectations. In fact, the WTE Facility has received several national awards and, most recently in 2012, the Solid Waste Association of North America bestowed a Gold Excellence Award on the WTE Facility for stellar operations.

3.8 LANDFILL DISPOSAL

Within OCRRA's CSWMS, there are only two waste streams requiring landfill disposal: ash residue from the WTE Facility and bypass waste generated at the Transfer Stations. Bypass waste from the Transfer Stations includes hard fill materials, drywall, polyvinyl chloride (PVC) piping and siding, mattresses and other items that cannot be processed at the WTE Facility.

3.8.1 PERMITTED LANDFILL SITE

Although OCRRA has secured the required permits to construct and operate an in-County landfill, the current economic climate has allowed OCRRA to benefit from competitive landfill disposal pricing at privately owned landfills and thereby defer construction. Construction of the permitted, in-County "Site 31" Landfill for ash residue and bypass waste in the Town of Van Buren makes economic sense only if it can be done at a lower unit cost than that for transport to and disposal at an out-of-county landfill, or in the event that out-of-county disposal capacity becomes unavailable. This has not been the case to date, however, OCRRA continues to evaluate the costs, risks, and benefits associated with construction of the "Site 31" Landfill. The estimated construction cost of the "Site 31" Landfill was $75 million in 1995 dollars.

3.8.2 CONTRACTUAL ARRANGEMENTS FOR LANDFILL DISPOSAL

Historically, every four to five years, OCRRA has issued a Request for Proposals (RFP) for disposal of ash residue and transfer station bypass material. Proper due diligence, including a site visit, discussion with the DEC, review of the permits and operational history, is conducted prior to awarding a contract. More recently, OCRRA has also evaluated the landfill's ability to beneficially reuse the ash residue as alternative daily landfill cover. Through the landfill disposal contract, OCRRA also secures adequate

landfill capacity for contingency planning, should the WTE Facility ever be down and unable to process waste for an extended period of time. To date, OCRRA has had landfill contracts with Seneca Meadows Landfill in Seneca County and High Acres Landfill (current) in Monroe and Wayne Counties.

3.9 ADVOCACY FOR EXTENDED PRODUCER RESPONSIBILITY

OCRRA has been involved in many EPR initiatives in the last few years; a policy priority of the NYS "Beyond Waste" Plan. EPR requires manufacturers to take responsibility for the safe and environmentally sound disposal of items they make and sell. This includes reducing toxic materials used for manufacturing and a requirement to implement some form of a take-back and reuse and/or recycling program.

In 2013, NYS passed a bill to require manufacturers to collect mercury thermostats. The bill, known as the Mercury Thermostat Collection Act, requires that manufacturers develop and implement a thermostat collection program that meets a pre-established goal of collecting 15,500 thermostats by 2015. The bill also calls for the DEC to establish annual collection goals thereafter, and to make changes to the program if manufacturers fail to meet these goals. This could include requiring manufacturers to pay financial incentives to recyclers to encourage greater participation.

In 2010, NYS passed the Electronic Equipment Recycling and Reuse Act, which ensures that manufacturers are responsible for the recycling of electronics, whether physically or financially. This law, which went into effect April 2011, relieves OCRRA of the economic burden of managing and recycling electronics in the waste stream.

Also in 2010, NYS adopted legislation to require the recycling of rechargeable batteries to be provided by the manufacturers, physically or financially. Beginning in late 2011, the NYS Rechargeable Battery Recycling Act banned the disposal of any rechargeable batteries in NYS. This new law means that manufacturers are providing outlets for recycling at all retail locations that sell rechargeable batteries at no charge to the consumer.

OCRRA is an active member of the New York Product Stewardship Council (NYPSC), a statewide, non-profit group which partners with local government agencies to advocate for EPR policies. OCRRA's Board of Directors has also passed several resolutions supporting EPR legislation (see Appendix H). In the future, OCRRA hopes to see further discussion of NYS EPR laws, particularly for toxics, paint, packaging, carpeting, mattresses, and fluorescent bulbs.

3.10 BIOSOLIDS MANAGEMENT

The biosolids produced at the Metropolitan Syracuse Wastewater Treatment Plant (Metro) are an anaerobically digested mixture of primary, waste-activated, biologically-nitrified, and chemical-precipitated biosolids.

In 1989, Onondaga County started a process to select a private contractor to permit, design, construct and operate a 240 ton per day biosolids processing facility at Metro. The vendor would also responsible for marketing the product produced from the biosolids. Pursuant to NYS Gen. Municipal Law Section 120-W, the County solicited proposals and, ultimately, selected Waste Stream Environmental (WSE). In June 1994, the $2.5 million processing facility began full scale operation.

Initially, the biosolids were dewatered by belt filter presses prior to processing into the N-Viro Soil product. In April 2007, dewatering was improved through the utilization of centrifuges and the biosolids now have an average of 31 percent solids content by weight.

Cumulatively, through 2009, over 560,000 tons of biosolids were diverted from landfills. The product, N-Viro Soil, produced by WSE, was marketed by their affiliate company, EarthBlends, Inc. N-Viro Soil was registered as an agricultural lime with the NYS Department of Agriculture and Markets. Over 1,000 farms successfully used this biosolids product to enhance their soil to grow crops. Other uses of the product included top dressing of golf courses and recreational fields, blends with other materials for horticultural uses and land reclamation.

Onondaga County ended its use of the N-Viro process in October 2009, following unresolved operational and permit concerns, primarily the generation of on-site odors. In response, the County initiated a contract for hauling the biosolids to a permitted disposal facility. Currently, the disposal facility is determined by the contracted hauler. Initially the County utilized Riccelli Enterprises for hauling with ultimate disposal at the Seneca Meadows Landfill. Currently, all biosolids are transported by Casella Organics for disposal at the Ontario County Landfill. Since the closure of the on-site N-Viro Soil process, the County has disposed over 145,000 tons of biosolids in landfills.

Onondaga County 15 Year Distribution History of Biosolids (wet tons)								
Option	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
N-Viro	51,113	53,921	53,330	59,658	50,796	47,484	49,346	38,358
Landfill	2,441	4,414	3,466	0	1,389	0	0	10,568
Total	53,554	58,335	56,796	59,658	52,185	47,484	49,346	48,926

	2007	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
N-Viro	45,920	38,314	39,933	NA	NA	NA	NA	Pending
Landfill	0	0	2,834	37,603	37,612	33,451	33,699	Pending
Total	45,920	38,314	42,767	37,603	37,612	33,451	33,699	Pending

It should be noted that to a lesser extent, approximately 3% of the County's annual biosolids production is also managed at the Baldwinsville Seneca Knolls Wastewater Treatment Plant. The aerobically digested sludge generated there is dewatered by belt filter presses to approximately 18 to 33 percent solids content (by weight).

4.0 OTHER REGULATED SOLID WASTE FACILITIES IN ONONDAGA COUNTY

In addition to OCRRA's solid waste facilities (including the WTE Facility, Ley Creek and Rock Cut Road Transfer Stations, and Amboy and Jamesville Compost Sites), there are other independent solid waste operations within Onondaga County that are regulated by the DEC. These facilities are generally complementary to OCRRA's services, although some directly compete for waste materials – namely yard waste and C&D. As discussed in Section 2.3.3, in order to secure and achieve the public benefits of OCRRA's CSWMS, Onondaga County implements and enforces a regulatory system governing waste generated within the planning unit. Specifically all residential, governmental, commercial, institutional, and light industrial waste must be directed to OCRRA's WTE Facility or Ley Creek Transfer Station. This law specifically excludes recyclables, yard waste, and C&D.

4.1 WASTE TRANSFER STATIONS

According to DEC records in 2013, there were two privately-owned and operated transfer stations and four municipally-owned and operated transfer stations within OCRRA's CSWMS, in addition to OCRRA's Ley Creek and Rock Cut Road Transfer Stations. Syracuse Haulers has a solid waste permit to transfer C&D and recyclables – but not MSW. Environmental Products and Services of Vermont, the other private transfer station, primarily manages industrial waste streams. With respect to the municipal transfer stations, those in the City of Syracuse, Town of Marcellus, and Town of Geddes are used for municipal management of C&D, which may or may not be delivered to OCRRA. The fourth, the Town of Spafford's transfer station is used to accept MSW and recyclables from their residents; the MSW is directed to OCRRA. Within Onondaga County, but outside of the planning unit, the Town of Skaneateles also has a municipal transfer station.

4.2 WASTE DISPOSAL FACILITIES

Within Onondaga County, there are three permitted disposal facilities other than the WTE Facility and the "Site 31" Landfill – the Town of Camillus Landfill, the Marcellus Brush Dump, and the Town of Skaneateles Land Clearing Debris Landfill, according to DEC records in 2013. None of them are double-lined sanitary landfills. According to the DEC, the Marcellus Brush Dump and Town of Skaneateles Land Clearing Debris Landfill are used to manage municipal land clearing debris. The Town of Camillus Landfill is an Order on Consent C&D Landfill operating on Honeywell's Wastebed 15. The Town of Camillus Landfill currently accepts about 30,000 tons of non-putrescible C&D materials annually.

4.3 MATERIAL RECOVERY FACILITIES

In addition to the two MRFs under contract with OCRRA to accept residential recyclables (Recycle America and Syracuse Recycling and Recovery, which was destroyed by a fire in July 2013), there are nine other permitted or registered recycling facilities within the Onondaga County planning unit and one within Onondaga County but outside of the planning unit (Skaneateles Transfer Station). Three private haulers have permitted or registered recycling facilities – Syracuse Haulers, Feher Rubbish Removal, and Dependable Disposal. The other private recycling facilities are run by CNY Resource Recovery, National Grid, SMR Fiber, and Solvents and Petroleum Services (two facilities). There is one municipal recycling facility run by the Town of Spafford.

4.4 COMPOSTING FACILITIES

Other than OCRRA's Amboy and Jamesville Compost Sites, there are three registered municipal composting facilities and six registered private composting facilities within Onondaga County, according to DEC in 2013. The City of Syracuse has two yard waste compost sites and the Village of Marcellus has a biosolids composting facility. Out of the six privately-owned and operated facilities, half (Ground Effects, Raimondo Bro's, and Toad Hollow Farms) are registered to manage non-recognizable food processing waste in addition to yard waste. The others (Altman Enterprises, Gerber Top Soil, and Mill Creek Quality Earth Products) manage only yard waste materials. In addition to the registered facilities, there are other smaller composting operations within the planning unit.

4.5 C&D PROCESSING FACILITIES

Based on information from the DEC, there are ten permitted C&D processing facilities in Onondaga County. The annual reports submitted to DEC indicate that the majority of the facilities primarily manage and recycle hardfill materials (*e.g.*, aggregate, concrete, asphalt, masonry). However, at least two facilities (Clifton Recycling and Ground Effects) also manage unadulterated wood and brush/branches/trees/stumps.

4.6 HOUSEHOLD HAZARDOUS WASTE FACILITY

Within the planning unit there is one private household hazardous waste management facility – Environmental Products and Services of Vermont. This is the vendor currently utilized for proper household hazardous waste management within the planning unit. See Section 3.5.1 for more information.

4.7 OTHER PERMITTED OR REGISTERED SOLID WASTE FACILITIES

In addition to the types of facilities already discussed, the DEC has issued solid waste registrations or permits for land application of treated septage and biosolids; regulated medical waste radiopharmacy, treatment and storage facilities; waste oil storage/processing facilities; and waste tire storage facilities within Onondaga County; and has reporting requirements for vehicle dismantling/scrap metal facilities. These operations are generally unrelated to the services OCRRA provides to the community.

4.8 CONSISTENCY WITH LOCAL SOLID WASTE MANAGEMENT PLAN

OCRRA has developed a premiere CSWMS that is consistent with the NYS Solid Waste Management Plan's hierarchy of waste reduction/reuse, recycling, WTE, and environmentally sound landfill disposal. As DEC states on its website, "*Up-to-date solid waste management planning at the local level is a necessary and essential element in maintaining an environmentally sound integrated solid waste management program in New York State.*" As planning units carefully and thoughtfully develop solid waste systems, it is critical that the DEC work with planning units to ensure that permitted independent solid waste facilities are consistent with the local comprehensive solid waste management plans and functional systems.

Currently, the Part 360 regulations require that permit applications submitted by or on behalf of a municipality in a planning unit demonstrate that the proposed facility is consistent with the local

solid waste management plan (6 NYCRR §360-1.9 (e) (4) (v)). For permit applications which are not submitted by or on behalf of a municipality in a planning unit, the Part 360 regulations require that the application include an assessment of the proposed facility's impact on the local solid waste management plan (6 NYCRR §360-1.9 (e) (4) (vi)).

SEQR provides another mechanism for including input from local planning units relative to such proposed independent facilities. As required by SEQR per 6 NYCRR §617.7 (c) (1) (iv), a reviewing agency must consider the impact of local solid waste management plans when conducting a significance determination and finding for facilities, whether private or public.

Though OCRRA and Onondaga County have established “safeguards” to support the long-term continuation of OCRRA’s environmentally-beneficial CSWMS, it is imperative that the DEC work collaboratively with planning units when considering any permit applications for new solid waste management facilities within that planning unit.

5.0 QUANTIFICATION AND DATA ANALYSIS

While OCRRA provides a CSWMS for Onondaga County, it does not have any authority over independent solid waste facilities. That makes complete data acquisition and waste quantification an ongoing challenge. OCRRA's waste quantification accounts for waste tonnages associated with:

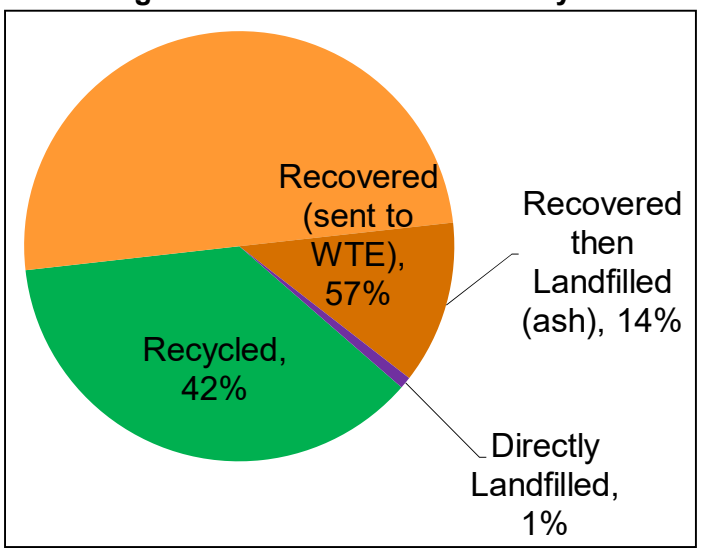
- OCRRA's solid waste facilities;
- Biosolids data provided by WEP;
- Residential recycling data from OCRRA's contracted MRFs; and
- Voluntary recycling information provided by private recycling operations and commercial entities.

Given that MSW is required to stay within OCRRA's CSWMS per the Flow Control Law (see Section 2.3.3), OCRRA is able to adequately quantify MSW requiring disposal. In contrast, recyclables, C&D, and yard waste are difficult to quantify because they can be managed outside of OCRRA's CSWMS. In order to estimate the planning unit's recycling rate, OCRRA sends out information requests to private recycling operations, commercial entities, and independent composting facilities. For C&D, OCRRA only accounts for the tonnage entering OCRRA's CSWMS. OCRRA is exploring additional mechanisms for collecting recycling and composting data from haulers for material generated within the planning unit.

5.1 MANAGEMENT OF MSW IN OCRRA'S SYSTEM

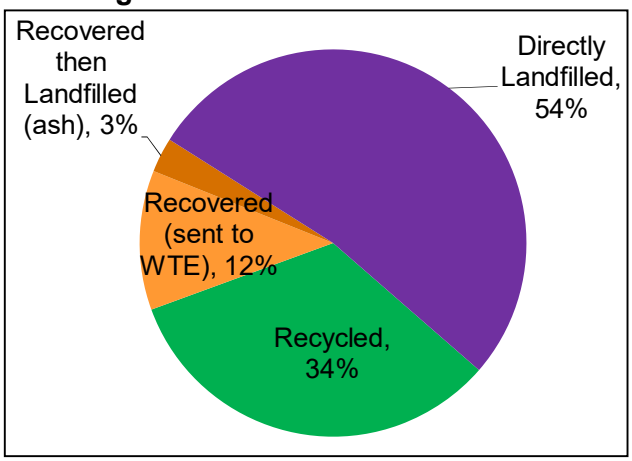
In 2013, nearly one million tons of materials were managed. Of the total waste stream, 62% was recycled, 33% was sent to the WTE Facility for energy recovery (a quarter of that amount, or 8%, then went to a landfill as ash residue), and 5% was directly landfilled. About half of the total waste stream falls into the category of MSW; in OCRRA's system, about 42% of MSW was recycled, 57% of MSW was sent to the WTE Facility for energy recovery (a quarter of that amount, or 14%, then went to a landfill as ash residue), and only 1% was directly landfilled. OCRRA's CSWMS is highly consistent with the DEC's and EPA's solid waste management hierarchy.

Management of MSW in OCRRA's System

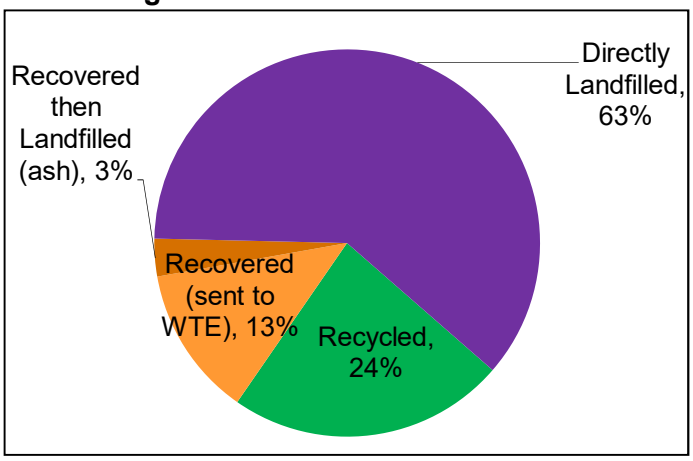


The following figure shows the overall management of MSW in the US, as reported by EPA's "Municipal Solid Waste Generation, Recycling, and Disposal in the United States: Facts and Figures for 2012." As is apparent, more than half of the MSW generated in the US is sent directly to a landfill and only about a third of MSW is recycled. The New York State numbers are similar to the national numbers.

Management of MSW in the United States



Management of MSW in New York State



Sources: EPA, MSW Generation, Recycling, and Disposal in the U.S.: Facts and Figures for 2012; NYSDEC 2010 data

5.2 WASTE QUANTITIES AT OCRRA'S FACILITIES

A scale system is used at OCRRA's WTE Facility and Ley Creek Transfer Station to measure the tonnage of waste materials delivered. This data is the most reliable of any type and is used to calculate the exact fee for disposal. For increased efficiency, OCRRA also employs a "flat rate" fee schedule (based on the type of vehicle delivering the material) at both the Rock Cut Road and Ley Creek Transfer Stations. Both transfer stations also accept bags of trash with "trash stickers" purchased from OCRRA. Total material tonnages for the Transfer Stations are determined using supplemental scale data at the disposal locations (WTE Facility and landfill). The most recent (2013) annual waste quantities for the WTE Facility and Transfer Stations are presented below.

OCRRA's WTE Facility - 2013 Waste Quantities

----------INCOMING----------		----------OUTGOING----------		
material	***tons***	***material***	***destination***	***tons***
Direct Hauler MSW	235,825	Ash Residue	Landfill	79,359
Ley Creek C&D/MSW	75,845	Ferrous Metal	Recycling Vendor	7,901
Rock Cut Road MSW	3,737	Non-ferrous Metal	Recycling Vendor	546
Non-Hazardous Industrial	240	Unacceptable	Ley Creek	9

OCRRA's Ley Creek Transfer Station - 2013 Waste Quantities

---------INCOMING---------		----------OUTGOING----------		
material	***tons***	***material***	***destination***	***tons***
MSW	30,740	MSW / C&D	WTE Facility	75,845
C&D	39,753	MSW / C&D	Landfill	11,028
Roofing	14,458	Scrap Metal	Recycling Vendor	1,707
		Corrugated Cardboard	Recycling Vendor	241

OCRRA's Rock Cut Road Transfer Station - 2013 Waste Quantities

---------INCOMING---------		----------OUTGOING----------		
material	***tons***	***material***	***destination***	***tons***
MSW / C&D	4,057	MSW	WTE Facility	3,737
		MSW / C&D	Landfill	320
		Scrap Metal	Recycling Vendor	199
		Corrugated Cardboard	Recycling Vendor	151

OCRRA's Amboy Compost Site has a scale system for incoming food waste loads, however yard waste at both Amboy and Jamesville is estimated based on the size of the delivery vehicle. Yard waste is measured by volume (cubic yards) and food waste is measured by weight (tons). Outbound materials (*i.e.*, compost and mulch) are estimated by volume and by residential pass usage. The 2013 Compost Site waste quantities are presented below (incoming yard / brush and wood waste quantities were converted to tons based on a conversion factor of 0.25 tons / cubic yard). Note that, due to construction associated with the Amboy Compost Site expansion, 2013 quantities were reduced for the Amboy Compost Site.

OCRRA's Amboy Compost Site - 2013 Quantities

----------INCOMING----------			----------OUTGOING----------	
material	***quantity***	***unit***	***material***	***cubic yards***
Yard Waste	1,125	tons	Bulk Mulch	1,718
Brush and Wood Waste	500	tons	Bulk Compost	2,177
Food Waste	600	tons	Residential Mulch	2,000
			Residential Compost	2,000

OCRRA's Jamesville Compost Site - 2013 Quantities

----------INCOMING----------			----------OUTGOING----------	
material	***Quantity***	***unit***	***material***	***cubic yards***
Yard Waste	1,875	tons	Bulk Mulch	3,630
Brush and Wood Waste	4,000	tons	Bulk Compost	2,568
Food Waste	600	tons	Residential Mulch	2,000
			Residential Compost	1,000

5.3 ANNUAL DATA COLLECTION AND REPORTING

In addition to the data collected at OCRRA's facilities, OCRRA annually collects data from many external sources to better understand recycling practices for materials generated in Onondaga County. As part of the contract with the local MRFs, OCRRA inventories and records recycling tonnages of all material recycled through the residential curbside program. For commercial recyclables, OCRRA sends out annual information requests to large recycling operations and commercial entities, as well as public and private institutions. This information is provided on a voluntary basis and the data is not audited by OCRRA. OCRRA's annual recycling reports summarize the data by material for the total waste stream, as shown by the following table.

2013 Recycling By Material (Total Waste Stream)

MATERIAL	TONS[1]	PERCENT OF TOTAL[2]
Organic Wastes (excluding Paper)		
Food	96,499	18%
Yard Waste	54,041	11%
Wood	4,558	1%
Textiles	4,686	1%
Total Organic	**159,785**	**31%**
Plastics	**9,032**	**1%**
Metal		
Ferrous Metals, except MSW Ferrous	96,747	17%
MSW Ferrous and MSW Non Ferrous	8,365	2%
Non Ferrous Metals, except Aluminum and MSW Non Ferrous	19,267	4%
Aluminum	17,122	3%
Total Metal	**141,502**	**26%**
Paper		
Corrugated Cardboard and Kraft Bags	111,026	19%
Newspapers and Magazines	27,081	0%
Office / Mixed Paper	50,469	9%
Books	292	0%
Total Paper	**188,869**	**28%**
Sludge	**60,217**	**11%**
Other		
Glass	7,075	1%
Special and Hazardous Wastes	0	0%
Electronics and Batteries	9,566	2%
Appliances	465	0%
Miscellaneous	6,073	1%
Total Other	**23,179**	**4%**
TOTAL RECYCLABLES	**582,584**	**100%**

[1]Data reporting is voluntary and is not audited by OCRRA. Many businesses consider the tonnage and disposal of their special process wastes (the category “Special and Hazardous Wastes”), whether or not they are “hazardous”, to be proprietary information. Therefore, the data concerning the recapture and recycling of waste, particularly in this category, may be underreported.

[2]Data may not equal 100% due to rounding.

5.4 PLANNING UNIT'S RECYCLING RATES

OCRRA boasts one of the most successful recycling programs in the country, recycling over 60% of total waste each year. Recyclables in Onondaga County consist of commercial, residential, institutional, and industrial generators.

"Commercial" recycling is the bulk of total recycling tonnages in Onondaga County and is reported to OCRRA voluntarily. It refers to the recyclables collected through commercial accounts (including industrial), as opposed to those collected by curbside pick-up. However, some residential material is included, such as that generated from large apartment complexes. Commercial recyclables include mandatory recyclables (those mandated by local law), such as paper and cardboard, as well as non-mandatory items, such as scrap metal and composted food waste. Residential recycling (or "curbside" recycling) is measured directly at the local MRFs. This material consists entirely of mandatory recyclables.

Total recycling (commercial plus residential) tonnage fluctuates from year to year. However, the curbside portion of this total has remained relatively consistent from 1995 to 2013. See following table for annual recycling totals, as well as the overall annual recycling rates. The "processable recycling rate" refers to diverted recyclables that could have otherwise been disposed of at the WTE Facility; it is in reference to a goal to maintain at least a 40% processable recycling rate, as mentioned in the WTE Facility's solid waste permit.

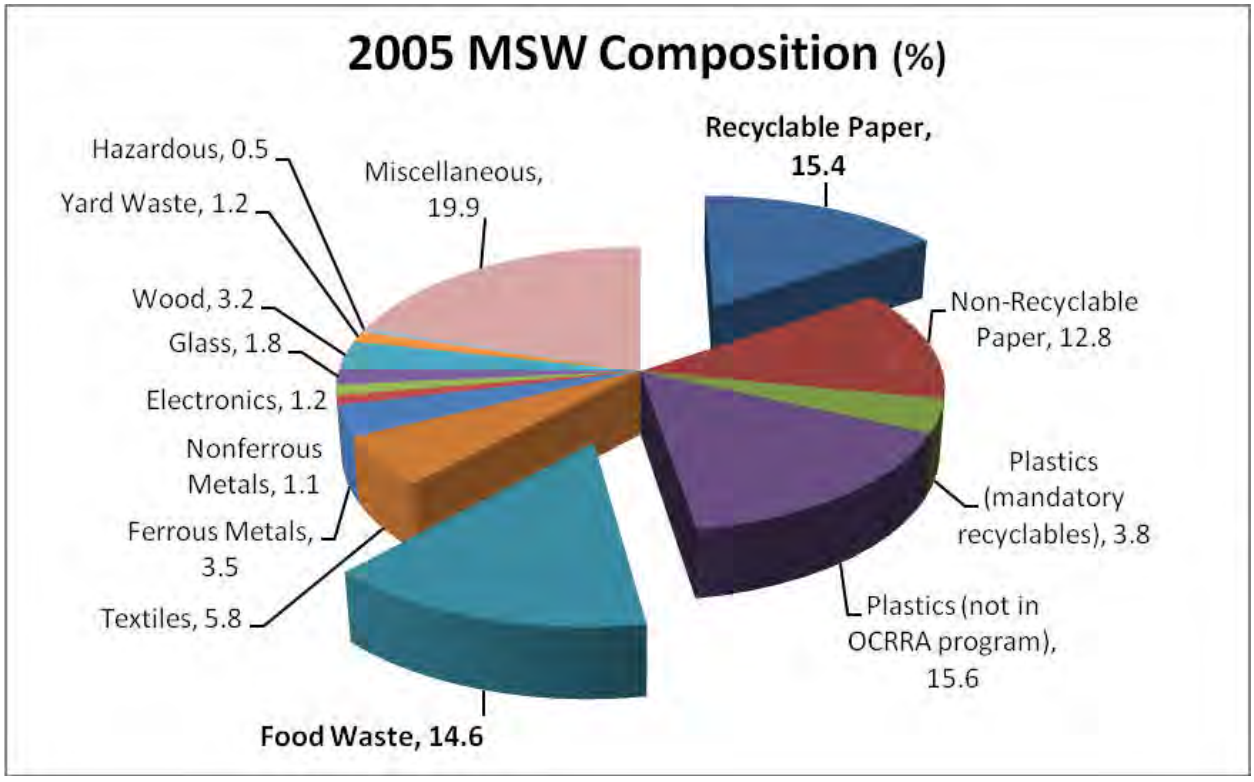
Year	Total Generation Tonnage	Total Recycling Tonnage (Commercial plus curbside)	Curbside Recycling Tonnage	Total Recycling Rate (%)	Processable Recycling Rate (%)
2000	1,023,347	615,063	42,758	65.4%	41.3%
2001	1,104,454	696,283	44,045	68.0%	42.8%
2002	1,073,030	681,890	42,328	69.1%	42.9%
2003	1,127,602	716,551	43,688	68.0%	42.3%
2004	1,102,828	685,633	43,380	66.5%	42.9%
2005	1,044,775	638,354	44,688	66.0%	43.0%
2006	1,048,837	651,542	42,235	66.0%	44.0%
2007	1,021,252	618,825	41,979	65.1%	43.2%
2008	1,034,253	642,585	41,446	65.8%	45.2%
2009	906,552	541,547	42,014	67.6%	52.1%
2010	894,651	536,876	38,900	60.0%	46.5%
2011	916,859	547,922	37,760	59.8%	45.0%
2012	900,920	551,749	38,227	61.2%	46.7%
2013	925,114	575,071	38,436	62.1%	47.4%

5.5 WASTE QUANTIFICATION AND CHARACTERIZATION STUDIES

OCRRA relies on waste analysis data to make informed decisions concerning the direction of resources and public education focus. In September 2005, OCRRA conducted its most recent Waste Quantification & Characterization Study to measure the composition of: 1) source separated residential recyclables collected from the curbside by haulers operating within the OCRRA service area; and 2) mixed MSW materials originating from residential, commercial, governmental, institutional, and industrial sources within OCRRA's CSWMS. Samples from these streams were sorted, as delivered, into more than 50 categories.

Similar studies conducted in 1987, 1993, and 1998 have been used to make decisions concerning the expansion of the list of mandatory recyclables and public communications. The 2005 study allowed more current examination of recycling trends.

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 chart below). These constitute the largest tonnage of potentially recyclable material 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. Below is a chart summarizing the 2005 MSW composition (% by weight).



A full tabular summary of the MSW composition for the 1987, 1993, 1998, and 2005 studies is provided in Appendix I.

DEC's waste composition and recovery projection tool for MSW is an additional resource for understanding waste composition within the planning unit. For more information, see Appendix J. The table below provides a comparison of waste composition (based on total generation) for DEC and EPA's 2008 data. This is different from the data in OCRRA's waste composition studies because OCRRA's studies separate the waste stream into recycled and disposed, whereas the data below looks at total MSW generated (recycled and disposed).

Material	2008 Data	
	EPA Percentages	NYS Percentages
Newspaper	**4.30%**	**4.06%**
Corrugated Cardboard	**12.30%**	**10.00%**
~ Other Recyclable Paper ~		
Paperboard	2.30%	2.29%
Office Paper	2.40%	2.86%
Junk Mail	2.30%	2.11%
Other Commercial Printing	2.50%	2.24%
Magazines	1.00%	1.00%
Books	0.50%	0.46%
Bags	0.40%	0.39%
Phone Books	0.30%	0.27%
Poly-Coated	0.20%	0.23%
Other Recyclable Paper (Total)	**11.90%**	**11.86%**
Other Compostable Paper	**4.20%**	**6.68%**
Total Paper	***32.70%***	***32.61%***
~ Ferrous/Aluminum Containers ~		
Ferrous Containers	1.10%	1.11%
Aluminum Containers	0.70%	0.48%
Ferrous/Aluminum Containers (Total)	**1.80%**	**1.59%**
Other Ferrous Metals	**5.10%**	**4.34%**
~ Other Non-Ferrous Metals ~		
Other aluminum	0.20%	0.25%
Automotive batteries	0.50%	0.39%
Other non-aluminum	0.60%	0.33%
Other Non-Ferrous Metals Total	**1.30%**	**0.97%**
Total Metals	***8.20%***	***6.89%***
PET Containers	**1.10%**	**1.01%**
HDPE Containers	**0.90%**	**0.85%**
Other Plastic (3-7) Containers	**0.20%**	**0.19%**
Film Plastic	**2.20%**	**5.75%**
~ Other Plastic ~		
Durables	4.10%	3.18%
Non-Durables	2.20%	1.77%
Packaging	1.40%	1.29%
Other Plastic (Total)	**7.70%**	**6.25%**
Total Plastics	***12.10%***	***14.05%***

Material	2008 Data	
	EPA Percentages	NYS Percentages
Glass Containers	**4.50%**	**3.98%**
Other Glass	**0.80%**	**0.39%**
Total Glass	***5.30%***	***4.38%***
Food Scraps	**12.50%**	**17.65%**
Yard Trimmings	**12.80%**	**5.02%**
Total Organics	***25.30%***	***22.68%***
Clothing Footwear, Towels, Sheets	3.70%	3.78%
Carpet	1.20%	1.40%
Total Textiles	**4.90%**	**5.18%**
Total Wood	**5.60%**	**3.49%**
DYI Construction & Renovation Materials	0.30%	4.47%
Other Durables	0.50%	1.68%
Diapers	1.50%	1.69%
Electronics	1.20%	1.41%
Tires	1.90%	1.00%
HHW	0.20%	0.30%
Fines	0.30%	0.19%
Total Miscellaneous	**5.90%**	**10.73%**
Total	**100.00%**	**100.00%**

5.6 DATA FROM DEC ANNUAL REPORTS

As previously discussed, data collection and management is an ongoing challenge for facilities beyond OCRRA's control; however annual reports submitted to DEC provide additional insights into the management of waste generated in Onondaga County. The following table is an attempt to combine data from the most recent DEC annual reports (2010) with the data collected and managed by OCRRA. Unlike the historical recycling rate calculations done by OCRRA that combine all waste categories, this table is broken down into MSW, C&D, biosolids, and industrial waste. This is a work-in-progress and should only be used as a rough estimate. It likely underestimates the recycling tonnage due to challenges associated with obtaining recycling data. As discussed in Section 8.7, data collection and management is an ongoing priority.

	Estimated Tons	Notes:
MSW		
Glass used as ADC	2,000	Based on annual reports submitted to DEC.
Energy Recovery	280,000	Based on OCRRA's scale data; supported by annual reports submitted to DEC.
Recycled	235,000	Based on OCRRA's processible recycling rate calculation.
Yard Waste Composted	36,000	Based on data collected by OCRRA.
SUBTOTAL	553,000	
WTE Ash Residue Used as ADC	80,000	Based on OCRRA's scale data.
C&D		
Landfilled	60,000	Based on OCRRA's scale data and annual reports submitted to DEC.
C&D used as ADC	7,000	Based on annual reports submitted to DEC.
Contaminated Soil used as ADC	30,000	Based on annual reports submitted to DEC.
Brush and Wood Waste Composted	30,000	Based on OCRRA's data and data collected by OCRRA.
Energy Recovery	35,000	Based on OCRRA's scale data.
Recycled	15,000	Based on annual reports submitted to DEC.
SUBTOTAL	177,000	
Biosolids		
Landfilled	42,000	Based on annual reports submitted to DEC.
Industrial		
Landfilled	55,000	Based on annual reports submitted to DEC.
Shredder Fluff used as ADC	17,000	Based on annual reports submitted to DEC.
Recycled	345,000	Based on the tonnage difference between OCRRA's processible and total recycling rates.
SUBTOTAL	417,000	
TOTAL	1,269,000	

6.0 FUTURE PLANNING UNIT PROJECTIONS AND SOLID WASTE CHANGES

The recent economic recession has had a significant impact on the generation of residential and commercial MSW. Across the nation, solid waste managers have noted a steep decline, in the range of 10-15%, similar to what OCRRA observed. With less disposable income, people buy and, ultimately, dispose of less. With some financial experts predicting that the economy may not rebound for several years, it's difficult to forecast what will happen with MSW generation in the next two decades. However, for planning purposes, this analysis sets forth reasonable future projections for MSW generation.

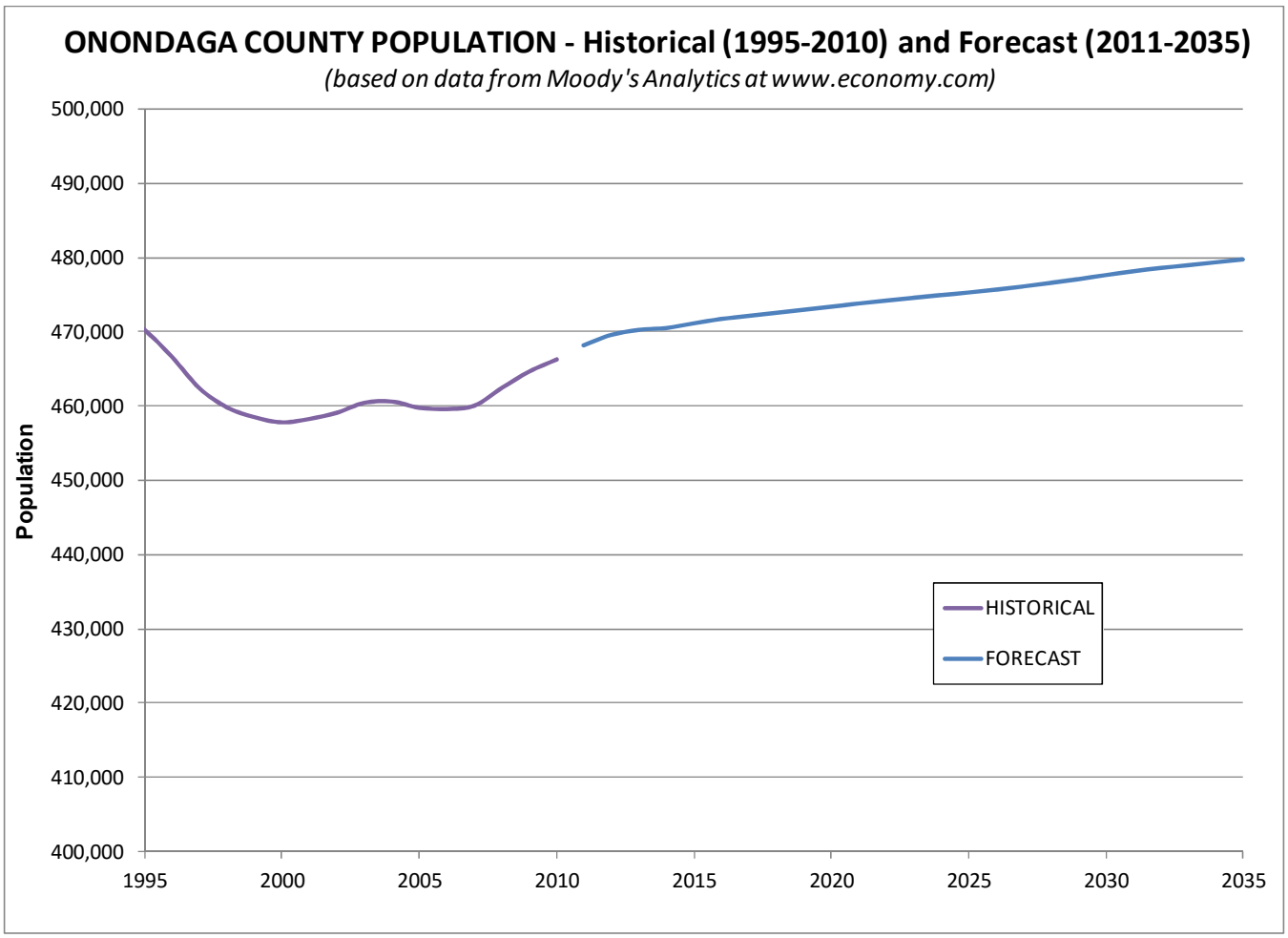
6.1 POPULATION TRENDS

Sources for population trends, including the Cornell Program on Applied Demographics and Moody's Analytics, indicate stagnant or very slow population growth for Onondaga County for the next two decades. The Cornell Program on Applied Demographics even projects population decline from 2030 to 2040, see table below.

Year	*Total Population*	*Change in Population*	*% Change*
2010	467,026	8,690	1.90%
2020	472,385	5,359	1.10%
2030	474,630	2,245	0.50%
2040	469,880	-4,750	-1.00%

Source: 2010 Census and projections by Cornell Program on Applied Demographics

The forecast population data from Moody's Analytical (www.economy.com), as shown in the following graph, indicates very slow population growth averaging about 0.1% per year.



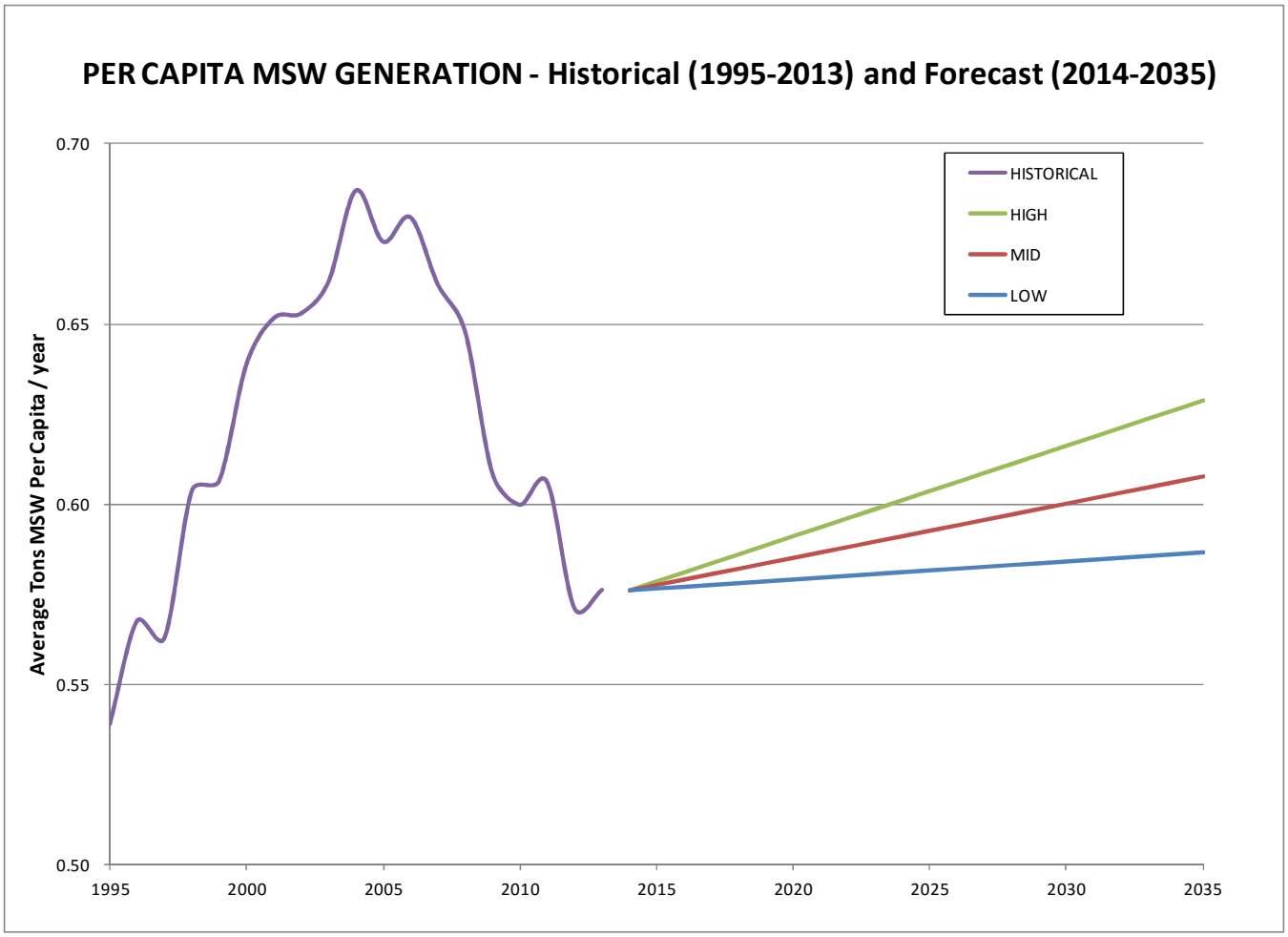
6.2 PER CAPITA WASTE GENERATION TRENDS

Historical per capita MSW generation rates were calculated using the Moody's Analytics population data and OCRRA's total system data for MSW requiring disposal. As shown in the following graph, from 1995 until about 2005, per capita MSW generation increased significantly. However, over the past decade, per capita MSW generation rates have been declining – likely due to the state of the economy.

Future per capita MSW generation rates are estimated as low, mid, and high. The low generation rates correspond to a very slowly recovering economy. The low generation rate indicates permanent changes in habits of consumption and disposal – people buying (and disposing of) less "stuff" for the decade to come. Some experts are, in fact, predicting that the old consumer economy is gone. According to an article in the New York Times ("We're Spent," 7/17/2011), "… consumer spending will not soon return to the growth rates of the 1980s and '90s."

The mid generation rates correspond to a moderate economic recovery over the next decade, with consumer confidence and spending increasing slowly – but not to historical highs. The average mid generation rate for the next decade returns to the average generation rate for the previous decade.

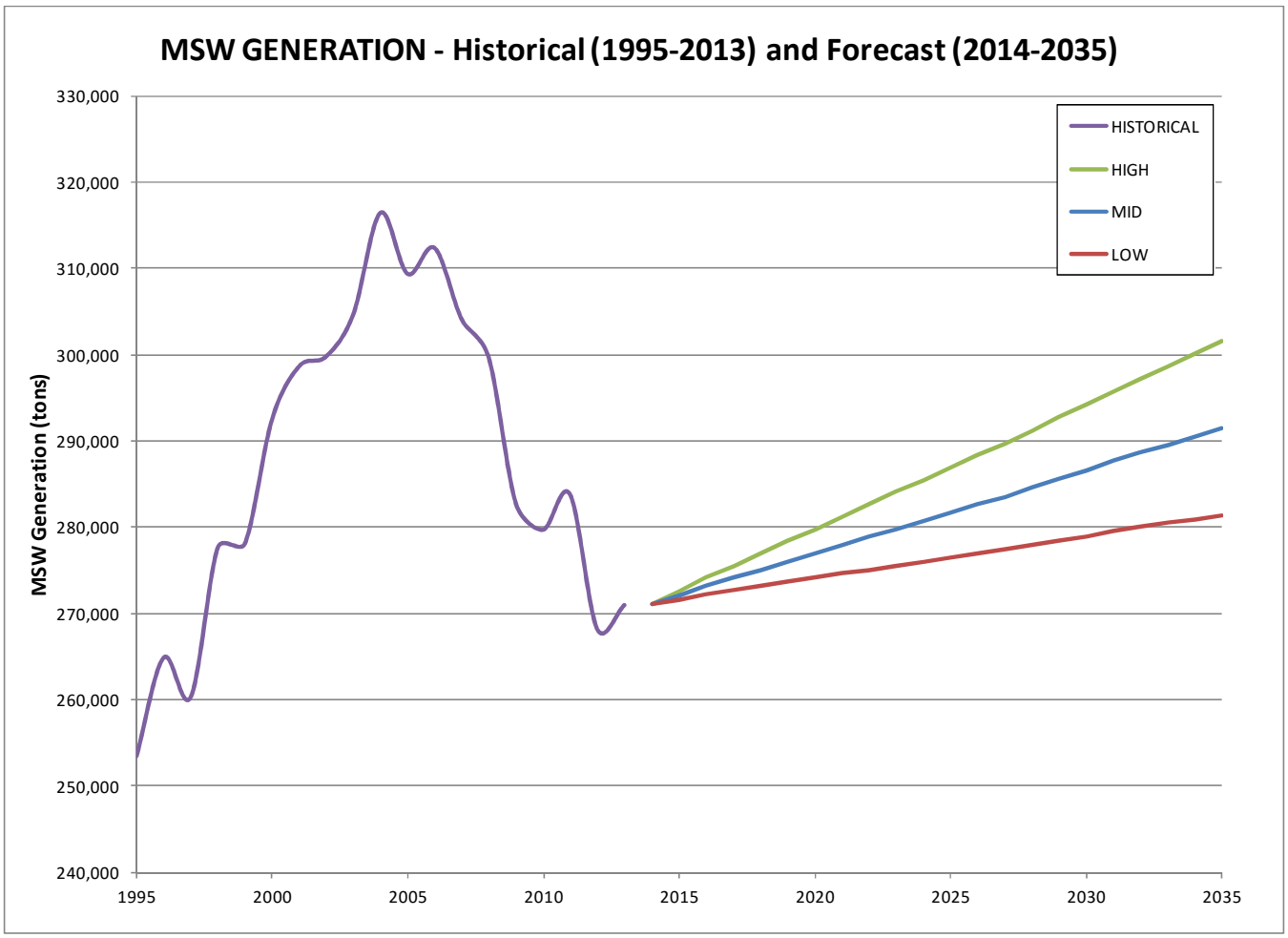
Lastly, the high generation rates correspond to very strong economic recovery – with consumer spending (and disposal) rates increasing to relatively high levels. This is probably the most unlikely scenario, but it remains a possibility.



6.3 TOTAL WASTE GENERATION FORECAST

OCRRA's MSW generation forecast for the next decade combines the Onondaga County population growth forecast with the per capita MSW generation predictions, ultimately resulting in a reasonable range of estimated tonnage (see following graph). While this range takes into consideration OCRRA's current recycling efforts, it does not take into account potential future waste reduction and recycling opportunities, which could further reduce the amount of MSW requiring disposal.

In addition to developing this MSW generation forecast, OCRRA evaluated the historical correlation of MSW generation with other economic indicators, such as retail sales, real gross domestic product (GDP), total employment, rate of unemployment, and per capita or household income. Unfortunately, none exhibited a strong correlation with MSW generation.



The table below provides the annual tonnage estimates for total MSW requiring disposal in the OCRRA system, based on the model developed using population growth and per capita MSW generation rates. Given the uncertainty with respect to economic recovery, this reflects OCRRA's best prediction of MSW generation for the next two decades.

TONNAGE ESTIMATES FOR MSW REQUIRING DISPOSAL

	LOW	MID	HIGH
2015	271,600	272,100	272,600
2016	272,200	273,200	274,100
2017	272,700	274,100	275,500
2018	273,200	275,100	276,900
2019	273,600	276,000	278,400
2020	274,100	277,000	279,800
2021	274,600	277,900	281,200
2022	275,100	278,900	282,700
2023	275,500	279,800	284,100
2024	276,000	280,700	285,500

6.4 RECYCLING TRENDS AND OUTLOOK

Onondaga County's recycling rate is significantly impacted by local, national, and global factors that are beyond the control of OCRRA or Onondaga County. This makes it extremely difficult to forecast recycling tonnages for the next decade, however, the CSWMP update sets forth reasonable estimates, given available information.

6.4.1 GLOBAL FACTORS INFLUENCING RECYCLING

Global commodity market developments continue to impact domestic recycling conditions. Most recently, China's "Operation Green Fence" made strong waves throughout the recycling industry. In order to curtail the amount of contamination within bales of imported recyclables and, ultimately, the amount of imported waste ending up in Chinese landfills, China initiated strict quality control measures on imported recyclables. Shipments that did not meet their high standards were sent back.

This was a wake-up call that required immediate action by MRF owners and operators. Prior to China's Green Fence, MRF operators would manage unmarketable recyclables by sprinkling them into bales of marketable recyclables. At the end of the day, the unmarketable recyclables weren't being recycled; it was simply a way for MRFs to move the material somewhere else. There was such demand within the Chinese market that buyers accepted the contamination – up until Operation Green Fence.

While China's Green Fence sparked a renewed focus on the importance of domestic recycling infrastructure, the reality remains that recyclables are a global commodity, sensitive to global market influences. As a result, MRFs will need to maintain high quality standards for recyclables – and that may influence the types of materials that can be accepted through planning units.

6.4.2 NATIONAL AND STATE FACTORS INFLUENCING RECYCLING

Nationally and on a state level, there are two primary trends – manufacturers reducing material usage and manufacturers playing a role in the recycling of their products – also known as EPR.

By reducing material usage, manufacturers can achieve cost savings while touting environmental benefits. "Thin-walling" or "lightweighting" reduces the weight of recyclable items by decreasing the material used. This is apparent in many products, including polyethylene terephthalate (PET) bottles, aluminum cans, and corrugated cardboard items. The trend toward lightweighting now includes the replacement of heavier rigid containers with lighter weight flexible packaging. Examples include: readily recyclable paperboard cereal boxes and high-density polyethylene (HDPE) milk jugs being replaced with flexible bags, which are not easily recyclable and not accepted in most residential recycling programs. While these trends save manufacturers on material and transportation costs and potentially decrease the overall carbon footprint of a product, it can replace a recyclable material with a non-recyclable material that ultimately ends up in the trash.

Another trend involves newspapers, which make up the largest portion in OCRRA's residential recycling stream, at 42% of all curbside recyclables. The current trends are moving towards smaller and thinner newspapers. In general, papers like the New York Times and the Wall Street Journal are seeing lower circulation rates, partly due to increased internet use. A recent poll found that the internet is by far the most used source of information, over television, newspapers and radio. When asked to peer into the future, an overwhelming 82% of respondents said the internet would be the main source of information in five years time, compared to 13% for television and 0.5% for newspapers

(http://www.reuters.com/article/2009/06/17/us-media-internet-life-idUSTRE55G4XA20090617). As a result, newspaper circulation is declining at a rapid rate. Due to these changes, OCRRA expects to see the tonnage of newspapers in the recycling stream decrease in the future, further diminishing total recyclable tonnages.

On a national and state level, EPR is slowly taking root, whereby manufacturers must play an active role in the recycling of their products. One example is electronic waste. Prior to NYS's EPR law for electronics, OCRRA provided a successful "e-waste" collection program that diverted about four million pounds of e-waste for recycling. After the law took effect in April 2011, manufacturers were required to establish systems to recycle electronics. OCRRA currently steers residents toward local electronics recycling outlets throughout Onondaga County. This new legislation is a welcome change, transferring the financial burden to recycle e-waste from planning units to manufacturers – which in turn encourages manufacturers to design products that are easier to recycle.

NYS has also established EPR laws for rechargeable batteries and mercury thermostats. Other states have passed EPR legislation aimed at paint, mattresses, carpeting, pesticide containers, fluorescent lighting, and other materials.

In a similar vein, the DEC's Plastic Bag Reduction, Reuse and Recycling Act requires all retail stores within NYS that are 10,000 square feet or more in size, and that provide plastics bags to customers, to establish and maintain a plastic bag recycling program. This law was established to ensure convenient recycling locations for consumers to drop off their used plastic bags. By requiring stores to report data on weight and end market, the DEC has the ability to ensure that the bags collected are actually being recycled. OCRRA frequently promotes this plastic bag take-back program to the public. It is beneficial to OCRRA's CSWMS, as it aims to keep plastic bags out of the trash and the blue bins, where they ultimately create problems with MRF sorting machinery.

In 2009, NYS's returnable container law (the Bigger Better Bottle Bill) was expanded to include non-carbonated products, such as water. This was a welcome change, as OCRRA's 2005 Waste Quantification & Classification Study indicated that beverage containers exempted by the previous bottle bill law were two to three times more likely to be trashed as those containers which require deposits.

6.4.3 LOCAL FACTORS INFLUENCING RECYCLING

Recycling tonnages in Onondaga County are also affected by local economic development factors. Over the past decade, several large companies have closed or downsized in the Onondaga County area. This contributes to a commercial recycling tonnage drop, as many of those businesses generated large quantities of recyclable materials, especially manufacturing operations.

Some local newspapers have also reduced operations or discontinued production. In early 2013, the Syracuse Post Standard reduced the printing of the daily newspaper to 3 days a week. Also in spring 2013, the Scotsman PennySaver ceased production. With these two changes, there has been a decrease in newsprint available to be recycled, estimated by OCRRA at 2,000 – 3,000 tons annually.

6.4.4 IDENTIFYING OPPORTUNITIES FOR EXPANDING RECYCLING

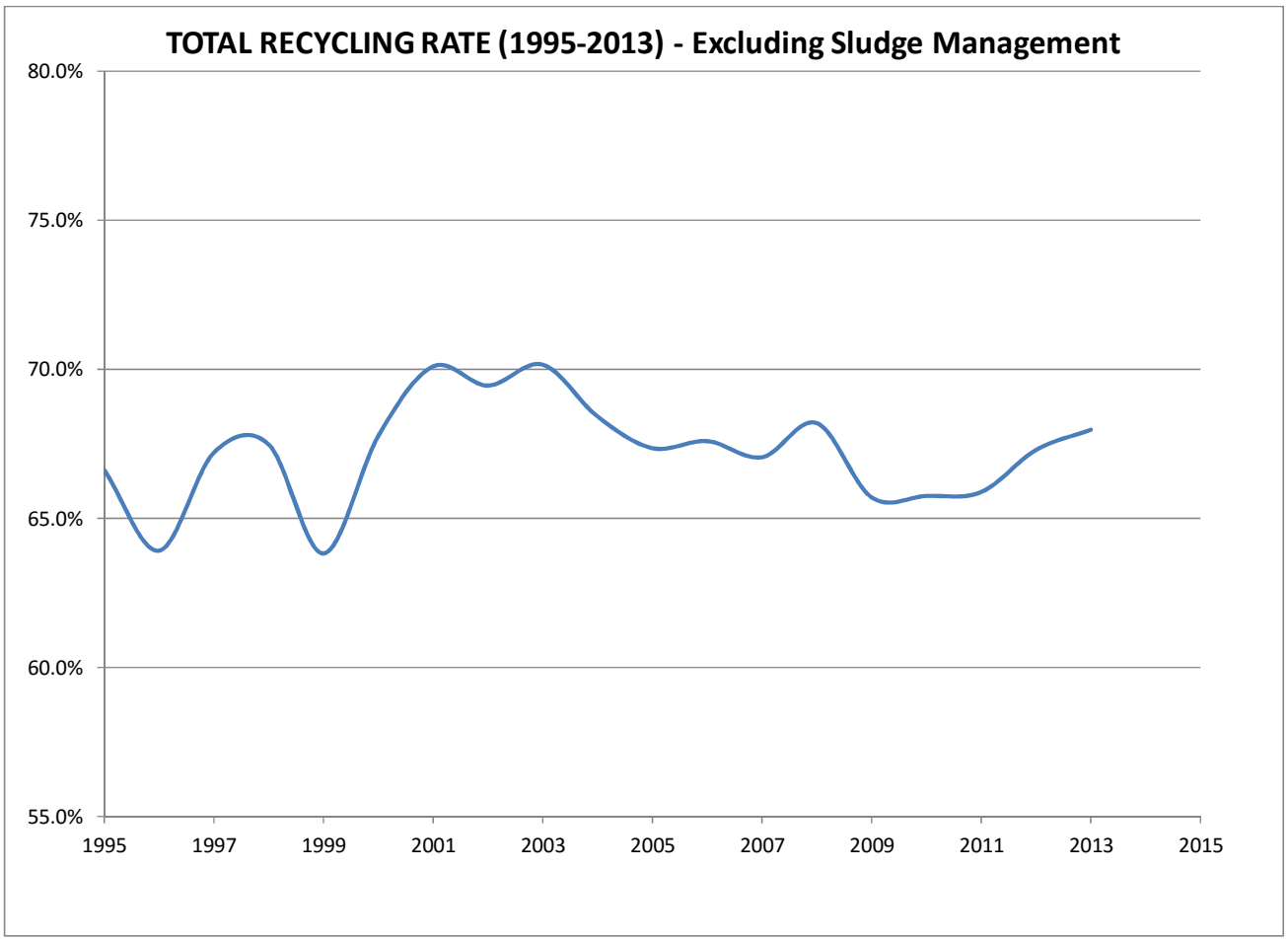
OCRRA's recycling program continues to evolve in response to global, national, and local influences. In order to stay ahead of the game, OCRRA continually evaluates materials to determine the most environmentally sound and economically feasible method of keeping items out of the trash. In many cases recycling is the best method, such as for cardboard and bottles. However, in some cases, reuse is found to be the ideal choice, such as with textiles. Finally, source reduction may be a focus, as some items may be difficult and expensive to recycle with limited markets, as is the case with polystyrene.

OCRRA considers all of the options available – direct recycling through OCRRA programs, EPR options, and recycling through other established markets (such as for scrap metal and textiles), as well as reuse and waste prevention (source reduction). Many of the latter recycling options are becoming more prevalent, thereby reducing the need for OCRRA's direct management. And while recycling is generally the main focus of planning units, source reduction and reuse are also important. When recycling is not a feasible option, OCRRA encourages residents, businesses and institutions to examine ways in which they can use less of this material by eliminating it altogether, reusing it, or finding a recyclable alternative.

With respect to blue bin recyclables, OCRRA is very careful about adding new mandatory recyclables. If there is not a sustainable, viable, long-term market, then they will not become a new blue bin item. The decision concerning what materials to recycle involves a number of factors. They include the ease with which people can sort and prepare the items for recycling; the cost and feasibility to collect the materials at the curb and sort at the MRFs; and, most importantly, the long-term stability of the market for the sale of the material.

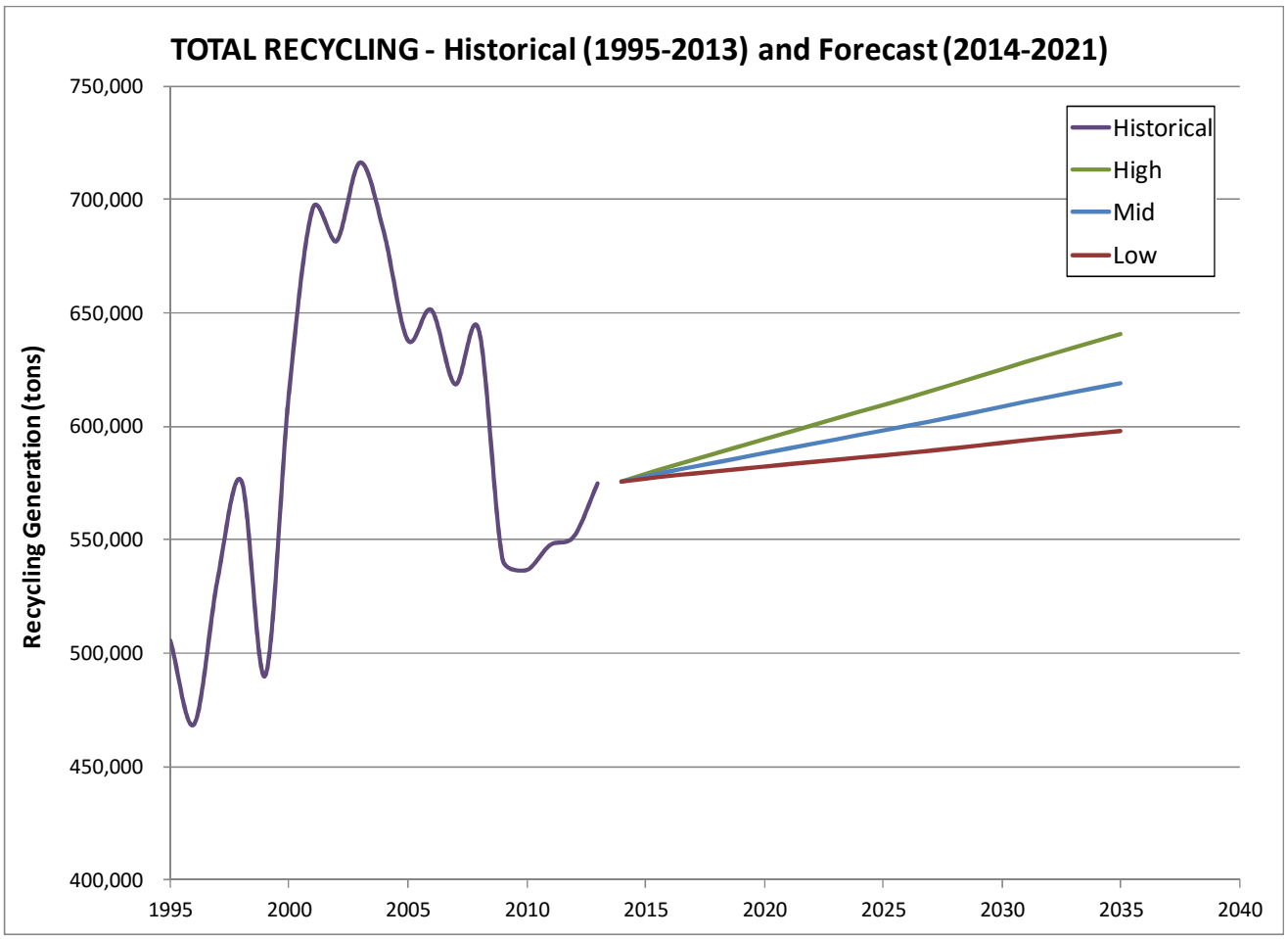
6.4.5 RECYCLING PROJECTIONS

Despite external influences, the total rate of recycling (including commercial and residential) has remained relatively stable – generally between 65% and 70%. For this analysis, the recycling rate disregards sludge management and was calculated as total recycling tonnage (excluding sludge recycling, if any), divided by total waste (total recycling tonnage plus MSW). These rates are different than those reported in OCRRA's Annual Recycling Reports; in those reports sludge management is included and C&D is included in the trash totals. The historical rates for Total Recycling are displayed in the following chart.



As shown, total recycling rates have remained relatively steady over the last two decades. OCRRA predicts this trend will continue, factoring in recent trends in lightweighting (which significantly reduces recycling tonnage), EPR (which could slightly increase recycling tonnage), and new program initiatives (which will hopefully close the gap to keep the rate static). The assumption that rates will not fluctuate substantially in the next decade was also found to be the opinion of many other recycling coordinators; according to a nationwide survey of recycling coordinators, more than half of respondents predict the national recycling rate of commercial and residential materials will stay the same or decline by 2020 (Resource Recycling, Dec 2010).

For this analysis, OCRRA predicts that the total recycling rate will stabilize at 68%. Forecasted total recycling tonnages are based on OCRRA's projected high, mid, and low MSW generation, as displayed in the following chart.



The tables below provide annual estimates for total recycling tonnages in OCRRA's CSWMS, based on predicted MSW generation rates. Given the uncertainty with respect to economic recovery, this reflects OCRRA's best prediction of recycling generation for the next two decades.

ESTIMATED TOTAL RECYCLING TONNAGE

	LOW	MID	HIGH
2015	577,300	578,300	579,300
2016	578,500	580,500	582,500
2017	579,500	582,500	585,500
2018	580,500	584,500	588,500
2019	581,500	586,500	591,600
2020	582,500	588,500	594,600
2021	583,500	590,600	597,600
2022	584,500	592,600	600,600
2023	585,500	594,500	603,600
2024	586,400	596,500	606,600

6.4.6 ESTIMATION OF POTENTIAL MSW AND C&D RECOVERY

As previously mentioned, DEC's waste composition and recovery projection tool provides additional insights into waste composition and potential recoverable materials. The follow table was generated using DEC's waste composition and recovery projection tool for MSW. The complete table is provided in Appendix J.

Material	Tons Generated	% of Total		2013 (estimate)	
				Tons Diverted	% Diverted
Newspaper	21,436	3.88%		16,000	74.64%
Corrugated Cardboard	55,021	9.95%		48,000	87.24%
Other Recyclable Paper					
Paperboard	12,625	2.28%		11,000	87.13%
Office Paper	14,692	2.66%		11,500	78.28%
Junk Mail	11,592	2.10%		7,000	60.39%
Other Commercial Printing	11,855	2.14%		7,000	59.05%
Magazines	5,344	0.97%		4,500	84.21%
Books	2,435	0.44%		500	20.53%
Bags	2,099	0.38%		1,000	47.64%
Phone Books	1,575	0.28%		1,000	63.49%
Poly-Coated	1,222	0.22%		200	16.37%
Other Recyclable Paper (Total)	63,439	11.47%		43,700	68.89%
Other Compostable Paper	36,330	6.57%		0	0.00%
Total Paper	176,225	*31.87%*		107,700	61.11%
Ferrous/Aluminum Containers					
Ferrous Containers	5,874	1.06%		5,500	93.63%
Aluminum Containers	2,614	0.47%		2,500	95.65%
Ferrous/Aluminum Containers (Total)	8,488	1.53%		8,000	94.25%
Other Ferrous Metals / Appliances	26,331	4.76%		24,000	91.15%
Other Non-Ferrous Metals					
Other aluminum	1,358	0.25%		700	51.53%
Automotive batteries	2,552	0.46%		2,500	97.97%
Other non-aluminum	1,879	0.34%		1,000	53.23%
Other Non-Ferrous Metals (Total)	5,789	1.05%		4,200	72.56%
Total Metals	40,608	*7.34%*		36,200	89.15%
PET Containers	5,234	0.95%		3,000	57.31%
HDPE Containers	4,607	0.83%		2,500	54.26%
Other Plastic (3-7) Containers	1,081	0.20%		200	18.50%
Film Plastic	31,539	5.70%		6,000	19.02%
Other Plastic					
Durables	17,395	3.15%		3,000	17.25%
Non-Durables	9,618	1.74%		0	0.00%
Packaging	7,076	1.28%		0	0.00%
Other Plastic (Total)	34,089	6.16%		3,000	8.80%
Total Plastics	76,551	*13.84%*		14,700	19.20%

Material	Tons Generated	% of Total		2013 (estimate)	
				Tons Diverted	% Diverted
Glass Containers	21,747	3.93%		14,000	64.38%
Other Glass	2,071	0.37%		0	0.00%
Total Glass	23,819	*4.31%*		14,000	58.78%
Food Scraps	89,319	16.15%		3,000	3.36%
Yard Trimmings	39,265	7.10%		36,000	91.69%
Total Organics	128,584	*23.25%*		39,000	30.33%
Clothing Footwear, Towels, Sheets	21,100	3.82%		5,000	23.70%
Carpet	8,096	1.46%		0	0.00%
Total Textiles	29,196	*5.28%*		5,000	17.13%
Total Wood	19,388	*3.51%*		5,000	25.79%
DIY Construction & Renovation Materials	22,391	4.05%		2,000	8.93%
Other Durables	9,022	1.63%		0	0.00%
Diapers	9,346	1.69%		0	0.00%
Electronics	8,313	1.50%		4,500	54.13%
Tires	6,850	1.24%		3,000	43.80%
HHW	1,713	0.31%		100	5.84%
Fines	995	0.18%		0	0.00%
Total Miscellaneous	58,630	*10.60%*		9,600	16.37%
Total	553,000	100.00%		231,200	41.81%

Similarly, DEC developed a waste composition tool for C&D that shows the components of the C&D waste stream. More data is needed to develop estimates of diverted tonnage; this will be a focus for future data collection efforts.

Material	Tons Generated	% of Total
Concrete/Asphalt/Rock/Brick	62,644	35.39%
Wood	26,191	14.80%
Roofing	8,723	4.93%
Drywall	4,493	2.54%
Soil/Gravel	48,171	27.22%
Metal	10,462	5.91%
Plastic	702	0.40%
Corrugated/Paper	3,539	2.00%
Other	12,075	6.82%
Total	177,000	100.00%

7.0 ALTERNATIVES TO EXISTING PROGRAM

As a preface to this section it is important to note that OCRRA has existing contractual obligations with respect to the WTE Facility through 2022. Those obligations make it likely that WTE will be the disposal option for MSW generated within the planning unit through at least that time period. OCRRA is also currently in negotiations with Covanta to continue the existing public-private partnership for another long term period.

While recognizing the existing and potential future contracts with Covanta, this CSWMP update provides an objective evaluation of existing and emerging alternative disposal technologies. This section also evaluates alternative system funding mechanisms, regional partnership opportunities, alternative recycling models, alternative transfer station operations, and options for ash residue and bypass waste management.

7.1 EXISTING SYSTEM CHALLENGES

The primary challenge facing OCRRA today is its funding dichotomy – OCRRA's strives for increased waste reduction, reuse, and recycling yet waste disposal is the primary funding source (*i.e.*, per ton trash "tipping" fees and electricity revenue). Said another way, OCRRA relies on waste disposal to fund all of its programs, yet ultimately OCRRA is trying to reduce waste disposal.

The downturn in the economy and associated decrease in trash tonnage and electricity rates have significantly impacted OCRRA's financial position. In order to maintain a reasonable tipping fee, OCRRA has heavily drawn down reserve funds. Obviously this is a short term fix. In the long term, OCRRA must develop additional revenue streams and/or identify opportunities for cost savings in order to continue providing Onondaga County residents with the many green services they have grown accustomed to enjoying.

7.2 ALTERNATIVE SYSTEM FUNDING MECHANISMS

OCRRA is not a division or branch of county government and no county or local taxes fund OCRRA. Through a combination of fiscal discipline, operational efficiency, and program adjustments, OCRRA has maintained an appropriate trash tipping fee. A reasonable tipping fee, in combination with flow control, has historically allowed OCRRA to secure hauler contracts with all of the private and municipal haulers in Onondaga County and thereby draw the waste needed to maintain the CSWMS. However, as seen in recent years, OCRRA is vulnerable to tonnage reductions.

Diversification of revenue sources would reduce OCRRA's paradoxical reliance on waste generation. Yet, quite simply, there are no straightforward alternatives. In 1999, OCRRA's attempt to implement a "green fee" was stuck down by a NYS Supreme Court ruling. OCRRA does not possess taxing powers and, per the ruling, OCRRA can assess a solid waste fee only against those residents and businesses that use the CSWMS.

OCRRA has investigated alternative funding mechanisms that are successfully implemented in other communities. The most reliable are tax-based mechanisms, such as a solid waste service fee assessed on a property tax bill. Any such tax-based mechanism would need to be approved by the appropriate entities.

7.3 REGIONAL PARTNERSHIP OPPORTUNITIES

Regional partnerships present an opportunity to improve the cost-effectiveness and financial sustainability of OCRRA's programs and services to the community. Towards that end, OCRRA is committed to working with other planning units to identify new opportunities. OCRRA is exploring partnership opportunities for agricultural plastics recycling, composting, and electronic waste management.

7.4 ALTERNATIVE RECYCLING MODELS

Pay as You Throw (PAYT) is a popular tool for reducing waste generation. PAYT systems charge waste generators based on the amount of waste generated. This provides a direct economic incentive for waste generators to reduce waste. PAYT systems must be implemented by member municipalities or private haulers, as OCRRA does not provide collection services.

Within the Onondaga County planning unit there are several variations of PAYT implemented by member municipalities and private haulers. The Town of Dewitt and some private haulers offer variable pricing options for the size of the residential waste container – with smaller containers costing less than the larger containers. The Villages of Elbridge, Jordan, and Liverpool have a trash sticker program whereby residents must purchase a trash sticker for each bag of garbage put out to the curb for collection. These programs are not a one-size-fits-all approach and need to be tailored by individual municipalities or private haulers. To encourage more PAYT programs, OCRRA will develop case studies of the existing programs, such that haulers and municipalities can learn from the successes and failures of other programs.

In addition to providing recycling containers and extensive public education, OCRRA has historically provided a model that allows contracted haulers and municipalities to deliver recyclables to a local MRF at no charge. In 1990, OCRRA signed its first contract with a private company to provide processing and marketing services for residential recyclables collected in Onondaga County. The recycling service was tonnage-based and paid by OCRRA through a reimbursement process to the haulers. Later, in 1993, OCRRA changed the system to a direct payment to the MRF and, in 1995, set up a profit share based on recycling market values.

In 1997, OCRRA began reviewing other possible options for MRF services. OCRRA contacted adjoining counties to determine if they had the handling capacity to process the 43,000 tons of Onondaga County curbside recyclables. OCRRA sent out an RFP to several regional MRFs, which produced multiple scenarios. OCRRA also conducted an analysis of the costs for OCRRA to own its own MRF. The 1997 review revealed that the lowest cost scenario was to continue with the current private MRF and work on revising the contract.

Over the past two decades, the private MRF alternatives have changed with ownership changes and the number of MRFs operating in the County. At regular intervals, OCRRA has revisited the financial risks and benefits of MRF ownership and MRF contracts. The analysis has consistently concluded that a MRF contract is the best financial option for the same, or perhaps better, materials management services.

OCRRA’s public-private partnership(s) with the local MRF(s) provides the planning unit with the security that residential recyclables will always be recycled, regardless of market conditions. Over the years, OCRRA has improved its MRF contract to reduce OCRRA’s annual risk in connection with payments to

the MRFs for material processing and to potentially generate income for OCRRA under favorable market conditions. Residents are currently able to commingle all recyclables through single stream recycling. In the future, OCRRA will explore progressive rate structures that promote and reward recycling, reuse and reduction of material added to the waste stream.

7.5 ALTERNATIVE TECHNOLOGIES FOR ORGANICS MANAGEMENT

Anaerobic digestion and aerated static pile composting are both viable technologies for organics management. After extensive research and a successful pilot project, OCRRA invested in a large aerated static pile food and yard waste composting facility. The site is designed to process up to about 10,000 tons of food waste annually. Once the Amboy Facility reaches capacity, additional opportunities for organics management will be explored. More information is available in Section 3.4.

7.6 ALTERNATIVES FOR C&D MANAGEMENT

There are several facilities that accept C&D waste within the planning unit – OCRRA's transfer stations (see Section 3.6.2), the Camillus Landfill (see Section 4.2), and ten regulated C&D processing facilities (see Section 4.5). Based on annual reports submitted to DEC, some C&D is also sent for processing or disposal outside the planning unit. As part of the priority for data collection and management (Section 8.7), OCRRA needs to develop a better understanding of quantities being diverted and disposed. For this planning period, OCRRA's efforts for increased C&D diversion/recycling will focus on increased recovery at the Ley Creek Transfer Station and potential partnerships with other C&D processors.

7.7 ALTERNATIVES FOR BIOSOLIDS MANAGEMENT

Currently only one municipality has a permit for composting biosolids – the Village of Marcellus (see Section 4.4). There is also only one municipality with a permit for land application of biosolids – the Village of Tully. The remaining biosolids generated within the planning unit are disposed at landfills. The majority of biosolids are generated by Onondaga County at the Metro Treatment Plant. As discussed in Section 8.9, in 2015 or 2016, Onondaga County WEP anticipates issuing procurement documents for a long-term biosolids management program. Emphasis will be placed on the beneficial reuse, while the County will also weigh environmental and economic considerations. Onondaga County will continue researching best management practices for biosolids and will likely repeat this process once the initial contract expires.

7.8 ALTERNATIVES FOR INDUSTRIAL WASTE MANAGEMENT

Although there is limited disposal information for industrial waste available through annual reports submitted to the DEC, the recycling data collected by OCRRA indicates that there is a substantial amount of industrial waste being recycled. More data is needed to fully assess how industrial waste is managed; however, an initial assessment indicates that recycling is the primary management for industrial waste streams. As part of the data collection and management priority, OCRRA will work to gather additional information regarding the management of industrial waste streams.

7.9 ALTERNATIVE TECHNOLOGIES FOR MSW DISPOSAL

As mentioned in the introduction to this section, it is likely that the planning unit's trash will continue to be processed at the WTE Facility. However, this section looks at some other readily available and emerging technologies.

7.9.1 LANDFILL

The primary alternative to a WTE facility is a double-lined MSW landfill. Over the past decade there has been available landfill capacity at the large private landfills west of Onondaga County including the Seneca Meadows, High Acres, and Ontario County Landfills. And due to the economy's impact on MSW tonnage, landfill disposal rates have been at historical lows. Yet, historically, landfill prices have been volatile – and subject to economic supply and demand. A 2011 feasibility study for a new capital regional solid waste authority, commissioned by Albany County, with Local Government Efficiency grant funds from the NYS Dept. of State (http://www.dos.ny.gov/lg/publications/LGEProjectReports/2009/AlbanY_SWMA_FinalReport.pdf), summarized this well:

> *"If a new regional processing and disposal facility were developed it would largely insulate the area from the potential for significant future increases in the cost of disposal in the private market. Like any other commodity, the cost of waste disposal in the private market is determined by supply and demand. Over the past 25 years there has been significant volatility in the disposal market [the availability and price of disposal service]. For nearly a decade starting in the mid-1980s disposal prices rose sharply. This spurred the development of new disposal capacity in neighboring states and that increase in supply leveled prices for the ensuing decade. In the last several years the economic recession and associated reduction in waste volumes has caused owners who built disposal capacity to reduce their prices to the lowest level in nearly 30 years. At this time very good rates can be obtained at disposal facilities.*
>
> *However, no one can depend on that condition for the long term. Conditions throughout the Northeast and beyond will impact the availability and price of disposal capacity.*
>
> *In looking just at the study area, if the approximately 400,000 tons per year of waste currently taken to the City of Albany and Town of Colonie landfills is taken outside the area to private disposal facilities, that will increase the demand for disposal capacity, consume landfill capacity, reduce the available supply and ultimately increase the cost of disposal.*
>
> *Even allowing for the development of new private disposal capacity, without local public facilities all the communities in the region will be subject to the volatility that goes with the private market. There may be times, like the current condition, when communities can benefit from an economic recession and low disposal prices. However, there will also be times when prices increase and in that case the local communities will have no option but to pay whatever the market demands."*

With respect to long-term planning, it is important to keep in mind this notion of "insulation" from volatile private market pricing through the development or maintenance of public or public/private facilities.

When considering the landfill alternative, one must also factor in transfer station and transportation costs. In the long term, OCRRA's current transfer stations would need significant upgrades, costing tens of millions of dollars, to transfer all of the planning unit's MSW to a distant landfill. Given rising fuel costs, long distance transport will become increasingly expensive.

As discussed in Section 7.11.2, OCRRA's permitted "Site 31" Landfill was designed and permitted to accept ash residue from the WTE Facility and bypass waste from the transfer stations; it was not designed or permitted to accept all of the MSW generated within the Onondaga County planning unit.

Landfilling is currently the most viable alternative to WTE, although it is less preferable with respect to NYS's and EPA's solid waste management hierarchy. OCRRA will continue to consider landfill alternatives if current negotiations with Covanta are unsuccessful.

7.9.2 MIXED MSW COMPOSTING

Delaware County (NY) currently utilizes a rotary drum MSW composting system to reduce the amount of material that goes to their landfill and extend their landfill's life. One of only about a dozen such systems in the nation, it cost $20 million and is designed to process 35,000 tons of MSW and 6,700 tons of biosolids annually. The aerobic degradation process breaks down the organic matter in the MSW and turns it into compost that must be marketed. Of the remaining inorganic materials, metal is recovered and the glass and plastic materials require landfill disposal. While this system seems to be working well for Delaware County's integrated system, the current technology is unsuitable for Onondaga County due to the quantity of MSW generated in Onondaga County and the associated cost to construct the facility. More information on Delaware County's composting system is available at: http://www.biocycle.net/2006/11/22/composting-mixed-msw-and-biosolids-to-extend-landfill-life/.

7.9.3 MECHANICAL / BIOLOGICAL TREATMENT

Mechanical / biological treatment (MBT) is a two step process used primarily in Europe. It includes a thorough preprocessing step (the mechanical component, sometimes referred to as a "dirty MRF" or mixed MSW MRF) to separate recyclables and remove the inorganic components of the waste stream, followed by anaerobic digestion, drying, and/or composting to manage the organics (the biological component). Some MBT facilities create what is called a refuse-derived fuel (RDF) that is then combusted in cement kilns or power plants.

In Europe, landfill bans and landfill capacity limitations have supported the economics of these costly systems. Pre-processing/sorting equipment is extremely expensive and has generally made these systems cost-prohibitive in the US. OCRRA will continue to follow the development of these systems and evaluate the feasibility for Onondaga County.

7.9.4 THERMAL OR CHEMICAL CONVERSION TECHNOLOGIES

Every day there are new articles about emerging thermal or chemical conversion technologies, including pyrolysis, gasification, plasma arc gasification, and other waste-to-fuel technologies. Their biggest potential advantage is they convert waste into a higher-value fuel or chemical product, not just power. Like MBT, most conversion technologies require extensive and costly pre-processing systems to remove undesirable materials and create a more homogenous feedstock. This often includes shredding and/or drying, in addition to recyclable sorting technologies. The mechanical preprocessing is followed by thermal or chemical conversion process that creates a primary fuel that is then usually further refined into a desirable, high quality product in a third process.

In the US, no operating conversion technologies currently exist for MSW at a scale that would be appropriate for Onondaga County. As concluded in NYS's "Beyond Waste" Plan, these are emerging

technologies that have not yet been successfully demonstrated in the US in an economically viable, environmentally protective commercial scale operation. OCRRA will continue to follow these technologies to determine future viability for Onondaga County.

7.10 TRANSFER STATION ALTERNATIVES

OCRRA's current transfer station operations are designed to be consistent with the rest of OCRRA's CSWMS. In order to maximize energy recovery through WTE, the operations include a separation process to keep materials that may be processed at the WTE Facility separate from materials destined for a landfill. OCRRA also removes the recyclable scrap metal and cardboard for recycling. To increase transport efficiency, materials are crushed and compacted with a landfill compactor prior to being loaded into a transfer trailer. As technologies advance, OCRRA may identify ways to increase efficiency, such as through the use of a slow-speed shredder instead of a landfill compactor; an option that OCRRA is currently studying.

If OCRRA's CSWMS changes, then OCRRA must adjust the transfer station operations accordingly. For example, if OCRRA were to haul all MSW to a landfill for disposal, then the operations would no longer include material segregation. OCRRA also adapts its transfer station operations to meet the community's needs. For example, to better accommodate residents, OCRRA changed its Rock Cut Road Transfer Station hours to Tuesday to Saturday from Monday to Friday.

7.11 ASH RESIDUE AND BYPASS WASTE MANAGEMENT ALTERNATIVES

7.11.1 ASH RESIDUE REUSE / RECYCLING

While there have been several attempts to reuse or recycle ash residue from WTE facilities in asphalt or binder mixes for road construction, it is not widely practiced in the US. On a small scale, Polk County Minnesota is the most recent to test reuse options. For more information visit: http://www.seas.columbia.edu/earth/wtert/sofos/nawtec/nawtec08/nawtec08-0006.pdf.

More commonly, WTE ash residue is beneficially re-used as alternative daily landfill cover, as is the case with the ash residue from the Onondaga County WTE Facility. The use of ash residue offsets the use of soil, shale, and other natural resources as daily cover material.

7.11.2 ASH RESIDUE DISPOSAL: IN-COUNTY ALTERNATIVES

The "Site 31" Landfill is a permitted, but never constructed, 52-acre landfill on 541-acre site. The proposed landfill facility is designed for a 25 year capacity of 500 tons/day of ash residue from the WTE Facility, bypass waste from the transfer stations, and other de minimis residues from recycling and composting. The estimated construction cost of the "Site 31" Landfill was $75 million in 1995 dollars.

Based on extensive landfill capacity in western NY, competitive landfill pricing, and the ability to use the ash residue as an alternative daily landfill cover, it has not made sense for OCRRA to develop the site and construct the landfill. Yet having the landfill and the permit has served OCRRA well in disposal negotiations. Although private sector landfill capacity is currently available, it is subject to regulatory discretion and market volatility. Having an in-County solution is a solid fallback option. OCRRA will continue to evaluate the costs and benefits of landfill development versus other disposal alternatives.

7.11.3 ASH RESIDUE DISPOSAL: OUT-OF-COUNTY ALTERNATIVES

There is currently sufficient capacity and demand for the beneficial re-use of ash residue as alternative daily cover at the major landfills west of Onondaga County – Seneca Meadows (about 50 miles away), High Acres (about 80 miles away), and Ontario County (about 65 miles away). Every four to five years, OCRRA issues a RFP for ash residue disposal – this has historically afforded OCRRA reasonable and competitive disposal fees. When selecting a proposal, OCRRA considers beneficial reuse options at the facility, the facility's environmental record, tolls and fees, and transport distance, in addition to the cost of disposal.

7.11.4 BYPASS WASTE RECYCLING ALTERNATIVES

As discussed in Section 3.6.2, bypass waste is material segregated at the Ley Creek and Rock Cut Road Transfer Stations that cannot be processed at the WTE Facility and must be disposed of at a landfill. It includes the following items:

- Dirt, rocks, concrete, and other non-burnable waste;
- Dry wall, sheet rock, plaster, and lathe;
- PVC piping and siding;
- Building insulation;
- Treated lumber of any kind including creosote railroad ties and telephone poles along with landscape timbers;
- Mattresses and box springs that have not been shredded.

OCRRA's Transfer Stations generate between 10,000 and 15,000 tons of bypass waste annually. Over the past few years, OCRRA has explored recycling options for dry wall but the distance to the nearest market made it unfeasible.

Due to space constraints, OCRRA has limited ability to perform additional material separation. That said, OCRRA will continue to explore recycling alternatives for the materials that are currently sent to a landfill for disposal.

7.11.5 BYPASS DISPOSAL: IN-COUNTY ALTERNATIVES

OCRRA has historically incorporated the disposal of bypass waste into the contract for ash residue disposal. However, in the future, OCRRA may want to explore options to partner with the Town of Camillus for in-County disposal of bypass waste at the Camillus Landfill. This is an alternative that will be further investigated to better understand whether the Camillus Landfill can accept the quantity and types of OCRRA's bypass waste.

7.11.6 BYPASS DISPOSAL: OUT-OF-COUNTY ALTERNATIVES

As previously mentioned, OCRRA has included bypass disposal as part of its RFP for ash disposal. Historically, after a thorough environmental review, the most cost-effective option has been the same for ash residue and bypass waste; hence they have always gone to the same disposal location. In order to secure the best deal for the community, OCRRA will continue to issue requests for proposals for the disposal of bypass waste.

8.0 COMPREHENSIVE SOLID WASTE MANAGEMENT SYSTEM SELECTION AND PLANNING PERIOD PRIORITIES

In the 2011 feasibility study to evaluate the benefits and drawbacks of a capital region solid waste authority (as previously referenced in Section 7.9.1), it evaluated existing agencies like OCRRA and noted, "*In looking at the experience over the past 25-30 years, it is apparent that properly structured, well-run solid waste management authorities have reduced the costs, streamlined operations and administration, spearheaded controversial but necessary facilities, increased transparency, and increased recycling.*"

The report determined the success of solid waste management authorities on the following three characteristics: 1) whether they are financially self sufficient; 2) whether they have developed the facilities needed to fulfill the reason they were created; and 3) whether they serve the public as originally envisioned. It underscored the benefits of solid waste management authorities, like OCRRA, including: increased recycling rates, cost savings from economies of scale and consolidation of services, enhanced environmental benefits (such as increased ability to implement a successful organics processing facility), protection against market risks for disposal and transportation, and the establishment of predictable and reliable long term disposal.

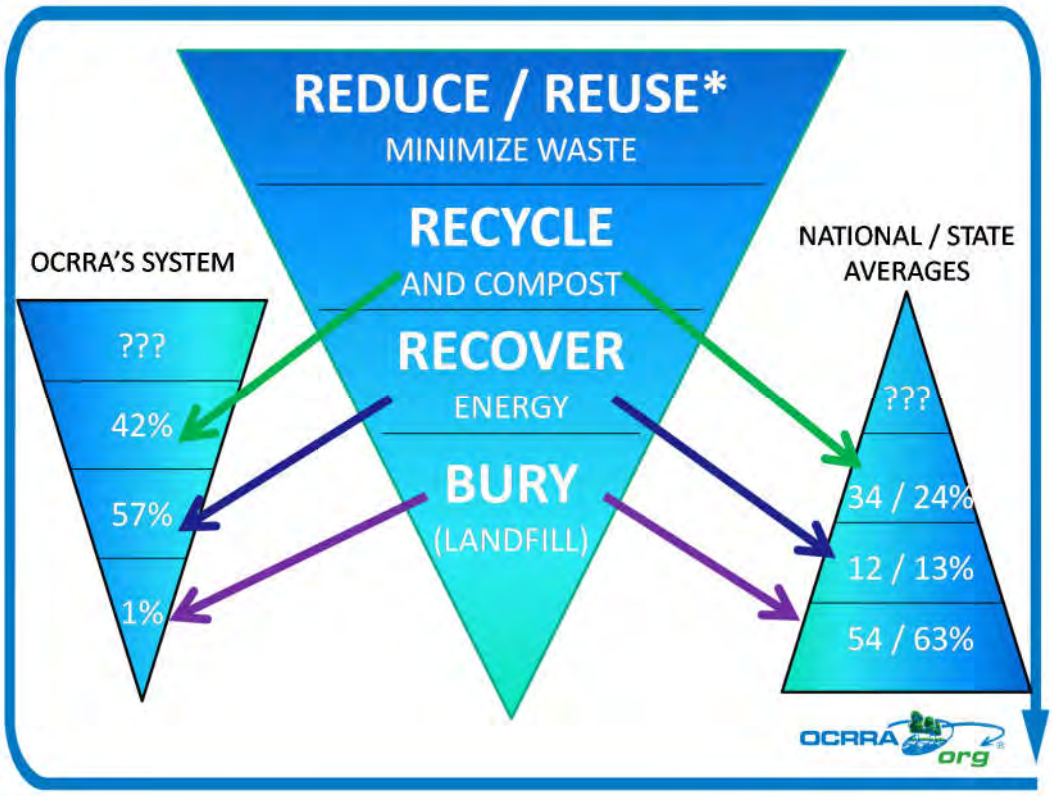
8.1 ONGOING IMPLEMENTATION OF THE COMPREHENSIVE SYSTEM

OCRRA's CSWMS has a proven track record. It has achieved very strong recycling rates, and as discussed in Section 8.2, it is highly consistent with the solid waste management hierarchy. Though zero-waste advocates push for phasing-out disposal facilities, the reality recognized by solid waste management professionals is that disposal facilities will be needed for the foreseeable future. The Onondaga County WTE Facility is expected to operate for at least another 25 years, and as previously mentioned, OCRRA has existing agreements to send material to the WTE Facility through 2022. With some new goals, outlined in this section, OCRRA's nationally recognized CSWMS will continue to serve the community in a similar fashion for the next two decades, adapting as necessary to meet the community's changing needs.

8.2 CONSISTENCY WITH SOLID WASTE MANAGEMENT HIERARCHY

The waste management hierarchy set forth in NYS's 2010 "Beyond Waste" Solid Waste Management Plan, as well as in USEPA guidelines, includes (in order of preference): 1) waste reduction, 2) reuse and recycling, 3) recovery of energy from solid waste that cannot be economically reused or recycled (e.g., modern WTE facilities), and 4) use of permitted landfill facilities. This hierarchy, supported by our state and the nation, considers the environmental impacts of each level and prioritizes them accordingly, with the most preferred option being waste reduction/reuse and the least preferred option being landfilling. It also provides a good measuring stick for evaluating OCRRA's CSWMS. As indicated in the figure below, OCRRA's CSWMS is extremely consistent with the hierarchy. On the other hand, the national and New York State average doesn't do nearly as good a job with its low recycling rate and heavy reliance on landfilling. In fact, the national and statewide numbers are upside down.

Resource ("Waste") Management Hierarchy



* Items minimized through reduction and reuse are not included in the percentages above, as they cannot be tracked (in any system).

8.3 KEY CONTRACTS AND LAWS

To ensure the long-term stability of OCRRA's CSWMS, OCRRA has contracts with the operator of the WTE Facility; the local MRF(s), an out-of-County landfill disposal site; and a local vendor for the HHW program. These contracts create a foundation for long-term planning and stability for the OCRRA system.

The adoption of Local Law 5 of 2003 by the Onondaga County Legislature, established Interstate Flow Control, and protected the community's CSWMS. This law conformed to a 2001 ruling from the US Second Circuit Court of Appeals that accords municipalities the opportunity to designate that their waste goes to publicly operated solid waste management systems for proper environmental disposition. This decision was appealed to the US Supreme Court and an April 2007 ruling upheld this decision.

In addition, the Interstate Flow Control Law is complemented by the existing Intrastate Flow Control ordinances that had been enacted during the years 2000 and 2001 by the towns and villages within the planning unit. These municipal partnerships and local laws provide our community with a host of proper solutions to protect public health and the environment.

To further secure the CSWMS, OCRRA has historically entered into four-year delivery contracts directly with all of the area's trash haulers, wherein they contractually commit to deliver all MSW picked up in

the 33 participating municipalities to OCRRA's CSWMS. OCRRA has a long track record of managing the planning unit's waste materials through these hauler contracts.

8.4 PRIMARY FUNDING MECHANISM

Despite the challenges associated with OCRRA's current tonnage-based funding (see Section 7.1), OCRRA will continue to employ fiscal discipline and operational efficiency to maintain a reasonable tipping fee for the planning unit. The tax-based alternatives evaluated in Section 7.2 would need to be implemented by the Onondaga County Legislature or member municipalities.

8.5 PLANNING PERIOD PRIORITY #1: ESTABLISH KEY CONTRACTS

8.5.1 EXTEND PUBLIC-PRIVATE PARTNERSHIP FOR WASTE-TO-ENERGY FACILITY

The WTE Facility is currently owned by OCRRA and operated by Covanta under a public-private partnership. Contractually, in May 2015, Covanta has the option to purchase the Facility for $1. As part of purchasing the Facility, Covanta assumes responsibility for the outstanding WTE Facility debt of $45 million. Once Covanta purchases the Facility, it will become entirely private or a "merchant" facility, and OCRRA will no longer oversee operations or share in the revenue it generates, which funds OCRRA's green programs.

As a private Facility, Covanta would have the ability to import trash without any restrictions. Based on a US Supreme Court ruling (Fort Graciot v. Michigan Dept. of Natural Resources, 1992), it is an unconstitutional violation of the commerce clause to restrict waste flow to a privately owned facility.

However, OCRRA is currently negotiating with Covanta Energy to maintain the existing public-private partnership. If successful, OCRRA will continue to own the Facility, oversee operations, and generate revenue to fund the many green programs OCRRA provides to the community.

A critical aspect of the negotiations has been utilization of the WTE Facility's capacity. Since the economic downturn in late 2008, the Facility has not been running at full capacity. The proposed Regional Solid Waste Partnership (see Section 8.5.2) provides a potential opportunity to address this issue. OCRRA's target for finalizing negotiations with Covanta is 2014, such that the public-private partnership seamlessly transitions at the end of the current contract in May 2015. OCRRA is currently seeking a long-term partnership.

8.5.2 EXTEND OTHER CRITICAL CONTRACTS / AGREEMENTS

In addition securing the relationship with the WTE Facility, OCRRA must execute hauler contracts for a new term (generally 3-5 years) and extend its waste delivery agreements with the participating member municipalities. These contracts help OCRRA to sustain its CSWMS.

8.6 PLANNING PERIOD PRIORITY #2: INCREASE WASTE REDUCTION AND RECYCLING / COMPOSTING

In addition to a continuing public education effort aimed at potentially recyclable paper, which constitutes about 15% of the MSW composition by weight, OCRRA plans to expand its waste diversion

efforts into the next major opportunities: food waste (15% of MSW by weight) and textiles (6% of MSW by weight).

With respect to food waste, OCRRA's target is commercial and institutional food waste (*i.e.*, large food waste generators), as opposed to residential food waste. OCRRA's expansion at the Amboy Compost Site was sized for nearly 10,000 tons of food waste – approximately half of the commercial and institutional food waste generated within the planning unit. More details are available in Section 8.6.1.

Textiles present another opportunity for increased reuse and recycling. Fortunately, the infrastructure, collection systems, and recycling markets are already in place for textiles. The main challenge is public education and outreach. More details are available in Section 8.6.2.

OCRRA is also actively engaged the development of a new school curriculum focused on sustainable waste management. This includes segments on waste reduction, recycling, composting, and energy recovery.

OCRRA has a leadership role in several product stewardship organizations and will continue to advocate for new programs that address end-of-life product management challenges.

To encourage municipalities to consider PAYT programs, OCRRA will develop case studies, as discussed in Section 7.4.

Last but not least, OCRRA needs the information obtained through waste quantification and characterization studies to identify the next major priority areas for waste reduction and recycling. Over this next ten year planning period, OCRRA would like to conduct at least two comprehensive studies.

8.6.1 EXPAND FOOD WASTE COMPOSTING PROGRAM

Beginning in 2014, OCRRA's goal is to expand the food waste composting operations at the Amboy Compost Site by 20% (or 2,000 tons of diverted food waste) per year; thereby reaching the Site's permitted capacity (approximately 10,000 tons of diverted food waste) within 5 years. As discussed in Section 3.4.3, OCRRA is targeting large quantity food waste generators, namely commercial and institutional vendors, including grocery stores, restaurants, hospitals, universities, and local schools.

While OCRRA may eventually decide to accept residential food waste from compost site users, for now OCRRA will continue to encourage residential backyard composting through its education programs (such as the Master Composter training classes), compost bin sales, and extensive resources pertaining to residential composting available on OCRRA's website and in OCRRA's quarterly newsletter.

8.6.2 INCREASE TEXTILE RECYCLING

Based on OCRRA's most recent Waste Quantification and Characterization Study, textiles comprise 5.8% of Onondaga County's waste stream. Fortunately, textiles already have viable markets for reuse and recycling. There are ample opportunities for textile reuse in Onondaga County and OCRRA strongly encourages residents to donate these items.

Two major charities, the Rescue Mission and the Salvation Army, along with other smaller charitable donation centers and private enterprises, collect old clothes and textiles at drop-off locations throughout

Onondaga County. These locations not only collect re-sellable clothing items, but old textiles that will be sent for recycling into rags.

OCRRA currently informs the public of these donation centers via its website and helps support the mission of these charities by providing a credit towards their trash fees based on the amount of donations they collect.

Yet, today, the biggest challenge is education. According to the Council for Textile Recycling (CTR), the US generates 25 billion pounds of textiles annually – about 82 pounds per resident. Of that amount, 15% gets recycled and the remaining 85% is trashed, despite the fact that there are strong markets for textiles. For more information see: http://weardonaterecycle.org/about/issue.html and http://weardonaterecycle.org/about/clothing-life-cycle.html.

Public education is the key to increasing textile recycling. In NYS, approximately 1.4 billion pounds are textiles with an estimated market value of $200 million are trashed annually. Beginning as early as 2014, OCRRA intends to partner with professional associations like the New York State Association for Reduction, Reuse, and Recycling (NYSAR3), and trade associations including CRT and Secondary Materials and Recycled Textiles (SMART), on a state-wide textile recovery effort.

8.6.3 IMPLEMENT INTERACTIVE AND ENGAGING SCHOOL CURRICULUM

OCRRA is currently investing in the design of an interactive and engaging school program that will consist of a series of five, professionally produced videos and supplemental, interactive classroom lessons. The program intends to reach over 12,000 3rd through 5th grade students in Onondaga County (well beyond the reach of OCRRA's current in-classroom presentations) and excite them about their role in sustainable materials management in the context of OCRRA's CSWMS.

Students and teachers will emerge with the information necessary to become environmental stewards by practicing litter prevention, waste reduction, reuse, and recycling skills. Students will also have a strong understanding of OCRRA's CSWMS. The interactive lessons will reinforce the message that every day, students can make a positive impact in their schools, in their neighborhoods, and their community.

OCRRA has collaborated with teachers from local school districts to develop the content, such that it is enthusiastically received and closely tied to curriculum elements. OCRRA has retained Pinckney Hugo Group, an award-winning, local advertising agency, to develop the videos and interactive games. OCRRA plans to roll out the program for the 2014/2015 school year. OCRRA intends to update the program about every five years.

8.6.4 ONGOING ADVOCACY FOR PRODUCT STEWARDSHIP

Through direct involvement in several professional associations, including the NYPSC and the national Product Stewardship Institute (PSI), OCRRA will continue to stay at the forefront of EPR initiatives. These programs relieve OCRRA of the costs associated with special collection programs and transfer the financial burden to manufacturers, which are then incentivized to make products that: contain fewer or no toxins, are easy to recycle or upgrade, have increased durability, and have reduced impact on the environment. OCRRA strives to see EPR programs for paint (especially oil-based), tires, carpeting, mattresses, primary batteries, fluorescent bulbs, and items containing toxic ingredients, such as

pesticides, household cleaning chemicals, and other items collected through OCRRA's HHW program. This will be an ongoing effort.

8.6.5 UPDATED WASTE QUANTIFICATION AND CHARACTERIZATION STUDY

OCRRA's Waste Quantification and Characterization Studies have been instrumental in analyzing the constantly changing waste stream and providing accurate data aimed at developing future program priorities. The most recent study was performed in 2005 – nearly a decade ago. Due to the extensive cost of these rigorous and statistically-representative studies (approximately $50,000 - $75,000 per study), OCRRA has deferred funding such a study over the past few years. As OCRRA's financial position improves, OCRRA intends to perform another study in 2015/2016 and again in 2021/2022.

8.7 PLANNING PERIOD PRIORITY #3: IMPROVE DATA COLLECTION AND MANAGEMENT SYSTEMS

As was evident during the development of this CSWMP update, data collection and management is an ongoing challenge. This is primarily due to the decentralized management of materials like recyclables, C&D, industrial waste, and biosolids. While OCRRA offers a comprehensive system of services for MSW, many of the other waste categories are managed by private operations, some out of the County.

Over this next planning period, OCRRA will try to obtain reliable data from waste generators, recycling operations, and disposal facilities. This includes gaining a better understanding of biosolids management (beyond Onondaga County Department WEP), yard waste composting operations, and C&D recycling within the planning unit. OCRRA will also work more closely with DEC to obtain and utilize the data submitted to DEC in annual reports and, ultimately, generate a much fuller perspective on solid waste management activities within the planning unit.

OCRRA will also work towards developing a recycling rate for each waste category (MSW, C&D, industrial waste, and biosolids), as the current recycling rate combines the waste categories.

8.8 PLANNING PERIOD PRIORITY #4: INCREASE OPERATIONAL EFFICIENCY AND DIVERSION RATES AT TRANSFER STATIONS

As discussed in Section 3.6.2, OCRRA currently uses a landfill compactor to crush the materials at the Ley Creek Transfer Station prior to transport. As the existing equipment ages, OCRRA plans to investigate alternative processing technologies, such as a slow-speed shredder, to see if there are more efficient means of operation. OCRRA anticipates that it will conduct this analysis about every four to five years. Furthermore, OCRRA will also explore options to increase recycling of the materials received, such as hardfill materials, gypsum, and rigid plastics. This includes visiting and learning from C&D recycling operations within the region and seeking out partnership opportunities for increased recycling.

8.9 PLANNING PERIOD PRIORITY #5: SELECT ALTERNATIVE FOR SUSTAINABLE BIOSOLIDS MANAGEMENT

In 2015 or 2016, WEP anticipates issuing procurement documents for a long-term biosolids management program. Emphasis will be placed on the beneficial reuse, while the County will also

weigh environmental and economic considerations. Onondaga County will continue researching best management practices for biosolids and will likely repeat this process once the initial contract expires.

8.10 IMPACTS ON NEIGHBORING PLANNING UNITS

The continuance of the fundamental aspects of OCRRA's programs will have little impact on the neighboring planning units. Onondaga, Oswego, and Madison Counties have self-sufficient systems that enforce flow control legislation to keep waste within their systems. These systems also restrict waste importation.

OCRRA continues to identify partnership opportunities with neighboring planning units.

9.0 IMPLEMENTATION SCHEDULE / TARGETS

PRIORITY	2015/2016	2017/2018	2019/2020	2021/2022	2023/2024
Planning Period Priority #1: Establish Key Contracts	Extend WTE Partnership / Extend Municipal Waste Delivery Agreements / Execute Hauler Agreements for New Term	Execute Hauler Agreements for New Term	Look at potential partnerships for the management of bypass wastes that are unable to be processed at the WTE Facility	Execute Hauler Agreements for New Term	Conduct survey of participating municipalities to get their feedback on OCRRA's services
Planning Period Priority #2: Increase Waste Reduction and Recycling / Composting	Increase Food Waste Composting by 1,000 tons per year / Participate in statewide textile recycling efforts / Launch new school curriculum / Perform waste study / Ongoing public education	Increase Food Waste Composting by 1,000 tons per year/ Ongoing product stewardship advocacy and public education / PAYT case studies/ Enhanced backyard composting outreach	Increase Food Waste Composting by 1,000 tons per year / Explore the need for additional organics processing capacity / Ongoing product stewardship advocacy and public education	Increase Food Waste Composting by 1,000 tons per year / Update school curriculum / Perform waste study / Ongoing product stewardship advocacy	Ongoing product stewardship advocacy and public education
Planning Period Priority #3: Improve Data Collection and Management Systems	Access and Review DEC annual report data	Evaluate new systems for internal data collection	Develop recycling rates for specific waste categories	Focus on increasing understanding of biosolids management practices	Assess the planning unit level of understanding of waste generation / disposition by category
Planning Period Priority #4: Increase Operational Efficiency and Diversion Rates at Transfer Stations	Visit C&D recycling operations / Research transfer station efficiency improvements	Evaluate opportunities for increased recycling of specific materials received at sites	Conduct hauler surveys to gain additional perspectives on efficiency opportunities	Explore partnership opportunities for hardfill recycling	Explore alternative technologies / processing equipment for new facility
Planning Period Priority #5: Select Alternative for Sustainable Biosolids Management	Issue procurement documents	Select management strategy	Continue researching best practices for biosolids management	Continue researching best practices for biosolids management	Issue procurement documents and select management strategy

Utilizing DEC's MSW composition and recovery projection tool and integrating the planning period priorities previously described, the table presented in Appendix J establishes targets for MSW

diversion. Given the high current level of recycling within the planning unit, these are aggressive future recycling targets that factor in future EPR legislation, which may or may not actually occur. This table likely underestimates the material currently being recycled due to data collection and management limitations. Because it follows DEC's format, it is slightly different from OCRRA's "processable" recycling rate calculation, primarily due to the inclusion of yard waste. This is intended to be used as a rough guide. Targets will be updated in OCRRA's biennial compliance reports.

10.0 PLAN FINALIZATION

10.1 SUMMARY OF PUBLIC PARTICIPATION

Onondaga County and OCRRA have strived for robust public participation in the development of this CSWMP update. The following is a summary of the public participation opportunities, as well as a description of the efforts to announce and raise awareness about the public participation opportunities:

DATE(S)	PUBLIC PARTICIPATION OPPORTUNITY	ANNOUNCEMENT / PUBLIC NOTICE
12/4/2014—1/17/2014	Public comment period on draft CSWMP update	DEC's Environmental Notice Bulletin (ENB); OCRRA Media Release; Email Blast; Social Media Notification; OCRRA newsletter; OCRRA website; Onondaga County website
12/16/2014	Public hearing on draft CSWMP update	

10.2 NOTIFICATION TO NEIGHBORING PLANNING UNITS

Prior to finalization of the CSWMP update, OCRRA reached out to all of the neighboring planning units and requested a meeting to discuss opportunities for collaboration. All of the neighboring planning units participated in the meeting and one of the topics discussed was the development this CSWMP update.

All neighboring planning units were provided with an electronic copy of the draft CSWMP update and invited to participate in the public comment period.

Upon adoption by the Onondaga County Legislature, all neighboring planning units will be provided with an electronic copy of the final CSWMP update.

10.3 SUMMARY OF DEC REVIEW

While Section 1.7 describes the DEC review process, the following table chronologically summarizes the major milestones:

DATE	MILESTONE DESCRIPTION
9/3/2014	Onondaga County and OCRRA meet with DEC for preliminary review meeting
11/3/2014	DEC provides preliminary comments/suggestions to Onondaga County and OCRRA
12/3/2014	Onondaga County submits draft CSWMP update to DEC
2/9/2015	DEC issues "approvable letter" to Onondaga County
	Onondaga County submits final CSWMP update, adopting resolution, and SEQR determination to DEC
	DEC issues "final approval letter" and CSWMP update goes into effect

10.4 RESOLUTION ADOPTING THE FINAL COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN

Upon receiving final approval from the DEC, the Onondaga County Legislature must pass a resolution to adopt the final CSWMP update.

10.5 FINAL PLAN ACCESSIBILITY

The final CSWMP update will be easily accessible on OCRRA's website (www.OCRRA.org) for reference. A hard copy will be available for review at OCRRA's office location.

APPENDIX A – June 1989 Onondaga County Solid Waste Management Program Publication

TOPIC: Trash

A PUBLICATION OF THE ONONDAGA COUNTY SOLID WASTE MANAGEMENT PROGRAM JUNE, 1989
The Solid Waste Management Program is a solution for trash disposal developed jointly by Onondaga County and the City of Syracuse
Nicholas J. Pirro, County Executive

TRASH— THERE ARE NO EASY ANSWERS

Trash. Garbage. Solid Waste. However we refer to it, it's an important issue these days. Not only in Onondaga County, but across the United States and around the world. Wherever you go, people are talking about trash — how to reduce it, how to recycle it, but mostly, how to dispose of it.

And, ironically, trash disposal is more of a problem in technologically advanced countries. In the United States especially, we place a high priority on convenience, and the marketplace readily provides us with thousands of disposable items intended to make our lives easier. As a result, each resident of Onondaga County disposes of five pounds of trash per day — twice as much as a European and four times as much as someone living in Japan. If we consider what happens when all of these items are thrown away, we begin to realize that convenience carries a very high price.

TIME'S RUNNING OUT

Like most of the northeast, Onondaga County is facing a trash disposal crisis. We've been fortunate, up to this point, that we've had a relatively inexpensive means of trash disposal. Currently, most of our trash is hauled to the Seneca Meadows landfill in Seneca Falls, with the remainder taken to four small municipal landfills within the county, each under state pressure to close. Our contract with Seneca Meadows expires in October of next year, and the landfill may close shortly after that. That leaves us with tons of garbage — more than 1,000 per day — and nowhere to put it.

It has been the goal of the Solid Waste Management Program to find a solution to this trash disposal crisis. To design a safe, reliable and cost-effective program of trash management that will become a part of our lifestyle, now and into the future. To that end, the different alternatives of trash disposal have been thoroughly researched. Data relative to the environmental impact of each alternative has been examined. Garbage bags full of trash have actually been analyzed to determine what we dispose of every day.

Do you know what we throw away? Take a look — the following list was compiled from an analysis of Onondaga County's trash (figures are in tons per day):

Paper	*360.5**	*Rubble*	*70.3*	*Diapers*	*11.6*
Food	*128.1*	*Metals*	*49.0**	*Rubber (Tires)*	*9.7*
Plastics	*94.7**	*Yard Waste*	*43.1**	*Batteries*	*1.9*
Glass	*88.4**	*Textiles*		*Hazardous*	
Wood	*78.4**	*Other*	*27.9*	*Material*	*0.1*
					1000.6

**Includes Recyclable and Non-Recyclable Material*

AN INTEGRATED SOLUTION

These studies have concluded that no single method of disposal can solve our trash dilemma, but that we need a finely balanced, integrated trash management plan. The resulting Solid Waste Management Program consists of four parts: a waste reduction program, a recycling program, a waste-to-energy facility and a lined landfill, each part specifically designed to work with the other components in a way that is most consistent with the way we live and work.

The first phases of this plan are already being implemented, and the entire program will be fully functioning by 1993. This same four-part program is being tailored to the needs of other communities throughout the country.

YOUR NEED TO KNOW AND UNDERSTAND

There are no easy answers when it comes to disposing of our trash, and some portions of this program have become highly emotional issues. This publication is being distributed because, as a resident of Onondaga County, you need to know the facts surrounding the program and how it affects you, your family and your community. You need to know how to start your own "solid waste plan" of trash reduction and recycling. And you need to understand the importance of facilities like the landfill and the waste-to-energy plant.

Trash disposal is not just a temporary problem. It promises to be as difficult and demanding an issue tomorrow as it is today. And we owe it to future generations to take a step forward in controlling our trash, before it controls us.

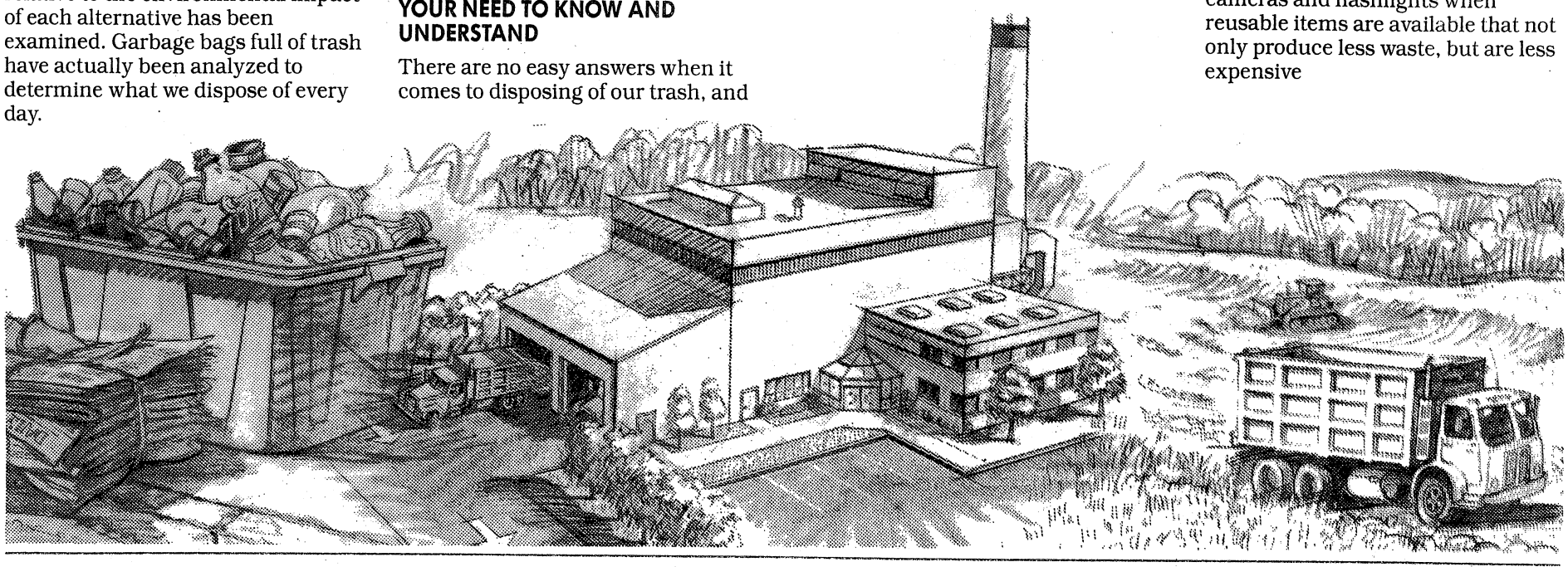
DON'T PRODUCE— REDUCE!

In 1960, each resident of Onondaga County produced, on average, two and a half pounds of trash per day. Today it's increased to five pounds. Through waste reduction, we can eliminate trash at its source and reduce the amount we are forced to dispose of.

On the state level, we can support New York State's efforts to pressure manufacturers into eliminating excessive packaging or finding alternatives to products and packaging that present disposal problems. These efforts may take the form of taxes on the sale of items such as disposable diapers and tires, or agreements with fast food chains to phase out the use of non-recyclable containers.

As individual consumers, we can all make a conscious effort to reduce the amount of trash we produce. Here are some ideas:

- Donate goods to charities when you can no longer use them
- Limit purchase of convenience foods, products in aerosol cans, products in excessive packaging or unnecessary small electrical appliances
- Buy and use cloth napkins and hand towels instead of paper napkins and paper towels and use china plates, china cups and silverware instead of disposables
- Choose refillable and/or reusable containers and the giant economy size when possible
- Purchase products made from recyclable or recycled materials
- Start a backyard compost pile for yard waste and kitchen scraps
- Have your name removed from direct mailing lists. Start by writing to: Mail Preference Service, Direct Mail Marketing Assoc., 6 E. 43rd St., New York, N.Y. 10017
- Use cloth diapers instead of disposables
- Refuse to buy disposable items like cameras and flashlights when reusable items are available that not only produce less waste, but are less expensive



A trash disposal solution for today and tomorrow — Onondaga County's integrated, four-part waste disposal program includes waste reduction, an aggressive recycling program, a mass burn waste-to-energy facility and a modern, lined landfill

RECYCLING: THE FOUNDATION FOR SUCCESSFUL SOLID WASTE MANAGEMENT

There are many items in our waste stream that can be separated out, reprocessed and then reused by manufacturers as raw material. This process is called recycling, and it can result in a significant reduction in the volume of our trash. Recycling also helps us conserve our natural resources and, since it often takes less energy to manufacture items from recycled material than it does from virgin raw material, it helps us save fuel.

Right now, recycling in Onondaga County is on a voluntary basis. But, starting July 1, 1990, all individuals and businesses in the county will be required to recycle. Operation Separation, Onondaga County's recycling program, was introduced in November of 1988 to encourage everyone to start voluntary recycling now, so that when the program becomes mandatory, it will be second nature to us.

Our goal is to recycle as much as we can. The Solid Waste Management Program calls for us to recycle *at least* 33 percent of our trash. This figure was developed after an analysis of the volume and content of our waste, a survey of residents' attitudes toward separating their trash, projections of recovery rates, and study of the availability of markets for recyclables. In order for us to reach the minimum of 33 percent, it is necessary that 80 percent of county residents participate in recycling week after week, and separate 50 to 90 percent of those items that are recyclable.

PARTICIPATION IS THE KEY

Participation is the key that will determine how successful our recycling program will be. And, although recycling might appear difficult or time-consuming, in reality it is neither. Just separate the recyclable items from your other trash according to the chart at the bottom of this page.

Once you have separated your recyclables, rinse out food containers to prevent odors, make sure any aluminum products are free of food residue, and discard any lids or caps. There is no need to peel labels from plastic or glass containers. Newspapers and paper grocery bags should be stacked inside another paper grocery bag; corrugated cardboard boxes should be flattened.

IT'S FAST, IT'S EASY

All in all, separating your trash into recyclables and non-recyclables should take you about two minutes a day. Currently, the recyclables can be taken to any of a number of drop-off centers located throughout the county, or, depending on where you live, you may be eligible for a voluntary curbside pick-up program (see "Recycling Around the County"). When Operation Separation becomes mandatory county-wide on July 1, 1990, recycling will be even easier. The county will provide all residents with a special bin to hold recyclables and to be placed at the curb on pick-up day for collection by your regular trash collector.

RECYCLING AROUND THE COUNTY

The following is a list of recycling drop-off centers, their phone numbers and hours, and the types of recyclables they accept. Any voluntary and mandatory curbside pick-up programs currently in effect are also listed by municipality.

Village of Baldwinsville
D.P.W., Lock St.
Sandy Baker, 638-8865
Wed 4pm–7pm. Sat 8am–1pm
aluminum, bi-metal cans, glass, newspapers, plastic

Bodow Recycling
1925 Park St., Syracuse
422-2552
Mon–Fri, 8am–4:30pm
corrugated cardboard, office paper

Town of Dewitt
Highway Garage, Butternut Dr. between Kinne Rd. & Route 290
446-3428
Sat 8am–Noon
aluminum, bi-metal cans, glass, newspapers, plastic

Town of Elbridge
[illegible]dfill, Peru Rd.
[illegible]-9031
Fri & Sat, 8am–6pm
aluminum, bi-metal cans, glass, newspapers (no glossy inserts), plastic

[illegible]an Recycling
[illegible] Spencer St., Syracuse
471-0254
Mon–Fri, 7am–4:30pm, Sat 7:30am–Noon
corrugated cardboard, office paper

Village of Fayetteville
637-9864
Voluntary Curbside Pick-up
newspapers

Jamesville
Town Square
Vicki Baker, 469-5347
Sat 9am–11am
aluminum, bi-metal cans, glass, newspapers, plastic

Town of LaFayette
VFW Post, Route 11
Vicki Gernhardt, 677-9190
Sat 9am–Noon
aluminum, bi-metal cans, glass, newspapers, plastic

Village of Manlius
682-9171
Voluntary Curbside Pick-up
aluminum, bi-metal cans, glass, newspapers, plastic
or
Recycling Center, D.P.W., Mill St.
Barbara Lipe, 682-6171
Tues, Wed, Thurs, 9am–2pm, Sat 9am–Noon
aluminum, bi-metal cans, corrugated cardboard, glass, newspapers, plastic

Town of Marcellus
Lee-Mulroy Rd., across from Town Barn
Esther Holdridge, 673-2662
Sat 9am–Noon
aluminum, glass, newspapers, plastic

Village of Minoa
D.P.W., East Ave.
Dan Cunningham, 656-2533
Sat 9am–Noon
aluminum, bi-metal cans, glass, news[illegible]ers, plastic

Town of Onondaga
D.P.W., Route 173
469-3212
Sat 9am–Noon
aluminum, bi-metal cans, glass, newspapers, plastic

Town of Pompey
Town Hall, Route 20, Pompey Center
Frank Winters, 683-5685
Sat 9am–Noon
bi-metal cans, glass (clear only), newspapers, office paper, plastic

Syracuse Materials Recovery
301 Peat St., Syracuse
476-0800
Mon–Fri, 7:30am–4:30pm.
Sat 7:30am–11:30am
corrugated cardboard, office paper

Town of Skaneateles*
Recycling/Transfer Station. Old Seneca Tpke.
685-3473
Mon–Fri 7:30am–3pm, Sat 7am–2:30pm, or
Mandatory Curbside Pick-up
aluminum, bi-metal cans, corrugated cardboard, glass, newspaper (no color inserts), plastic

City of Syracuse
D.P.W., Canal St. Ext., off Midler Ave.
448-CITY
Open 24 hours, 7 days a week
aluminum, bi-metal cans, corrugated cardboard, glass, metal, newspaper (no color inserts), office paper, plastic, waste oil

Town of Tully
Cor. Grove & Community Dr.
Joanne Bean, 696-5959
Sat 10am–2pm
glass (clear only), newspaper, plastic

Town of Van Buren
Highway Barn, W. Dead Creek Rd.
635-3010
Sat 9am–Noon
glass (clear only), newspaper, plastic

*Town Residents Only

CAN RECYCLING BE THE ONE SOLUTION?

Seattle, Washington, has often been used as an example of a metropolitan area, comparable in size to Onondaga County, that has chosen to delay construction of a waste-to-energy facility. Instead, Seattle has set a goal of recycling 60 percent of its waste stream by 1996.

But Seattle can afford to delay more than most communities. It has 18 years left on its current landfill. And, because Seattle is a major seaport, it is able to economically export its recyclables to the low-cost labor markets of the Far East.

A BIGGER INCENTIVE

In addition to the ab[illegible] factors, the residents of Seattle have an even bigger incentive to practice waste reduction and recyc[illegible] — a financial one. To have *one* can trash per week collected, a family must pay $165.00 per year. Collection of three cans per week costs $381.00 per year. These rates have forced Seattle's residents into putting more effort into waste reduction and recycling simply because it is too expensive to throw things away. And no one knows how much illegal dumping is being done by those individuals who cannot or will not pay the price of disposal.

cont. on page 3

OPERATION SEPARATION: DIVIDE AND CONQUER

What's (Currently) Recyclable*

Paper
- Newspapers
- Corrugated Cardboard Boxes
- Clean Brown Paper Grocery Bags

Plastic
- Liquid Laundry and Dish Detergent Containers
- Bleach and Fabric Softener Containers
- Cloudy Plastic Milk, Juice and Water Bottles
- Colored or Cloudy Plastic Hair Product Bottles

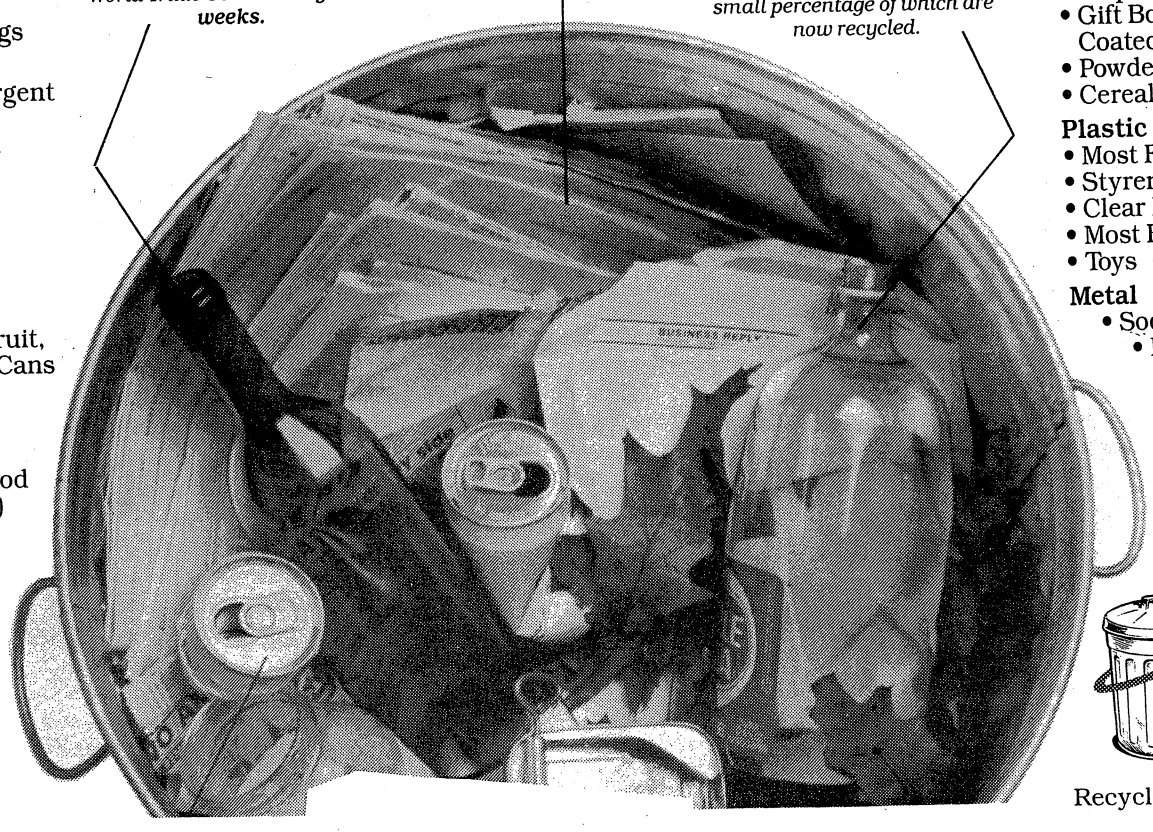
Metal
- Bi-Metal Cans such as Soup, Fruit, Vegetable, Juice and Pet Food Cans
- Aluminum Products such as Clean Foil and Foil Pans

Glass
- All Clear and Colored Glass Food Containers (with lids removed)

*In the U.S., we throw away enough glass bottles and jars to fill both towers of New York's World Trade Center **every two weeks.***

***Every Sunday,** more than 500,000 trees are used to produce the 88% of newspapers that are never recycled.*

*Americans go through 2.5 million plastic bottles **every hour,** only a small percentage of which are now recycled.*



What's Not (Currently) Recyclable*

Paper
- Magazines and Junk Mail
- Disposable Diapers
- Gift Boxes or Any Boxes with a Coated Surface or Color Printing
- Powder Detergent Boxes
- Cereal and Most Other Food Boxes

Plastic
- Most Food Containers
- Styrene Foam
- Clear Plastic Wraps
- Most Food Wrappers
- Toys

Metal
- Soda Bottle Caps
- Metal Lids From Other Containers

Glass
- Glass Containing Lead such as Auto and Window Glass
- Light Bulbs
- Pottery, China and Glassware

*Markets for recyclables fluctuate with supply and demand. And, as new technologies to recover reusable materials are developed, new markets will become available and more items will be recyclable.

Operation Separation

Recycling Hotline (315) 425-2412

RECYCLING

cont. from page 2

Even with major public participation and such high disposal costs, after two years of voluntary recycling Seattle has realized a 28 percent reduction in its waste stream. Though it is a substantial reduction, it is still far from their goal of 60 percent.

HOW ABOUT JAPAN?

Even in Japan, where recycling is considered most successful, it is only part of the answer to trash disposal. More than 70 waste-to-energy plants, located throughout a country the size of California, incinerate 50 percent of the total trash produced. Machida City, believed to be Japan's top recycling community, recycles 65 percent of its waste by requiring its residents to sort their trash into seven different categories. Once a week, residents exchange a week's worth of newspapers for rations of tissue paper, napkins and toilet paper. In this way, they have achieved a waste reduction of 95 percent in newspapers, 50 percent in glass and 70 percent in steel and aluminum. And in spite of this, they still incinerate 34 percent of the total amount of trash generated.

Our studies have shown that the majority of Onondaga County residents are willing to sort their trash, but as the number of categories increases, the participation rate decreases dramatically. That is why our mandatory recycling program will require that trash be sorted into only two categories — recyclables and non-recyclables. By making recycling easy, we hope to encourage everyone to participate in the program, so that we can recycle as much or more than programs that are more complicated.

WASTE-TO-ENERGY DEPENDS ON RECYCLING

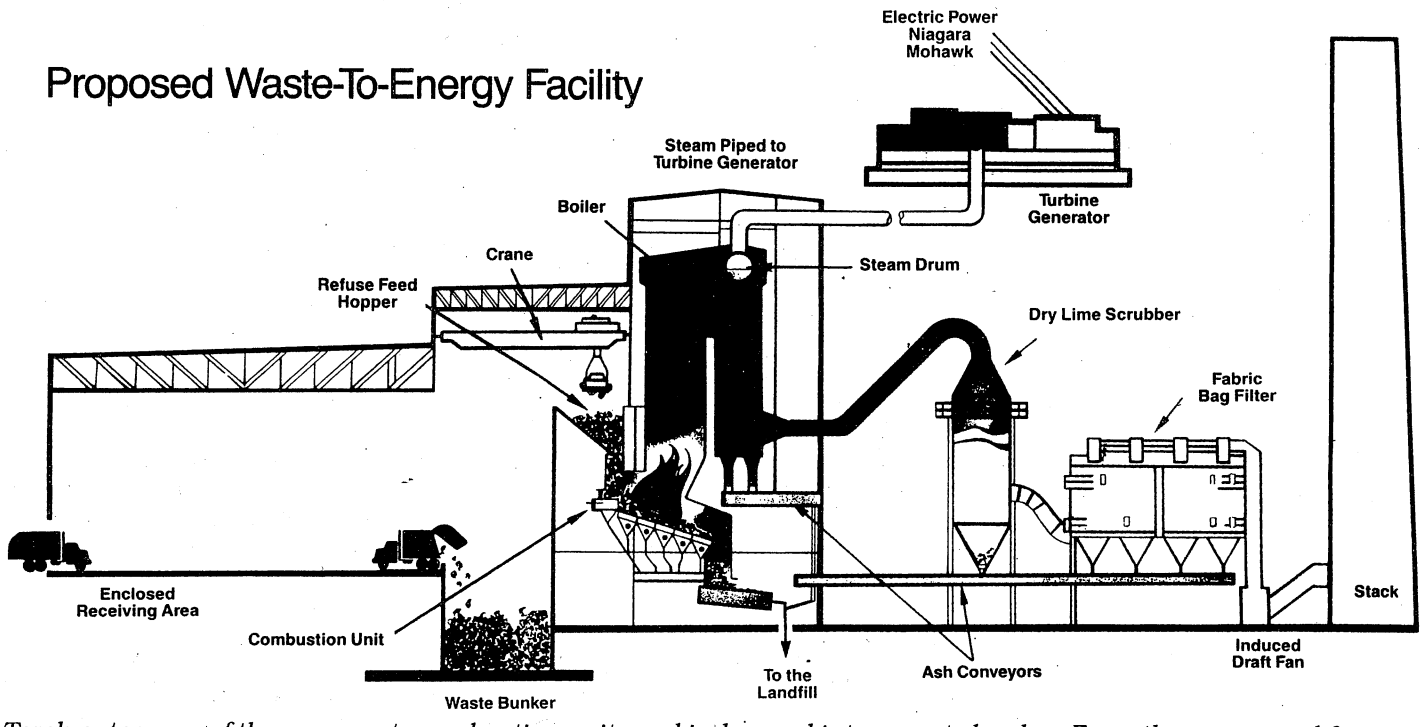
Concerns have been raised that the waste-to-energy plant will discourage us from recycling. In fact, the size of the plant is an incentive to recycle. The plant will burn an average of 850 tons of trash per day for an annual capacity of 310,000 tons. Today, we generate over 1,000 tons of trash per day. If we don't recycle at least 33 percent, we'll have too much trash for the plant to handle and we'll have to use scarce landfill space for raw garbage.

Concerns have also been raised that a significant decrease in the amount of trash, resulting from a concerted recycling effort, would mean that the plant might not be able to burn at the high temperatures needed to minimize emissions. This should not be a concern for two primary reasons:

- When we analyzed our waste stream, we calculated a 33 percent reduction through recycling, then analyzed what was left for available BTU's, which measure the available heat energy. The non-recyclable trash was found to have 6,000 BTU's per pound, which is higher than the average and more than enough to fuel the plant.
- The waste-to-energy plant is composed of three totally separate units. Should a decrease in the supply of trash become long-term, it is possible to shut down one of the plant's three combustion units, thereby allocating more trash for the other two. Having less trash is less of a problem than having too much trash.

To insure that a priority is placed on recycling in our program, the law governing recycling mandates that no recyclables can be diverted to the waste-to-energy facility to maintain the volume of trash processed.

WASTE TO ENERGY



Trash enters one of three separate combustion units and is dumped into a waste bunker. From there, a crane lifts it into the combustion chamber where it is burned, heating water in a boiler and producing steam. The steam passes through a turbine generator and produces electricity. Exhaust gases pass through a system a dry lime scrubbers and fabric bag filters where they are cleaned of 99.5% of pollutants. The gases then exit the plant through the stack. Ash is taken by truck to a lined landfill.

BECAUSE WE CAN'T RECYCLE EVERYTHING

Even after we have reduced our trash and recycled everything we can, we will still have more than half of our trash (by volume) left. With landfill space growing scarce, we need to further reduce this volume as much as possible to conserve space in our new landfill. A waste-to-energy plant will reduce the volume of the remaining trash by 90 percent, leaving ash that will stretch the life of a landfill from five years to an estimated twenty-five years. In our case, the waste-to-energy facility is a "mass burn water wall" resource recovery plant to be constructed on Rock Cut Road in the Town of Onondaga.

The mass burn technology is a reliable, proven method of trash disposal, used in Europe since 1925 and in the United States since 1970. Two-thirds of the waste-to-energy plants now being planned in the United States utilize the mass burn technology.

MASS BURN — HOW DOES IT WORK?

Trash is unloaded from trucks into a waste bunker. From there a crane lifts the trash into the combustion chamber, where it burns at approximately 1,800 degrees Fahrenheit, the temperature required to destroy many harmful compounds. The combustion process also "binds" potentially harmful substances to the ash. Meanwhile, an air intake system pulls air from the waste bunker into the combustion chamber and prevents odors from escaping.

Burning trash heats a boiler filled with water, producing steam that, in turn, passes through a turbine generator. The resulting electricity is sold to Niagara Mohawk. Exhaust gases that are formed in the process pass through a computerized emission control system of dry lime scrubbers and fabric bag filters. The system cleans the gases of 99.5 percent of particulates and other pollutants and prevents them from entering the atmosphere through the stack. Those emissions that do exit the plant through the stack are dispersed into the atmosphere and diluted over a wide area with no significant effect.

WHAT ARE THE TRADE-OFFS?

A health risk assessment was conducted at the county's request to determine the theoretical maximum effect of the waste-to-energy plant at the location of maximum exposure to plant emissions. For the purposes of this study, maximum theoretical exposure was defined as the cumulative effect of the following:

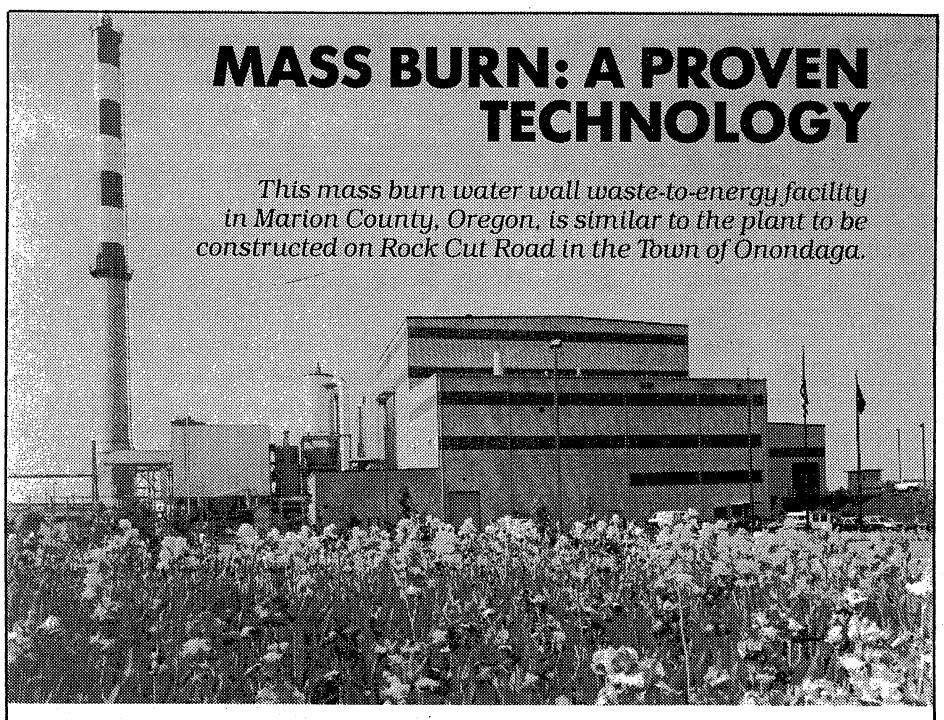
- A person of frail health• Breathing the most affected air for 70 years• Being breastfed as a child by a mother affected to the maximum theoretical extent• Playing in and eating the most affected dirt as a child• Drinking the most affected groundwater• Eating beef and drinking milk from cows grazing at the theoretical point of maximum impact• Eating vegetables grown at the theoretical point of maximum impact• Eating fish from the most affected bodies of water

The study intentionally overstated the potential for real exposure, so that any true risk would be even less, and measured the risk to human health above and beyond that already present in everyday life. It concluded that the risk over 70 years with the plant operating at 115 percent of capacity, 24 hours per day, 365 days per year, would be an additional nine cases of cancer in 1,000,000 people. Compare this to the normal lifetime risk of cancer — 440,000 cases in 1,000,000. In actuality, the health risk from the waste-to-energy facility is less than that of drinking chlorinated tap water.

What's left after the incineration process is ash, which will be deposited in a specially designed, lined landfill. Although minute amounts of metals, such as lead, mercury and cadmium, are contained in the ash, these same metals are also present, in some form, in items we use every day. These substances are present in batteries, in the color inks used in magazines and in many kinds of plastics. At this point, we've minimized as many of them as possible by recycling, by reducing household hazardous waste through

cont. on page 4

MASS BURN: A PROVEN TECHNOLOGY

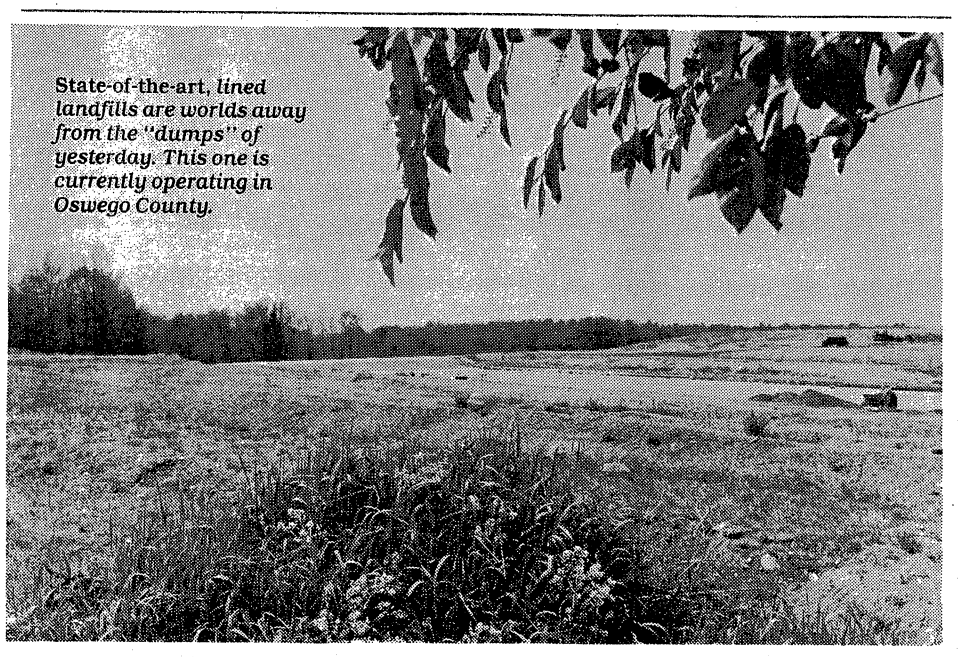


This mass burn water wall waste-to-energy facility in Marion County, Oregon, is similar to the plant to be constructed on Rock Cut Road in the Town of Onondaga.

Below is a list of mass burn water wall waste-to-energy facilities currently in operation in the United States. In addition to these, 15 plants are currently under construction and 31 plants are in the planning stage.

Location	Start-Up Date	Location	Start-Up Date
Commerce, CA	1987	Rochester, MN	1987
Bristol, CT	1988	Claremont, OH	1987
Brandon, FL	1987	Concord, NH	1989
Pinellas County, FL	1983	Albany, NY	1982
Savannah, GA	1987	Peekskill, NY	1984
Chicago, IL	1970	Tulsa, OK	1986
Baltimore, MD	1985	Marion County, OR	1986
Millbury, MA	1988	Nashville, TN	1974
North Andover, MA	1985	Alexandria, VA	1988
Saugus, MA	1975	Hampton, VA	1980
Jackson, MI	1987		

LANDFILL: ENGINEERED FOR SAFETY



State-of-the-art, lined landfills are worlds away from the "dumps" of yesterday. This one is currently operating in Oswego County.

Even though we can reduce our trash through waste reduction, recycling and incineration to approximately 10 percent of its original volume, we still need a landfill facility. A site on Brickyard Road in the town of Van Buren has been selected as the proposed location of a lined landfill for incinerator ash, construction debris and some raw garbage. Additional study and testing will determine whether the site can, in fact, be used.

COMPLICATED PROBLEM — DIFFICULT CHOICES

The selection of the landfill site has been one of the most difficult decisions to make. A lack of understanding of modern, lined landfills has caused the issue to become one highly charged with emotion. While no one wants to live near a landfill, it is unrealistic to think t' we can haul our trash out of state t e landfilled. With trash disposal a world-wide problem, who would be willing to take our trash? And it is *our* t n. Our responsibility.

Operating in conjunction with the waste-to-energy plant, our landfill will last for 25 years. It will be surrounded by a landscaped "buffer zone" designed to beautify the area and shield neighboring residents from any noise or disruption.

A LANDFILL WITH A NEW PRIORITY

Solid waste disposal engineers have learned a big lesson from "the old days" and the landfills that still haunt us. The first priority of modern landfills is to protect the environment and the health of those living around them. Our landfill's liner will be approximately eight feet thick and constructed in multiple layers. There are four liner systems:

- The first system is composed of a network of leachate collection pipes surrounded by gravel and sand. This network rests on top of a liner of dense, impermeable plastic about the thickness of a quarter.
- Beneath the liner is a second system composed of a two-foot thick layer of clay.
- Third, beneath the clay, is a second set of pipes to detect leakage, should it occur, and a second plastic liner.
- Finally, a one and a half-foot ck layer of clay, placed on top of the naturally occurring soils, forms the bottom layer of the liner.

LEACHATE — COLLECTED, MONITORED, CONTROLLED

Leachate is a major concern in a landfill containing raw garbage. Even though there will be a relatively small amount of raw garbage in our landfill (waste that cannot be recycled or incinerated), it is important to understand how leachate is formed, controlled and removed.

Leachate forms when rain or snow drains through garbage as it decomposes, gradually becoming a dilute acid. As the leachate passes through the garbage, it slowly dissolves metals and carries organic and petroleum-related chemicals to the bottom of the landfill. Our recycling and separation programs are the first and most important steps in preventing leachate from becoming a problem, since these programs can greatly reduce the amount of potentially harmful waste in our garbage.

What leachate is produced seeps to the bottom. In an unlined landfill, it can pass into the soil and eventually enter the groundwater. But, in our landfill, it will flow into collection pipes and be carried away to a sewage treatment facility as required by the New York State DEC. There, it will be diluted by the millions of gallons of water that pass through the plant daily, becoming essentially harmless.

Any leakage in the first plastic liner that eventually seeps through the clay liner will be detected and monitored in the second system of pipes. Below this system, a second plastic liner and layer of clay further protect the groundwater. Finally, wells will be placed around our landfill and closely monitored for the presence of any leakage. If leachate is detected it can be pumped from the wells for treatment. This system is the most complete and sophisticated groundwater protection available.

SEALED FOR PROTECTION

The landfill will be worked in sections. So that raw garbage does not attract birds or rodents, it will be covered with a layer of soil at the end of every day. When a section is full, it will be capped with a layer of impermeable plastic and clay to keep out any additional moisture. Excess moisture contained in the section will be collected by the leachate control system. What will remain is material which, sealed off from air and water, is stable. Each section will be continuously monitored by the leak detection system, while the landfill is in use and for 30 years after it closes.

HAZARDOUS WASTES DON'T BELONG IN YOUR TRASH

We rarely think of household products as being hazardous waste, but, very often they are. And, even though it makes up less than one percent of our waste stream, household hazardous waste can have negative impacts on trash disposal, whether in a landfill or a waste-to-energy plant. Items such as batteries and automotive tires, for example, represent a particular disposal problem that will receive more attention in the future.
The time to deal with these substances is before they become a part of the waste stream. After the mandatory recycling program goes into effect, the county will sponsor periodic "drop-off" times for household hazardous waste. By taking household hazardous wastes to a designated collection area, we can prevent them from entering our waste disposal facilities and allow them to be disposed of properly and safely. These substances include:

- Automotive fluid & batteries
- Paints & paint thinners
- Garden supplies
- Housecleaning supplies

The easiest way to dispose of hazardous waste is to use it all for its intended purpose, or give it to someone else who can use it. Leftover paint can be taken to a paint exchange set up at the Syracuse Department of Public Works recycling drop-off center on Canal Street Extension. Call the D.P.W. at 448-8554 for more information.

THE PAR Y'$ OVER

Onondaga County been getting a real bargain when it comes to trash disposal. At $28 per ton, our dumping fee at the Seneca Meadows landfill is considerably less than the cost of trash disposal for most other communities. But, when the County's contract with Seneca Meadows expires, the price that we will have to pay will be much higher. And additional costs will be incurred for the collection of recyclables.

Although the full cost of the Solid Waste Management Program will not be known for some time, estimates based on comparable systems in other communities project our costs to be between $60 and $80 per ton — considerably less than the $100 per ton it would cost to landfill our trash out of the county.

Regardless of the method, trash disposal costs will never again be as low as what we have been paying. A number of factors guarantee that trash disposal will soon become a major expense for all communities: concern for the environment and human health and safety; the tightening of state and federal regulations; and the scarcity of landfill sites. By taking a more responsible attitude toward the trash we produce — reducing and recycling as much as possible — we can all work toward keeping our disposal costs down.

"TOXIC" ASH — WHAT DOES IT REALLY MEAN?

The end-product of trash incineration is often referred to as "toxic ash." But the word "toxic" is misleading. Whether a substance is toxic or not is determined by the quantity of the substance absorbed or consumed. In large enough quantities, the most common substances are toxic. Few would dispute the medicinal value of two aspirin, yet a whole bottle would send you to the emergency room. In large quantities, salt can be toxic. So can vitamins.

Dioxin is an example of a toxic substance that is considered a cancer-promoting compound. Dioxin is an organic chemical that forms as a result of the combination of chlorine atoms and benzene atoms. It is found all around us. Dioxin is present in almost everything that is white paper, including this newsprint, due to the bleaching process that makes it white. But this newsprint poses no health risk to us because the amount of dioxin present is so small.

Dioxin is also found in the emissions of waste-to-energy plants, and the amount is strictly regulated by both the Environmental Protection Agency and the New York State Department of Environmental Conservation. The amount emitted from our mass burn facility will not exceed 2 nanograms per dry standard cubic meter. (A nanogram is equivalent to one-billionth of a gram. In other terms, a nanogram is to a pound as a second is to 1,438 years.) In fact, there are 20 million times more carcinogens in a dinner portion of broccoli than in the Environmental Protection Agency's allowable daily dose of dioxin — and that's not including any pesticide residue!

So, many substances are potentially toxic when present in a sufficient quantity. But to actually be toxic, there must be some way for the substance to be inhaled, absorbed or ingested. Ash from the waste-to-energy facility will contain elements that, if consumed in sufficient quantity, could be toxic. But the ash will be deposited in a landfill specifically designed and closely monitored to seal off any potentially harmful substances and prevent them from coming into contact with people or animals. Although some municipalities have chosen to deposit ash in unlined, unmonitored landfills, ours will be disposed of with utmost attention to protecting the health and safety of the community.

WASTE-TO-ENERGY *cont. from page 3*

special collections, and by maintaining the proper temperature during the burning process. The air filtering system makes sure that little of these substances escapes into the air, and as much as possible is bound to the ash, where it can be safely disposed of in our new landfill.

ALTERNATIVES TO MASS BURN

Because "resource recovery plant" is a generic term encompassing several different types of waste-to-energy plants, our proposed facility is often confused with other technologies. Resource recovery plants are divided into three basic types: mass burn facilities, refuse-derived fuel (RDF) plants, and modular facilities, which use a technology similar to mass burn but are usually smaller in size.

The RDF plant was studied as a possible alternative during the planning stage of our program, but was not selected for several reasons. RDF systems typically call for the trash to be shredded and then mechanically sorted into various combustible and non-combustible components. Because the sort is mechanical, it is not as efficient in separating out the recyclables and some of them are incinerated. And because the trash is shredded, any resulting recyclable material is of a lower quality and less desirable for recycling. Equally important, RDF technology has not proven to be as reliable as the mass burn technology.

SOLID WASTE MANAGEMENT PROGRAM ONONDAGA COUNTY

A County of Onondaga/City of Syracuse Program
c/o Division of Research & Communications
John H. Mulroy Civic Center, 13th Floor
421 Montgomery Street
Syracuse, New York 13202-2983
(315) 425-3421

APPENDIX B – Responsiveness Summary

Comment Category	Number of Comments
Disposal Alternatives	14
Economics	8
Environmental Justice	1
General	1
Greenhouse Gas Emissions	3
Household Hazardous Waste	1
OCRRA System	6
Public Education	6
Recycling / Jobs	18
Regional Partnerships	23
SEQRA	1
Support	3
SWMP	5
Waste Stream	2
WTE Facility Emissions	19
WTE Facility General	9
WTE Facility Operations	8
TOTAL	128

Comment Letter ID	Comment ID	Comment Category	Summary of Comment	Response
1	1C	Disposal Alternatives	The question is, should non-recyclable trash get burned or landfilled? For the overall region, which option results in the lowest overall environment impact? Which is worse: a small increase in WTE emissions or the negative environmental impacts caused by constructing acres of landfills that have the potential to contaminate both air and water supplies over the landfill life. What is the expected life of a landfill and what are costs of treating landfill leachate and collecting landfill gas over the landfill life?	G.3
9	9A	Disposal Alternatives	I have learned from my many years with Covanta that this County produces a lot of trash. I was overwhelmed when I saw how much is disposed of daily. As a parent and a homeowner I wondered where can we possibly put all this trash? In the ground? And then what issues would we have? I highly suggest to anyone here to have the opportunity to visit the facility to do so. It is astonishing what is put to the curb weekly.	G.3
12	12B	Disposal Alternatives	I think we really ought to take a look at transporting garbage and ash, you know. And I thought when I first read about it, that really sounds like that's a really smart idea. Bring the trash in, take the ash away. And then I drove by the place and I said, hey, there is a railroad track here, not far away at all. And that's the cheapest way to transport stuff. Maybe we wouldn't have to spend all the money on building up this other area. Maybe we could just put it on a rail and get it out of here real easy. And cheaper. No tolls. Just a lot easier sort of a thing.	Comment noted.
13	13A	Disposal Alternatives	However, my first question really is about lock-in. That I'm wondering does the County want to be in a 20 year position of lock-in with any agreement or negotiation that cannot be gotten out of? As a practical matter that doesn't make good business sense.	G.4
15	15B	Disposal Alternatives	Now I worked out the numbers on the difference between taking the garbage next year, making the deal with Covanta, and versus what it would cost to get rid of it down to Seneca Meadows or High Acres. The number I come up with, and I've given this number up, nobody challenged it yet. It's been 20 years, the taxpayers in this County will save $288 million just by getting rid of the flow control we have in effect now. The haulers, most of them have their own trailers, and most of them already paid for it out of the residue taken down to Seneca Meadows. Items that aren't, material that isn't covered by the flow control law. So if you get rid of the flow control law there would be no problem... Now scare tactics are used in this County...If we let Covanta buy the plant they could buy it for a dollar, and they can import all the garbage from anywhere they want in the country, because the Supreme Court says they can do that. That happens to be true. But what's not true it's just not a dollar, they would have to pay $42 million to pay off the existing bonds on the plant... The other scare tactic they use is that if Covanta buys it, which they won't. But let's say they do. They can take garbage from anywhere in the country. The only problem is this, when those trucks come down the Thruway from Peekskill and those counties down along the Hudson River, they pass on the Thruway right through Onondaga County. So when they get that far, they would have a choice, if Covanta was in the business. And that would be to turn off, take their trash and deliver it for $89 a ton or continue down the Thruway an additional $7.00 a ton cost and dumping it for $22.	G.4
16	16C	Disposal Alternatives	Onondaga could save greenhouse gas and transportation costs by using the landfill in Onondaga County for its waste disposal needs.	S.4
16	16J	Disposal Alternatives	Onondaga and Cortland can do much better in managing their waste. Much better than tying our future to an aging technology and toxic ash.	G.3
19	19C	Disposal Alternatives	Because right now even though OCRRA does one of the best jobs in the country for recycling, there has to be somewhere to put the stuff that can't be recycled. You have a landfill, where you put garbage in the ground. And garbage in the ground can leach and cause very severe impact to your health. That's also been cited. .. If that waste can't be recycled it is an alternative. The only alternative for that waste is to bring it to a landfill.	G.3
20	20A	Disposal Alternatives	The purpose of the SWMP is to look at current practices and plan for the future to minimize impact on health and environment. It should provide a look at alternatives and financial advantages/disadvantages of those alternatives. There is no such discussion in this document.	G.3
20	20K	Disposal Alternatives	DEC Goal should be Zero Waste Platform when considering disposal options.	Comment noted.
20	20R	Disposal Alternatives	IT IS TIME TO REVISIT OUR SWMP TO INCLUDE ALTERNATIVES TO INCINERATION.	G.3
21	21C	Disposal Alternatives	Duplicate Comment: The purpose of the SWMP is to look at current practices and plan for the future to minimize impact on health and environment. It should provide a look at alternatives and financial advantages/disadvantages of those alternatives. There is no such discussion in this document.	G.3
21	21G	Disposal Alternatives	Duplicate Comment: DEC Goal should be Zero Waste Platform when considering disposal options.	Comment noted.
22	22H	Disposal Alternatives	This last thought leads to another concern that the Plan did not explore in sufficient depth and research the many, many initiatives done in this country and world-wide to deal with waste materials issues. I have no sense from this document that the planners are familiar with the decades of work done by organizations like the Institute for Local Self-Reliance (www.ilsr.org) and individuals such as Paul Connett (his book is The Zero Waste Solution: Untrashing the Planet One Community at a Time, 2013). In fact, a simple internet search, as many of us have done, turns up lots of information relative both to the hazards of a WTE (incinerator)-based solution and the numerous alternatives out there – many more successful alternatives than presented in the Plan's alternatives section.	G.2, G.3
1	1F	Economics	I have one question regarding risks, before I can support extending the contract with OCRRA. The facility apparently has a debt of $45 million. As owner, I assume that OCRRA is paying for this debt out of revenues from tipping fees and WTE electric sales revenues. What will be the impact on tipping fees, Onondaga County taxpayers, and recycling programs if OCCRA remains the WTE owner and the WTE becomes inoperable for an extended period, or requires major unforeseen repairs? How would this change if Convanta purchases the facility?	G.4, S.6
4	4D	Economics	Having modern waste disposal facilities and future viability for these operations makes us more attractive to keep, grow and attract new jobs and economic activity to our community. The financial stability of OCRRA is important, because it provides predictability and cost for residents and businesses. Predictability for budgeting and a cost of operations is useful and attractive to businesses.	Comment noted.
8	8E	Economics	And what I'm concerned about, that this is going to cost us much more money than we can save at all in any way by burning trash. Because we're going to have to clean it up, just like we had to clean up the Onondaga Lake. All this pollution of air, soil and especially water, our reservoir in Jamesville, and Clark Reservation, all those other areas, and especially also health costs of the residents like myself.	Comment noted.
14	14C	Economics	Point Number 2 is that this document, which makes lots of good points, I don't want to disparage it, but it doesn't talk about a essential, which is money. How much will it cost? No mention whatsoever of cost. We need an honest evaluation of cost. How can we have a Plan that ignores that? Economic considerations have to be taken into account. Not only includes the cost of residents of the County and the institutions and businesses in our County for waste disposal, but it should also include the economic costs associated with increased health exposures -- expenses rather, associated with the operation of the incinerator. For the transport of solid waste and ash and all that. And furthermore, economics should look into job creation associated with the various forms of waste disposal... And recycling is, well reduction and recycling is by far the cheapest alternatives. You get paid for materials that you recycle. Other average costs, $44 a ton for composting, $61 a ton for land-filling. Incineration $92 a ton. If we commit to incineration we're going to see the highest possible cost.	S.5
15	15A	Economics	Right now the price to get rid of garbage, this next year is $89 a ton. A lot of you people don't know it but they raised it $10 in anticipation of giving more goodies to Covanta.	S.7

19	19D	Economics	At the facility OCRRA is able to, we recycle it into energy. And those energy revenues support all of the OCRRA programs that we have all come to love in the community, such as household hazardous waste days, such as the additional shredding events, shred-o-ramas, all of those programs you hear and see through OCRRA are all financed through the revenues from the plants... None of OCRRA's revenue are coming from the Onondaga County Legislature, as you all know. OCRRA is entirely funded by the revenues associated with the plant... And as a resident and taxpayer I'm very pleased that my taxes do not include any additional fees to support all of the programs that OCRRA provides me as a resident of the community.	Comment noted.
22	22E	Economics	The section (7.2, page 68) on funding covers much of the required territory. However, more emphasis should be given to ways of overcoming the limits to funding relative to taxing powers, which may require restructuring OCRRA to some extent.	Comment noted.
22	22F	Economics	No system like this should be tied in any way to a "profit" standard. The economic viability of any part of the system, such as the incinerator, should not depend on its ability to generate a "profit" or cover its costs. Such discussion inevitably leads to a corruption of the goals of Reduce, etc. if we have to generate, or import, more waste to cover the cost of operating an incinerator. Perhaps a smaller one should have been built, or none at all. Be as it may, better to subsidize the current facility until it can be replaced with other systems rather than feeling we have to cover its costs through direct fees, etc. The discussion is thin and does not cover issues of obsolescence of products through wear and tear, technology changes, or changes in desire. All of these impact the waste stream.	Comment noted.
13	13C	Environmental Justice	There is always residual and it certainly is about air, not only soil and water. This is an environmental justice issue, and I don't believe in forcing toxic residues or waste on anybody, whether it is someone from Cortland County who is receiving ash or someone living in the Valley of Syracuse who is unknowingly breathing, you know, things they don't want.	S.17
2	2A	General	It is my hope that the specialists in the business will do what's best for all concerned.	Comment noted.
14	14E	Greenhouse Gas Emissions	And finally, environmental considerations have been partially addressed but not fully addressed. The inflated claims made about the greenhouse gas impacts on incineration compared to land-filling. For one thing the power generated by the plant does not replace a lot of power generated by fossil fuels. That's the claim that's being made. But most of our electricity comes from nukes. Nuclear power, 80 percent. That figure is from Mr. Carrick over at the Regional Planning and Development Board. And the other 20 percent, a lot of it is hydroelectric. So we're not getting a benefit. And finally, I would like to refer to a comparison of CO2 emissions, so we're concerned about greenhouse gases, which we should be. The amount of emissions from a municipal solid waste fired incinerator is about 3,000 pounds compared to 2,200 pounds for coal. Coal is the next worst. Oil is at 1,500. Natural gas is at 1,200. This is not an improvement, folks.	S.12
20	20J	Greenhouse Gas Emissions	Global warming impacts must be included in the SWMP as NYSDEC must develop climate pollution remedies by 2016.	S.11
21	21F	Greenhouse Gas Emissions	Duplicate Comment: Global warming impacts must be included in the SWMP as NYSDEC must develop climate pollution remedies by 2016.	S.11
20	20F	Household Hazardous Waste	Mandate toxic waste prevention program AND YEAR ROUND COLLECTION SYSTEMS. CREATE A Put or Take Facility	S.16
4	4B	OCRRA System	Our community has distinguished itself nationally for our outstanding recycling programs and for progressive modern waste management. It's important for us to continue these efforts and the reputation we have deservedly earned.	Comment noted.
5	5C	OCRRA System	Another statement was made about the world class status of the OCRRA and recycling. They have won awards and they have done a good job as far as it's done, given the fact that they've had a lot of potential recycling diverted from their operation into the trash-burning plant. But world class now, as we've heard when an expert was brought to town recently to talk about the promising new ventures in recycling, world class now means that real progressive communities are shooting for zero waste. We're nowhere near that. And I don't see how, you know, having an extensive burning program is going to make us world class any longer.	G.2
12	12E	OCRRA System	I really hope that we will stick with that proposal that the federal government gave us in ELC, ETL 27 0. 106, the Act of 1987, the hierarchy of solid waste management. And respect that, and really know that there has got to be a better way than the way we're doing it.	G.6
20	20C	OCRRA System	THE New York STATE SOLID WASTE MANAGEMENT ACT: a) First, to reduce the amount of solid waste generated; b) Second, to reuse material for the purpose for which it was originally intended or to recycle the material that cannot be reused; c) Third, to recover, in an environmentally acceptable manner, energy from solid waste that cannot be economically and technically reused or recycled; And d) Fourth, to dispose of solid waste that is not being reused or recycled, or from which energy is not being recovered, by land burial or other methods approved by the department. THIS IS NOT WHAT IS BEING PLANNED. We will be fined if we do not produce enough waste!	G.6
20	20D	OCRRA System	Pg. 8 "While OCRRA's CSWMS is already highly consistent with the State's solid waste management hierarchy, OCRRA strives for continuous improvement for even greater consistency with the hierarchy (i.e., increased waste reduction, reuse, recycling, and composting)". The priorities identified by this SWMP update does not present an opportunity to set the bar even higher: OCRRA NEEDS TO REACH THE BAR-WASTE REDUCTION DOES NOT MEAN BURNING TO REDUCE VOLUME.	G.3
20	20H	OCRRA System	Onondaga County and OCRRA strive to serve the community and member municipalities with an economically, environmentally, and socially sustainable system for comprehensive solid waste management over the next 10-year planning horizon-NOTE: THIS CONTRACT IS FOR 20YEARS- Where are the financials on the true costs of incineration versus achieving zero waste? This SWMP update DOES NOTHING TO provide the road map BUT FOLLOW THE SAME OLD SYSTEM. WE BELIEVE THAT OCCRA SHOULD DO AS IT WAS ENVISIONED: waste reduction, reuse, recycling, and composting.	G.2, G.4, G.6
11	11A	Public Education	I would like to discuss the education section of the actual Solid Waste Management Plan that's proposed, which is on page 81 Section 8.6.3, which is Implementing Interactive and Engaging School Curriculum. The educational program proposed or that's on the website now intends to reach over 12,000 3rd through 5th grade students, that's what it states, with common core aligned lessons, videos and games. I've had a chance to review the content of the curriculum materials on the site. The videos, the games and the lessons. And I find that there are several positive messages to our students that are around composting,that are around recycling, reduction and reuse. However, the section on waste-to-energy does not give our children the full story, and the understanding on waste-to-energy facilities. The continued message to the students and the videos, games and materials that are produced on the website for the lessons in grades 3 through 5 is that waste-to-energy or incineration is the answer for all unrecyclable or non-reusable items. By burning, we're doing the best we can. And that is simply not the reality. The message has been sent to our youth and their teachers for several years, and for specific reasons... Nowhere in the materials does it really discuss a plan for zero waste. And to think about asking our kids based on the inputs from the videos to think about how we would get there. That's true critical thinking. The lessons on incineration and waste-to-energy are very rote, repetitive on the topic of glorification of incineration. How clean and how healthy it is for the environment. And it glorifies the mounds of energy that's created. It states in the video that there is no harm to our environment from burning trash. It also states that burning trash has a positive impact to our environment, several times in the videos and in the materials. This is simply not a true statement. And it's a message that's being sent to the youth of our County. The videos also say that the waste-to-energy facility has a high-tech pollution control system that keeps our environment clean and healthy. If we're going to make a statement like that to kids, what do we expect them to believe? The expectation from those types of statements is that everything is just fine. What the presentation materials that our kids are being exposed to doesn't show are additional facts about incineration, such as that waste-to-energy industry's sales pitch emphasizes the energy production of a waste-to-energy facility, even attempting to portray it as green or renewable energy. The sales pitch for the waste-to-energy industry does not address any human health concerns at all. We are requesting three things. 1) That the educational materials be re-evaluated to show the entire picture of waste-to-energy incineration; positive and pitfalls for the children of Onondaga County. Let's tell them the truth.	G.7
17	17A	Public Education	First of all, OCRRA has ads running on TV that say that they've taken 325,000 tons of waste out of the waste stream by burning it in the incinerator. Just not true.	G.7

20	20E	Public Education	Develop interactive and engaging school curriculum THAT EXPLAINS THE HAZARDS AND COSTS OF INCINERATION AND IT'S IMPACT ON CLIMATE CHANGE. Education must include information on pollution generated from trash disposal AND STEADY FUNDING FOR GREEN PROGRAMS.	G.7
21	21B	Public Education	Under 3.1 Public Education: All of the materials on the WTE facility should be reevaluated. The materials are misleading to the public. They glorify the Waste to Energy plant as a source of renewable energy. This is just not so. The public should also be informed that the plant releases several emissions that could be harmful to the environment. The commercials are very misleading. Powering 30,000 homes costs taxpayers much more than the actual cost of that energy. It is really important that the public understands this. They are misled in the advertising campaigns.	G.7
21	21D	Public Education	Under 8.6.3 Education: The educational materials that center on Waste to Energy need to be re-evaluated. The materials give students a false sense of the concept around these plants. The children should also be informed that the plant releases several emissions that could be harmful to the environment. A common core lesson should revolve around students learning about all aspects of the incinerator and forming their own opinion of what would be the best technology or methodology through research.	G.7
22	22G	Public Education	A major fault of this section, given a systems view, is the assumption that existing and slight changes in the inputs and processes are all that are needed and that nothing can, or should be done, to impact these components. Yes, there is a discussion of the educational efforts of OCRRA with respect to recycling but the focus is too narrow. What can be done to encourage consumers to buy less or use what they have better and longer. A more thorough approach would look at the inputs and processes with greater accuracy and precision with an end to reducing demand. Social and educational changes might have to be encouraged to make significant changes in the waste system. As an example, schools have converted from non-disposable trays, plates, and flatware, etc. to plastic disposables. What if OCRRA worked with local schools to reduce the use of disposables? Has this been done in other communities? We have no idea based on the limited scope of the Plan.	S.8
5	5D	Recycling / Jobs	And to look into establishing recycling as a true economic engine for our community. It's proven in other places that it creates jobs. And it's much more beneficial for people like myself and my in-laws and my friends and family that have to put up with what's coming out of the stacks over on Rock Cut Road.	G.2
8	8B	Recycling / Jobs	We do not have any new jobs that we create from burning trash. We can create jobs from recycling and new programs for recycling and making sure that we have clear waste programs. But we are not doing it with burning trash, it has absolutely no value.	G.2
8	8C	Recycling / Jobs	We have to move into the 21st century. And we have to embrace the new technologies that we have wonderful facilities for, like ESF and S.U. and students. And there is so much other already on the market that we can use to make sure that we take advantage of those technologies to be able to recycle more, not to expand our trash burning.	G.2
13	13F	Recycling / Jobs	Our own recycling rate is, as somebody has mentioned, not bad. It's in the what, 60 percent or thereabouts. We can go from recycling 101 to 102. We can start recycling what's called the wet stream waste. We can compost that. That is maybe 60 or 70 percent of the waste and it's not good to burn wet stuff anyway, it doesn't give a good burn. And finally, I'm a member of the Urban Jobs Task Force in Syracuse and I'm not speaking for the Urban Jobs Task Force here, but just to say that we need jobs in Syracuse, and incineration will not provide jobs. Recycling will. There are recycling industries springing up all over the country in cities which hire local residents, and they also build greenhouses. And this can build a whole eco systems of services that we haven't seen yet. We haven't seen that benefit. So until, I don't think we can say we've seen the whole menu of options there.	G.2
14	14D	Recycling / Jobs	Recycling and waste reuse generates far more jobs compared to land-filling incineration. Recycling and waste reduce creates added value as well as creating new products from old materials.	G.2
15	15D	Recycling / Jobs	The other issue is recycling. They say, well, we all want to reduce the garbage by recycling. But OCRRA stifles that. Because what will happen, if we renew the contract with Covanta there is going to be a reason to extend as much of that burning plant as they can. Because if we don't reach a certain threshold we're going to pay extra money. And nobody is going to invest in money to come up with a technology and the equipment to recycle more of a waste stream with Covanta -- or with OCRRA in the room, because you never know what OCRRA is going to do next... So my contention is, as long as OCRRA is out there with that waste-to-energy plant and they can charge this $89 a ton charges so they can subsidize their recycling, real recycling won't happen.	G.2
16	16I	Recycling / Jobs	Burning trash is a disincentive to recycling and composting.	G.2
18	18C	Recycling / Jobs	Tons of other counties and different states around the country have eliminated these incinerators and have brought in more recycling. And that's something that I think we should do here.	G.2
19	19A	Recycling / Jobs	The studies, there have been several studies that have shown communities such as the OCRRA-Covanta partnership that recycle and process and waste-to-energy facilities, they run in parallel. Meaning that waste-to-energy and recycling grow at the same effects. There have been statistics that OCRRA does a great job.	G.2
20	20L	Recycling / Jobs	Single stream recycling discourages public participation and DECREASES THE VALUE OF RECYCLING FEEDSTOCK.	S.18
20	20M	Recycling / Jobs	OCRRA must ban recyclables from being trashed-clear bags were never used, the recycling program never enforced.	S.19
20	20N	Recycling / Jobs	Wood waste -we burn it. Maximize deconstruction efforts and provide facilities to support that.	S.20
20	20O	Recycling / Jobs	Where is discussion of agricultural plastic recycling?	S.21
21	21A	Recycling / Jobs	According to Beyond Waste on the SWMP, I see nothing about burning or incineration in the plan. Why are we proposing 20 more years of burning instead of creating green jobs and moving toward a goal of zero waste. It's about educating the public to continue to reduce, reuse and recycle. That is what the education needs to focus on. Also, consultants are available that don't cost millions of dollars to help bring in companies that can recycle all sorts of things that you now burn. This creates jobs. How are you addressing the Beyond Waste by bringing in more trash and feeding the incinerator? There is very little logic in the thought process. What about Start Up NY as a way of bringing in companies who recycle several products currently in our waste stream? The current plan only scratches the surface of the Beyond Waste.	G.2
21	21H	Recycling / Jobs	Duplicate Comment: Single stream recycling discourages public participation and DECREASES THE VALUE OF RECYCLING FEEDSTOCK.	S.18
21	21I	Recycling / Jobs	Duplicate Comment: OCRRA must ban recyclables from being trashed-clear bags were never used, the recycling program never enforced.	S.19
21	21J	Recycling / Jobs	Duplicate Comment: Wood waste -we burn it. Maximize deconstruction efforts and provide facilities to support that.	S.20
21	21K	Recycling / Jobs	Duplicate Comment: Where is discussion of agricultural plastic recycling?	S.21
1	1B	Regional Partnerships	A very vocal group has been against the regional partnership with Cortland County because such a partnership would increase air emissions within Onondaga County. That is certainly a valid, but narrow and short-sighted viewpoint.	G.1
1	1E	Regional Partnerships	It is further my understanding that the proposed partnership with Cortland County would result in emissions similar to those prior to 2008. Assuming this is the case, I fully support the partnership with Cortland County.	G.1
3	3A	Regional Partnerships	However, until recycling eliminates the very real need to manage hundreds of thousands of tons of the municipal solid waste from our community, our management plans need to think regionally if not globally, and in the best interest of the environment and future generations.	G.1
4	4A	Regional Partnerships	Specifically we want to commend you for incorporating the "trash for ash" swap that has been negotiated with Cortland County into your plan.	G.1

4	4C	Regional Partnerships	We commend OCRRA, Cortland County and Covanta for their leadership in forging a win-win-win approach to our ash and Cortland's trash for several reasons: This brings long term operational sustainability to both OCRRA and Cortland County operations. Onondaga County will be able to continue our best in class recycling and special waste program and extend them into Cortland County. Covanta, having demonstrated a strong track record will continue to run the waste-to-energy facility and will make $21 million in plant upgrades starting with $6 million in enhanced pollution control and monitoring equipment. This is an environmentally responsible step, will reduce greenhouse gas emissions, equivalent to taking 15,000 cars off the road. This plan will cut ash travel in half from 80 miles to 40 miles a trip. And trucks will now travel full both ways. More waste-to-energy electricity will be generated at Rock Cut Road. Bringing in additional, up to half a million dollars a year into those operations and saving over $50,000 in Thruway tolls. My message to you is also to emphasize why this agreement makes good economic development sense and has advantages. Good government makes good sense and does not go unnoticed by the business community.	G.1
4	4E	Regional Partnerships	Modern, well run municipal services speak positively to the community and to businesses when they're looking at their decisions where to start to expand or move. Savings and avoided costs for municipalities, school districts and government entities will benefit taxpayers at all these levels. The savings from this new agreement with Cortland will be spread amongst residential households, businesses, institutions and municipalities in both counties. Also, given how precious infrastructure dollars are now, deficit reduced wear and tear on the road miles and the miles traveled, especially by heavy trucks, is an important benefit that also benefits taxpayers. We respectfully urge acceptance of the Plan with its inclusion of the new opportunities between Onondaga and Cortland County.	G.1
5	5B	Regional Partnerships	And the opposition at the time, including myself, said that you're building this way too big. If you're really serious about recycling you won't build such a large trash burning plant, obviating the ability of the recyclers to do their job. And one of the things that was told to us at the time was, well, don't worry, we'll never import trash. So I'm here some 30 years later to witness you're going back on your promises... And I urge the Legislature to not approve ash-for-trash, to keep your promises, not go back on the promises you made 30 years ago.	G.1
6	6A	Regional Partnerships	The Solid Waste Management Plan proposes adding another 25,000 tons of waste from Cortland to be processed at the facility. Since the facility is permitted by New York State DEC to process over 361,000 tons of waste annually, There is no issue with bringing in this additional waste. Even with this additional waste the facility will not be exceeding the permitted tons of the air and solid waste permits which are tied to the over 361,000 tons. Currently the facility is operating well under capacity at 315,000 tons per year, and has been for the last three to four years. With Cortland's proposed waste the facility will be at or about 340,000 tons per year, still well below the permitted capacity... I'm confident the proposed addition of bringing in Cortland County's waste will have no negative impact on the facility.	G.1
7	7B	Regional Partnerships	So on behalf of the Onondaga County Board of Directors for the Soil and Water Conservation District, we would like to lend our support to: the ash-for-trash opportunity with Cortland County. We see it as a great way to grow and expand community education and outreach programs well into the future.	G.1
8	8D	Regional Partnerships	We cannot go out and import trash from Cortland. This is just going to make our already polluted environment from and in that area much worse. Our air, our soil and water will be more polluted.	G.1
8	8G	Regional Partnerships	And this Plan that you have that you have been planning to go all the way to Cortland, I think I'm very concerned that Cortland is not going to be enough. Next place will be another County that you're going to be going to importing trash, which will bring more pollution.	G.1
8	8H	Regional Partnerships	I very much urge you today to start thinking about expanding recycling and do not approve this plan to go ahead with importing trash from Cortland County, because all we're going to create is more illness, cancer in the community among residents. Vote against, please vote against this expansion.	G.1
10	10E	Regional Partnerships	...if the Plan that's in place right now that they're proposing makes good use of the fuel, we're going to take the trash from Cortland and bring it here and we're going to bring the ash down there. As a contractor that's a win-win situation.	G.1
11	11C	Regional Partnerships	We are requesting three things... 2) That the waste amount of chemicals that are being released from the stacks of the Rock Cut Road waste-to-energy facility not be increased by bringing trash in from Cortland County or any other County to feed. 3) We are also requesting that the importation law not be changed for the sustainability of our environment and for our future generations of children.	G.1
12	12D	Regional Partnerships	And I thought, you know, okay, so there is a lot to think about. I don't think we've come to the best conclusion in the contract that I've seen. I saw that and I know we're talking now about a ten year review, but when I saw that the dump was going to last for 17 or 18 years and they had a 20 year contract, I thought that doesn't quite fit	G.1
14	14B	Regional Partnerships	And if we succeed in achieving a great reduction, and I certainly hope we do, because that's clearly the most environmentally sustainable thing to do, with this Plan we're going to be looking to fill a gap. Bringing in 25,000 tons from Cortland is not going to be enough. We're going to be hunting for more trash, because that is what incinerators are all about. You must feed them. If we do not come up with the required trash we, the County residents, have to pay a penalty, about $6 a pound. So that's point Number 1.	G.1
15	15C	Regional Partnerships	...the dollar amount that Cortland County should be paying would be $65 a ton just to break even. Any less than that would be a direct subsidy from the families of this County to the families of Cortland County. But nobody seems to know what the price is. So you know, I'd like a little transparency here.	G.1
16	16A	Regional Partnerships	Cortland Town and County officials are joining us to prevent an incinerator ash dump from being built in the recharge zone of our sole source aquifer. In shameful violation of Open Meetings laws and SEQR laws the siting process has been a sham. With numerous closed door meetings. Requested documents are continually concealed. And we were given an incomplete final scope and an incomplete DEIS. Documents were not read or reviewed but were approved. And the project has been pushed forward by officials who do not have much of a clue about what the project entails or about how much it will cost or what the likelihood is of catastrophic consequences to Cortland's sole source aquifer.	G.1
16	16B	Regional Partnerships	Incineration of some plastics causes dioxins and furans to be created. You must know that these are the most hazardous and persistent organic pollutants known to man. Dioxins and furans either go out the stack with emission or they are temporarily trapped in the ash or they are trapped in the pollution control devices. The pollution control residue then requires disposal. We don't want that stuff in our landfill, and we don't want the ash in the Cortland landfill either.	G.1
16	16G	Regional Partnerships	Additionally, if Cortland begins to recycle above the 8 percent that currently occurs in Cortland County there will not be much trash to send to the OCRRA incinerator and you will have to look further for trash.	G.1
16	16H	Regional Partnerships	There is a particularly heinous provision in the contract that is being negotiated behind closed doors between OCRRA and Onondaga County. The requirement is for Cortland to guarantee a certain number of tons of trash to OCRRA or pay a penalty per ton. This is called put or pay. And this provision has caused many localities to go into a huge amount of debt to pay penalty to incinerators when their waste streams shrink due to recycling and composting.	G.1
18	18B	Regional Partnerships	Now we plan on bringing in another County's trash. The pollution coming from the trash being burned already is enough. But bringing another County's trash is actually going to increase that amount by the amount of trucks that have to bring in the trash as well. They're letting off pollution. And as I grow up here in Onondaga County, I won't have to be worried that I might get cancer from this. And I'm really urging you guys to think about what's going to happen if we bring in another County's trash and we increase the amount of pollution in the area.	G.1
19	19G	Regional Partnerships	I am very proud to live in an environmentally responsive community, and I urge you to vote for the trash-for-ash agreement between Onondaga County, Cortland County and OCRRA.	G.1

20	20B	SEQRA	WE OBJECT TO THE NEGATIVE DECLARATION AND REQUEST THAT A FULL ENVIRONMENTAL IMPACT BE UNDERTAKEN!	S.15
3	3B	Support	The plan responsibly balances the environment, economics, and social impacts, specifically eliminating the troubling situation of a merchant facility.	Comment noted.
3	3C	Support	The plan did not create OCRRA, the waste-to-energy facility or the contract between Onondaga County and Covanta, but it does appropriately suggest how we should move forward, based on where we are at this time. I urge you to approve this update and ensure we re-evaluate in 10 years time.	Comment noted.
7	7A	Support	So on behalf of the Onondaga County Board of Directors for the Soil and Water Conservation District, we would like to lend our support to: the updated Solid Waste Management Plan... We see it as a great way to grow and expand community education and outreach programs well into the future.	Comment noted.
14	14A	SWMP	My first point that I want to raise here is that this document, we're commenting on something which is a Solid Waste Management Plan update. This is not really a Plan. This is simply an update. And the original Plan came out in 1991. Supposed to be updated every five years. That never happened. So this is the first update. That was 23 years ago, if I did the math right. A lot happens in 23 years... So what I would urge you to do is take this Plan, send it back and tell them we need a Comprehensive Plan, not just an update.	S.9
20	20P	SWMP	Why aren't the DEC comments on this plan included in this document? It would help the public versus appear that DEC is working against them.	S.10
22	22A	SWMP	A comprehensive solid waste management plan demands a broader scope than just mining the waste stream for resources and energy which would make it more consistent with the stated goals of developing a "top-performing, environmentally sound, cost-effective, financially sustainable, and comprehensive (solid waste management plan) that is a model for other planning systems." (pages 9 & 10)	Comment noted.
22	22C	SWMP	A nice visual indication of the problem is found in the typical inverted triangle hierarchy of Reduce, Reuse, and recycle with Recover and Bury. For many years a more appropriate model for planning in waste management has been the concept of materials and energy flow through the entire system. This more complete system includes inputs, processes, and outputs and needs to be addressed, more aggressively, in the Plan over a longer time-frame. The input side includes all those sources of trash that consumers acquire from food waste to plastic toys. The processes include all the things that consumers do with their stuff. And, finally, outputs are what basically show up in the liquid, gaseous, and solid waste streams. This latter portion is plainly the focus of the SWMP, seen as an "end of the pipe" approach – not a systems approach... So, Conceptually I would encourage you to go back to page 76 and add two broader levels to the Resource Management Hierarchy. One, the broadest and at the top, would be Reducing Inputs. The second, and next, would be a Process/Reduce layer. This would broaden our perspective to the larger waste issue system.	Comment noted.
22	22I	SWMP	Finally, this Plan should be withdrawn and an extension, if needed, to the Convanta contract done, don't commit to an Ash-for-Trash solution and spend more time coming up with a better plan. In this new plan, OCRRA would engage the broader community members who have been so active on these issues.	Comment noted.
20	20G	Waste Stream	Perform another waste quantification and characterization study-TO DO WHAT? INCINERATE THEM?	S.13
22	22D	Waste Stream	This document includes some general discussion of inputs is included in (Chapter 6) on future planning unit projections and solid waste changes. Population projections and per capita waste generation estimates are made based on Moody's materials (p. 57) and a single New York Times article. This begs the question of why the plan did not use local, independent demographers to make projections. They might have a clearer grasp of local development and population shift issues. Or, they could have used U.S. Bureau of the Census forecasts. And using only one article from a newspaper raises the question as to how much serious research has been done.	S.14
1	1D	WTE Facility Emissions	It is my understanding that emissions from the plant are strictly monitored and controlled and that air quality monitors in the area have not shown any unacceptable air quality conditions resulting from the WTE operation.	G.5
5	5A	WTE Facility Emissions	Many times I've had to call the hot line and tell Covanta that I smell acrid smelling foul chemical smells in my neighborhood. I had a hard time finding the number to call. I had a hard time getting them to return my calls. I still don't know what they did. They claim they did something, and eventually the smell after a few days evaporated. But it gave me pause and didn't actually instill me with the confidence in the management of the operation.	G.5
8	8F	WTE Facility Emissions	I also live within a mile from this plant. And I'm very concerned with the air pollution there. All of our health care costs. This all has to be taken into consideration by you, because you are our public officials that we elected for you to make that important decision today. So I think we have to look at much more beyond just saving money.	G.5
9	9C	WTE Facility Emissions	In the part of Jamesville where I live there are many large open fields and farm areas. It's very common for my neighbors to burn barrels or fire-pits of wood, trash and leaves. It is a fairly common practice in the area. One burn barrel can produce the same amount of emissions or pollutants as Covanta does in one year.	Comment noted.
10	10A	WTE Facility Emissions	The scrubber technology in that plant is phenomenal. It's what we needed in the Midwest, so we wouldn't pollute the Adirondacks.	Comment noted.
11	11B	WTE Facility Emissions	Waste incineration systems produce a wide variety of pollutants which are detrimental to human health. Far from eliminating the need for a landfill, waste incinerator systems produce toxic ash and other residues. The waste-to-energy program to maximize energy recovery is technologically incompatible with reducing dioxin emissions. Dioxins are the most lethal persistent organic pollutants, which have irreparable environmental health consequences. The affected populace includes those living near the incinerator as well as those living in the broader region. So it's not just the residents of Jamesville. People are exposed to toxic compounds in several ways: By breathing the air, which affects both the workers in the plant and people who live nearby; by eating locally produced foods or water that have been contaminated by air pollutants from the incinerator; and by eating fish or wildlife that have been contaminated by the air emissions. Dioxin is a highly toxic compound, which may cause cancer and neurological damage and disrupt reproductive systems, thyroid systems, respiratory systems, etc.	G.5
12	12C	WTE Facility Emissions	And I think there is a better way than what we're talking about here, because I have to breathe that air, not too far from the plant, and swim in the water, and our boat livery sends people out to catch fish for dinner. I'm wondering, what are they having for dinner? So I'm really concerned about this whole thing.	G.5
12	12E	WTE Facility Emissions	I think we need outside checks more than once a year with a week's notice on what's coming out of those stacks.	G.5
13	13B	WTE Facility Emissions	And my second point being, there is no way that incineration, as with any garbage disposal, you really have to consider full-life cycle analysis. Incineration is frankly not clean from the data I've seen. There is always residual and it certainly is about air, not only soil and water.	G.5
13	13D	WTE Facility Emissions	But that what I have seen is that the soil PCBs, this is data I requested from the County on what is called South Campus, which is immediately adjacent to Rock Cut Road, which is inhabited by students from Syracuse University. There are PCBs and I think dioxins measured routinely on that soil.	G.5
13	13E	WTE Facility Emissions	On the other side of that Valley at Clark Reservation there's been scientific papers written by University professors, again, and very well known professors, regarding the mercury in the fish there. That it is rising in distinction to mercury measured in other lakes in New York State which is declining.	G.5
16	16D	WTE Facility Emissions	Incinerators cause greenhouse gas emissions and emit lead, mercury, cadmium, ammonia, formaldehyde, sulfuric acid and fine particulates. The OCRRA incinerator does not even monitor or control for 2.5 PM, the smallest and most hazardous of the fine particulate. It is completely untrue that OCRRA uses state-of-the-art equipment.	G.5

16	16F	WTE Facility Emissions	The incidences of breast cancer, lung cancer, and prostate cancer are higher in Onondaga County as compared to New York State and the US. Why is this? Is OCRRA partially to blame? Please put an end to the use of dark age technology of waste incineration.	G.5
17	17B	WTE Facility Emissions	The fact is that medical and scientific agreement of the vast majority of physicians and scientists is, that carcinogens, cancer causing materials are unsafe at any level. Certainly unsafe at any measured level. And I have the documents here that show the measurements of dioxins in the soil, at a whole variety of off-site monitoring locations. We also have the indication that the ash that's being dumped from this incinerator is loaded with dioxins, dibenzofurans, which are relatives, PCBs and then the other carcinogens, I won't name all of them: arsenic, nickel, chromium, cadmium, lead is now considered a carcinogen. Actually lead was not considered a carcinogen when the original health assessment for this incinerator was done, over 20 years ago. Over 20 years ago when the Health Risk assessment, which we demanded to be repeated was done, dioxins were not known to be a thousand or more times as toxic as they are now. So if that Health Risk Assessment were repeated, which we are again demanding, I'm demanding this and other individuals in this room and other people who have spoken at these hearings have demanded a new Health Risk Assessment. If that Health Risk Assessment were done the incinerator would have to be shut down. On DEC regulations it could not operate. And that's the reason that the Health Risk Assessment has not been repeated, because the operator and apparently the County, want the incinerator to continue operating.	G.5
17	17C	WTE Facility Emissions	The cancer risk from dioxins, I did a brief calculation while I was sitting in the back. When you measure dioxins at City Lights, in the soil of the homes of people who live in City Lights, it's a pretty expensive development. And you measure those dioxins and then you calculate the way the EPA does, how much of that toxin, or toxic I should say, from the soil gets into people's homes? And then how much those individuals will ingest or inhale every day? Because all of you in your homes if you're adults the numbers vary, but it's about a hundred milligrams of dust or dirt that you're going to eat or inhale every day in your homes. Children, 200 milligrams. If you calculate how much dioxin is in that soil, and you use conservative estimates from the EPA, that at least a quarter of that will end up in your home or in your workplace, for example in the South Campus of Syracuse University, which has elevated dioxin and arsenic levels among other things. Then you recognize that in fact the cancer risk for those people is something like one in a thousand – or one in a thousand to one in 10,000. The acceptable risk from EPA is one in a million. Now one in 10,000 risk means a hundred extra cancers per year per million population. That is clearly from a public health standpoint unacceptable.	G.5
17	17E	WTE Facility Emissions	So I'll tell you now, we have increased rates of breast cancer in the 13078 zip code, which I mentioned the last meeting I attended. More than 50 percent higher than what's expected. That's approximately 30 plus thousand women downwind of the incinerator in Jamesville and in surrounding areas. Now the wind changes, so that's the biggest area of exposure. But there is exposure all over, within easily 5 to 10 miles of the incinerator you're going for exposure to those carcinogens. The fact that we have a 15 percent increase in the incidence, in other words new cancers, compared with when the year the incinerator opened in 1994 is, to my mind and my opinion, evidence that it's highly likely that it's the incinerator that's responsible... We've lost other industries, the only emitters of those carcinogens that are causing these excess cancers is the incinerator. It should be shut down.	G.5
18	18A	WTE Facility Emissions	Because the emission coming from the smokestack may be lightly filtered, but it does not remove all the harmful chemicals, mercury, arsenic, lead and dioxin.	G.5
20	20I	WTE Facility Emissions	A NEW Health risk assessment from this waste disposal plan MUST BE DONE. INCLUDING EXPOSURE TO Combined sources, STACK, DIESEL FUMES, AND ASH for 20 years!	G.5
21	21E	WTE Facility Emissions	Duplicate Comment: A NEW Health risk assessment from this waste disposal plan MUST BE DONE. INCLUDING EXPOSURE TO Combined sources, STACK, DIESEL FUMES, AND ASH for 20 years!	G.5
1	1A	WTE Facility General	To date, the WTE has clearly been an economic asset and has played a major role in the success of the County's recycling program. Those who were against the WTE construction because it would discourage recycling have clearly been proven very wrong.	Comment noted.
8	8A	WTE Facility General	...burning trash is a terrible, terrible outdated idea. We have much better technological advances and means to do a better job. And here is my concern: We do not have any added value when we burn trash. We just destroy and just give more chemicals in the air and soil in our land, polluting.	Comment noted.
10	10C	WTE Facility General	We should encourage this and we should work to educate the citizens of this County how good that place is. It's a state-of-the-art, you can't go anywhere in the world and find clean -- what we should be more worried about is China… I have no problems with anything that's emitted there.	Comment noted.
10	10D	WTE Facility General	There is no recycling that can take care of all our trash. It doesn't exist. That's a needed facility and it makes us all money. And we should be thankful and help them expand if we can.	Comment noted.
14	14F	WTE Facility General	And we should not commit ourselves to this relationship between Covanta and OCRRA. It's not good policy for this County, it's not good for this – for the residents, not good for the environment.	G.4
19	19F	WTE Facility General	OCRRA and Covanta work together to encourage residents from disposing of waste at the curb that comes to the facility. We recently hosted a mercury removal residential collection in October. We had over 300 residents bring to us mercury thermometers, thermostats and other mercury containing products which were collected and sent to mercury recovery facilities. Next on our plan is to host a e-waste collection event to gather, as I see when I come to work every day, the TVs that are left at the curbs that have nowhere to go at this point. So we're looking forward to doing that, it's another collaborative partnership between the two of us and the community we have here tonight.	Comment noted.
20	20Q	WTE Facility General	Incinerators are not clean, renewable energy and should not be included in SWMP. According to Energy Justice: Trash incinerators are the most expensive and polluting way to make energy or to dispose of waste. Since they impact health and property values, they're one of the most unpopular technologies in the world, and are actually on the decline in the U.S.	G.3
21	21L	WTE Facility General	Duplicate Comment: Incinerators are not clean, renewable energy and should not be included in SWMP. According to Energy Justice: Trash incinerators are the most expensive and polluting way to make energy or to dispose of waste. Since they impact health and property values, they're one of the most unpopular technologies in the world, and are actually on the decline in the U.S.	G.3
22	22B	WTE Facility General	Throughout the document and especially pages 41 43 the Waste-To-Energy (WTE) Facility is discussed but nowhere (based on a quick read) is it mentioned that this is an incinerator.	Comment noted.
6	6B	WTE Facility Operations	Covanta and OCRRA have both been great community citizens. Covanta is a superior operator at the facility for the last twenty years, and it has operated a facility with an impeccable safety record since it was constructed in 1995.	Comment noted.
9	9B	WTE Facility Operations	I am confident and comfortable living where I do, because I know what happens behind the scenes. I know what Covanta employees do to ensure a cleaner environment, while addressing our excessive trash demands and providing energy to support this area.	Comment noted.
10	10B	WTE Facility Operations	But that place runs like a nuclear plant. The care and the concern that they give to the environment and what the previous speaker just said about the air that comes out of that stack is true.	Comment noted.
12	12A	WTE Facility Operations	Tonight I've heard some great things about Covanta's operation. But the people that I talked to really don't trust what they hear. They're just not convinced, and maybe it's because the data isn't there for them to see or easily available. I haven't seen it myself. Maybe transparency is something I'm talking about there.	S.1
16	16E	WTE Facility Operations	I learned that OCRRA burns recyclables and I think it burns C&D waste also. There are much more modern ways to deal with waste.	S.2

17	17D	WTE Facility Operations	...but having read now the TCLP regulations, which is the test, a discredited test that's being used by OCRRA to prove that its ash is safe to bury in an unregulated landfill. I found that there are three instances in which you're not allowed to dispose of that waste except as hazardous waste. One: If it contains any cancer causing materials. Doesn't matter whether you do a so called TCLP test. If there are carcinogens in the waste it's hazardous waste. If it contains dioxins it's hazardous waste. And last, I looked at the report and in OCRRA's recent publication, and I got to believe in the mail in or the newspaper. And it said, "we tested by TCLP, and we found that cadmium and lead, both of which are cancer causing agents, meet the EPA's TCLP standard, and it's not hazardous waste. Well, lead and cadmium are both carcinogens, so therefore it is hazardous waste. Besides that, the TCLP regulations state you have to test for 39 different toxic components. And if one of them exceeds the EPA standards it's hazardous waste. That means that this incinerator and the County have been violating federal law for as long as these regulations have been in force. And it's been many many years.	S.3
19	19B	WTE Facility Operations	If you want to look at our environmental record, every year we test, every day, every hour, the facility is regulated 24 hours a day seven days a week, 365 days year. And someone earlier mentioned, we welcome anyone to come in and tour the facility and see what's it is, we're very transparent as is OCRRA. We have a great relationship.	Comment noted.
19	19E	WTE Facility Operations	We recycle over 9,000 tons a year of metal and what's called non-ferrous metal, you know, bicycle parts and all sorts of things that don't burn we pull out and recycle on the back end. 9,000 tons, which is about 3 percent of what comes in is recycled and resold.	Comment noted.

G.1 (Comments pertaining to Regional Partnerships and associated issues):

Section 7.3 of the Comprehensive Solid Waste Management Plan (CSWMP) Update identifies regional partnerships as a potential opportunity to improve the cost-effectiveness and financial sustainability of OCRRA's programs. Furthermore, regional partnerships may present an opportunity to further increase recycling and expand the breadth of programmatic offerings to the community. Section 8.5.2 describes a potential partnership with Cortland County that is currently being explored by OCRRA and Onondaga County. The CSWMP Update does not commit Onondaga County to any action associated with the potential partnership with Cortland County. Furthermore, it should be noted that a full environmental impact assessment (including a scoping process and preparation of a Draft and Final Environmental Impact Statement) is currently underway for the proposed partnership with Cortland County, pursuant to 6 NYCRR Part 617, New York State's Environmental Quality Review Act. Any future similar proposals would require separate environmental review (pursuant to New York's State Environmental Quality Review Act) and legislative approval.

G.2 (Comments pertaining to Recycling / Jobs and associated issues):

Despite decreasing waste tonnage, OCRRA has continued to pursue new opportunities for increased recycling and waste reduction as discussed in Section 3 of the CSWMP Update. This includes a $2.4 million investment in the largest municipal food waste composting facility in New York State, which will divert approximately 10,000 tons of food waste over the next five years. Section 8.6 outlines OCRRA's future priorities for increased waste reduction and recycling/composting.

Furthermore, Onondaga County and OCRRA welcome private sector investments in expanding our community's already robust recycling-related economy. In fact, there are currently numerous businesses throughout Central New York that rely upon thousands of tons of "waste materials" annually as their raw material for re-manufacturing, or for recovery and sale to downstream markets (such as plastics, fiber, and metal). These local businesses include RockTenn, Recycle America, CNY Resource Recovery, Bodow Recycling, SMR Fiber, Syracuse Fiber, TOMRA, Confidata, Bruin Computer Trading and Recycling, MacIntosh Pallet, Goodwill Finger Lakes, CXtec, Clifton Recycling, and JACO Environmental. Clearly, recycling, in many ways, already serves as an "economic engine for our community" as hundreds of people are employed by these firms, and more jobs are anticipated as several new companies have recently opened in the area with plans to recycle Styrofoam and paper.

Onondaga County and OCRRA concur that recycling-related industries create jobs, and applaud such economic development and hope that additional material recovery companies will look to the Central New York market to launch operations. Nonetheless, in spite of these local businesses, and the tremendous reduction in the waste stream that occurs in the wake of their material recovery and processing efforts, several hundred thousand tons of trash are generated annually, requiring proper disposal.

G.3 (Comments pertaining to Disposal Alternatives and associated issues):

Section 7 of the CSWMP Update discusses alternatives.

All disposal alternatives have environmental and economic impacts. Despite OCRRA's award winning recycling program, more than 300,000 tons of solid waste must still be responsibly managed annually. OCRRA's system is exceptionally consistent with the New York State and U.S. Environmental Protection Agency waste management hierarchy, which includes (in order of preference): 1) waste reduction, 2) recycling, 3) recovery of useful energy through solid waste combustion (i.e., modern waste-to-energy facilities), and 4) use of permitted landfill facilities. Without the WTE Facility, the non-recyclable materials generated by the local community would be hauled many miles to out-of-County landfills, as was the case before the Facility was constructed. Instead, the WTE Facility makes responsible and local management of the community's non-recyclable waste stream possible.

G.4 (Comments pertaining to WTE Facility Contract and associated issues):

OCRRA signed a 20-year extension agreement with Covanta on November 12, 2014. While the specific details of the contract relate to continued operation of the existing facility and, therefore, are outside of the scope of this SWMP update, many factors were taken into consideration in OCRRA's decision to extend the long standing public-private partnership with Covanta. A primary consideration was retention of public ownership of the WTE facility and the concomitant ability to legally control the origins and types of waste accepted for processing. Other factors considered included environmental oversight and financial sustainability, as well as the continuing commitment to the recycling program. If OCRRA did not retain ownership of the WTE Facility, the Facility would have otherwise transitioned to merchant ownership by Covanta Energy. The proposed updates to the SWMP continue to foster evolution of solid waste management alternatives, while assuring stable and sustainable solid waste management.

G.5 (Comments pertaining to WTE Facility Emissions and associated issues):

Air emission testing for the WTE Facility is conducted in accordance with all federal and state requirements. It includes a continuous emissions monitoring system (CEMS) and annual air emission testing. Annual stack testing is always conducted while the Facility is operating at full capacity; therefore it is representative of the maximum Facility emission rates. Stack testing has demonstrated that actual Facility emissions are generally 10-20% of the federal and state permit limits, which are deemed by the NYSDEC and USEPA to be protective of human health and the environment.

With respect to particulates, as required by the Facility's Title V air permit, the WTE Facility annually tests for total particulates and PM-10 (particles with a diameter of 10 micrometers or less). PM-10 is inclusive of PM-5 (particles with a diameter of 5 micrometers or less) and PM-2.5 (particles with a diameter of 2.5 micrometers or less). There are only several WTE facilities in the country that monitor for PM-2.5 – generally facilities with new units that have recently been permitted. For those facilities with PM-2.5 permit limits, the PM-10 and PM-2.5 permit limits are either exactly the same or the PM-2.5 limit is only slightly lower than the PM-10 limit – essentially meaning that the PM-2.5 permit limit is no more restrictive than the PM-10 limit (since PM-10 includes PM-2.5, as well as the fraction of particles between 2.5 and 10 micrometers). WTE facilities with PM-2.5 permit limits use the same air pollution control technologies (as those in place at the Onondaga County WTE Facility) to achieve compliance with PM-2.5 permit limits.

The Onondaga County Health Department implements an Incinerator Monitoring Program, which evaluates whether there are historical trends related to long-term deposition impacts from the WTE Facility. The Incinerator Monitoring Program Reports, including the latest 2013 report, consistently conclude, "In the monitoring conducted to date, no

relationship has been established between the operation of the incinerator and any significant increased levels of constituents in the environment."

Many of the public health related comments come from the NYSDOH dataset that showed a greater than expected incidence of female breast cancer from 2005-2009 in zip code 13078. These data alone are not sufficient to make a determination about any type of environmental association. This is explicitly stated on the NYSDOH website for FAQs on the zip code cancer data: http://www.health.ny.gov/statistics/cancer/registry/zipcode/faq.htm.

In order to put these data into context, the Onondaga County Health Department would need to have the historical zip code level data for the county, going back prior to the WTE coming on line. Without this, it is not possible to assess any trends over time at the zip code level. In addition, the "expected incidence" is the number of people in a zip code that would be expected to develop cancer in a five-year period if the zip code had the same cancer rate as New York State as a whole (including New York City). Due mostly to the population composition of New York City, cancer patterns there tend to be different than the rest of the state (e.g., lower incidence of breast cancer than state-wide).

It is important to note that many things contribute to cancer risk; age, health behaviors/lifestyle and genetic factors included. Even if all the data noted above were available (every cancer risk factor for every cancer patient), it would still be difficult to make comprehensive statistical adjustments for all other possible cancer risk factors.

Regarding any new information, the Onondaga County Health Department reached out to NYSDOH for more information and were told that, 1) zip code level cancer data prior to the 2005-2009 dataset are not available; and 2) zip code cancer statistics will be updated by March or April if not before, to include 2008-2012 numbers. However, as stated above, these data alone are not sufficient to make a determination about any type of environmental association.

Asthma data are available at the zip code level from a hospital discharge dataset from 2008-2009. These data are also provided as "observed" and "expected". For the zip codes of interest the rates ranged from 0% (13084) to 28% (13120) of expected for asthma hospital discharges in adults. The overall Onondaga County rate was 39% of the expected. Onondaga County has a much lower rate of asthma hospital discharges than the rest of New York State. To be precise, the asthma hospital discharge rates for Onondaga County are 68 per 100,000 as compared to NYS 176 per 100,000. All this information is available publicly including on the Health Department's website. However, these data are also subject to the same limitations outlined above. Previous years' data are not available, so the Onondaga County Health Department cannot assess any trends on the zip code level, and the expected rates were calculated including New York City, so the comparison may not be as useful.

Lastly, based on the available data and the recent Community Health Assessment, the OCHD has not seen any health patterns of concern suggesting a need for futher risk assessment with respect to the WTE Facility. As a public health agency, OCHD will continue to monitor various health indicators including cancer and asthma, both in the context of WTE as well as in general, in order to inform and educate the community for any new changes in the future to protect the health of our residents.

G.6 (Comments pertaining to solid waste management hierarchy and associated issues):

Section 8.2 describes how OCRRA's system is consistent with the NYS solid waste management hierarchy.

G.7 (Comments pertaining to public education and associated issues):

OCRRA continually reevaluates all elements of its school recycling education outreach program, which was developed with direct input from local elementary school educators to ensure alignment with common core requirements. Contrary to the commenter's statement that "Nowhere in the materials does it discuss a plan for zero waste," in fact, the majority of this education series clearly focuses upon effective strategies to maximize waste reduction, namely composting, recycling and waste reduction/reuse.

The video on trash disposal clearly states that "all forms of waste disposal have environmental impacts;" this has not been avoided as the comment suggests. Each of the videos is very short and is designed to: 1) stimulate further classroom discussion on the environmental concepts presented, and 2) complement the "offline" classroom activities that have been developed. These offline materials were generated by local elementary school educators and are consistent with common-core aligned lessons, including those that challenge students to use critical thinking skills as suggested by the commenter (i.e., write a persuasive essay urging your family to reduce the amount of garbage they create at home).

After waste reduction, reuse, recycling and composting, the need remains for environmentally sound disposal of the remaining trash. Waste-to-Energy is considered to be an environmentally sound approach to processing non-recyclable or non-reusable items by both the United States Environmental Protection Agency and the New York State Department of Environmental Conservation, and is a preferred alternative to landfilling. The trash disposal video is entirely factual in this regard, including that the facility is closely monitored and controlled to prevent adverse environmental impacts, generates electricity that reduces demand on natural resources, and minimizes potential impacts associated with landfilling trash. The ash residue from the WTE Facility is beneficially reused as alternative daily landfill cover.

S.1 (Specific Response to Comment 12A, related to transparency in WTE Facility operations/monitoring):

Onondaga County and OCRRA strive for transparency. There is an abundant amount of information about the WTE Facility operations, testing, and monitoring available at: www.ocrra.org and http://www.ongov.net/health/.

S.2 (Specific Response to Comment 16E, related to management of recyclables and C&D):

OCRRA's extensive recycling programs are discussed throughout the CSWMP update. The C&D processing at OCRRA's Ley Creek Transfer Station is discussed in Section 3.6.

S.3 (Specific Response to Comment 17D, related to ash residue testing):

The WTE Facility's combined ash residue is tested in accordance with all NYSDEC and USEPA protocols and requirements, including the document available at the links below.

1) http://www.epa.gov/osw/nonhaz/municipal/pubs/msw-samp6-95.pdf
2) http://www.gpo.gov/fdsys/pkg/FR-1995-02-03/pdf/95-2627.pdf#page=1

The USEPA makes an important statement in the second link above, specifically:

"In accordance with today's interpretation, ash that is combined (and conditioned, for example, with lime and/or phosphoric acid) at the end of the combustion process and within the combustion building, and exhibits no hazardous waste characteristics (i.e., it passes the TCLP) when it exits that building, may be sent to a nonhazardous waste facility for disposal."

Specifically, the ash residue is sampled semi-annually for chemical analysis by an independent, NYS-certified laboratory via the Toxicity Characteristic Leaching Procedure (TCLP), which simulates landfill conditions and is USEPA's prescribed test for determining whether a waste is hazardous according to the toxicity characteristic. In its Frequently Asked Questions for the TCLP Testing Method (available at: http://www.epa.gov/epawaste/hazard/testmethods/faq/faq_tclp.htm), the USEPA further explains the TCLP: *"The test was designed to model a theoretical scenario in which a waste is mismanaged by placing it in an unlined landfill containing municipal solid waste. The acetic acid solution in Method 1311 is designed to simulate the result of rainwater infiltrating the landfill, reacting with the municipal solid waste, and then leaching through the waste being tested. The numerical limits for the RCRA toxicity characteristic (40 CFR 261.24) were derived using the same scenario and were set at levels that would prevent the groundwater under the landfill from posing a threat to human health and the environment."*

A semi-annual analysis of percentage volatile solids is also conducted, as required. Over the twenty years of WTE Facility operations, the ash has always tested non-hazardous.

Initially, for the first year of operations, NYSDEC required that the combined ash residue be analyzed via the TCLP for all 40 contaminants identified by the USEPA (see 40 CFR 261.24). TCLP testing was performed for full set of volatile organics, semi-volatile organics, pesticides and herbicides, and all eight RCRA metals. Since all parameters except lead and cadmium were generally below laboratory detection limits and well below the TCLP limits, NYSDEC approved several ash testing variances for the Facility. The variance approvals have resulted in the current testing requirements, which are consistent with other WTE facilities in New York State and across the country.

S.4 (Specific Response to Comment 16C, related to use of Onondaga County landfill):

OCRRA has approved engineering plans and a NYSDEC permit for the development of a landfill in the Town of Van Buren ("the Site 31 Landfill") where ash residue and non-processible construction and demolition debris (C&D) could be disposed. That said, based on the existing landfill capacity in western NY, competitive landfill pricing, and the ability to use the ash residue as an alternative daily landfill cover, it has not made economical sense for OCRRA to develop the site and construct the landfill. In 1995, the estimated costs of development were $75 million. At the present time, OCRRA does not plan to construct the Site 31 Landfill.

S.5 (Specific Response to Comment 14C, related to economics associated with the CSWMP Update):

The CSWMP Update addresses economics throughout Section 7 and in Section 8.4.

S.6 (Specific Response to Comment 1F, related to WTE Facility ownership liabilities):

As noted in response G.4, OCRRA signed a 20-year extension agreement with Covanta on November 12, 2014. While the specific details of the contract relate to continued operation of the existing facility and, therefore, are outside of the scope of this SWMP update, in general, the owner is responsible for the debt associated with the Facility. The owner of the Facility is also responsible if there are catastrophic failures that render the Facility inoperable or in need of major repairs. Insurance coverage, an aggressive preventative maintenance and repair program, and termination clauses all reduce the owner's risks.

S.7 (Specific Response to Comment 15A, related to 2015 trash disposal fees):

OCRRA's 2015 trash disposal fee for municipal solid waste (MSW) is $84/ton, which is generally reduced to $80/ton when haulers take advantage of OCRRA's $4 prompt payment discount. This is a $5 increase from the 2013/2014 rate.

S.8 (Specific Response to Comment 22G, related to educational efforts):

Current public education and outreach efforts are discussed in Sections 3.1 and 3.2. OCRRA has a limited budget for public education and outreach and strives to maximize the effectiveness of each dollar spent. In addition to other school outreach initiatives, OCRRA is currently working with several school districts to develop food waste composting programs.

S.9 (Specific Response to Comment 14A, related to solid waste management plan requirements):

There were no requirements to update the plan every five years. Onondaga County and OCRRA submit biennial compliance reports in accordance with NYSDEC's requirements. More information regarding the plan requirements are available at: http://www.dec.ny.gov/chemical/47861.html.

S.10 (Specific Response to Comment 20P, related to DEC's comments):

Onondaga County has been working with the NYSDEC to update the plan, and the update will not be adopted until the Planning Unit receives an "approvability letter" from NYSDEC.

S.11 (Specific Response to Comments 20J and 21F, related to global warming impacts):

While the CSWMP Update does not specifically address global warming in a general sense, WTE, recycling, and composting provide significant greenhouse gas emissions benefits.

S.12 (Specific Response to Comment 14E, related to WTE Facility greenhouse gas emissions and electricity production):

Section 3.7.1 mentions the greenhouse gas benefits associated with WTE. The statements made are supported by USEPA's Waste Reduction Model (WARM) available at: http://epa.gov/epawaste/conserve/tools/warm/index.html.

The resource mix for the Upstate NY eGRID subregion is available at: http://www.epa.gov/cleanenergy/documents/egridzips/eGRID_9th_edition_V1-0_year_2010_Summary_Tables.pdf. According to that information, the Upstate NY electricity generation resource mix consists primarily of nuclear (29%), hydroelectric (28%), natural gas (22%), and coal (15%).

A recent USEPA-authored journal article published in Environmental Science and Technology provides information regarding the emissions of WTE facilities, as compared landfilling and conventional electricity generation technologies (coal, natural gas, oil, and nuclear). The article is titled, "Is It Better to Burn or Bury Waste for Clean Energy Generation?" and the analysis compares greenhouse gas emissions and emissions of other pollutants for WTE and landfill gas-to-energy (LFGTE), using a life-cycle analysis model. The analysis is available at: http://pubs.acs.org/doi/pdf/10.1021/es802395e.

The study states that MSW is a viable source for electricity generation and finds that WTE is a better option than LFGTE because WTE generates significantly more electricity from the same amount of waste, with fewer emissions. Though not immediately intuitive, emissions from LFGTE are due to fugitive methane emissions in a landfill, as well as emissions from combusting landfill gas in an internal combustion engine. The last paragraph of the article provides a good summary (Kaplan, Decarolis, and Thornloe, 2009):

"Despite increased recycling efforts, U.S. population growth will ensure that the portion of MSW discarded in landfills will remain significant and growing. Discarded MSW is a viable energy source for electricity generation in a carbon

constrained world. One notable difference between LFGTE and WTE is that the latter is capable of producing an order of magnitude more electricity from the same mass of waste. In addition, as demonstrated in this paper, there are significant differences in emissions on a mass per unit energy basis from LFGTE and WTE. On the basis of the assumptions in this paper, WTE appears to be a better option than LFGTE. If the goal is greenhouse gas reduction, then WTE should be considered as an option under U.S. renewable energy policies."

S.13 (Specific Response to Comment 20G, related to waste quantification and characterization studies):

Sections 5.5 and 8.6.5 discuss the objectives of OCRRA's waste quantification and characterization studies.

S.14 (Specific Response to Comment 22D, related to waste generation projections):

As Stated in Section 6.1, sources for population trends included the Cornell Program on Applied Demographics (which uses data from the U.S. Census Bureau) and Moody's Analytics. This level of data is sufficient and consistent with that used in other similar plans. In an attempt to better understand waste generation trends, OCRRA evaluated the historical correlation of MSW generation with other economic indicators, such as retail sales, real gross domestic product (GDP), total employment, rate of unemployment, and per capita or household income. However, none exhibited a strong correlation with MSW generation. As such, this research was not mentioned in the CSWMP Update.

S.15 (Specific Response to Comment 20B, related to SEQR process):

Pursuant to 6 NYCRR 617, New York State's Environmental Quality Review Act, it was determined that there are no impacts associated with the proposed action, as the proposed action is only a plan update.

This is in accordance with NYSDEC's guidance regarding these plan updates (available at: http://www.dec.ny.gov/chemical/71259.html), which states:

> **Appendix B - State Environmental Quality Review (SEQR)**
>
> If no new facilities are planned,
>
> 1. Draft Environmental Impact Statement (EIS) is not needed.
> 2. Planning Unit should issue a Negative Declaration in accordance with 6 NYCRR 617.

S.16 (Specific Response to Comment 20F, related to household hazardous waste collection):

Section 3.5.1 of the CSWMP Update provides details on OCRRA's new household hazardous waste collection program, which is a year-round drop-off model offered to residents of Onondaga County.

S.17 (Specific Response to Comment 13C, related to environmental justice):

Since the WTE Facility is an existing facility and the CSWMP update does not involve a change in its current operations or capacity requiring a permit modification, an environmental justice analysis pursuant to applicable New York State Regulations is not required. If in the future, the siting of a new solid waste management facility were to be considered, environmental justice considerations would form an important aspect of an environmental review of such a facility, if it was determined that any such proposal would impact an area meeting the then applicable economic and/or demographic criteria for such a review.

S.18 (Specific Response to Comments 20L and 21H, related to single stream recycling):

According to Section 8.3.7(b) of NYS's Beyond Waste Plan:

> "New York State's single-stream communities report high participation, increased diversion and low residue rates… While some single-stream processes in other jurisdictions have generated poor quality materials and high-residue rates, experience in New York State and elsewhere indicates that when appropriate technology is employed, contamination problems can be avoided."

S.19 (Specific Response to Comments 20M and 21I, related to enforcement):

OCRRA's enforcement program is described in Section 3.3 of the CSWMP Update.

S.20 (Specific Response to Comments 20N and 21J, related to deconstruction):

Section 3.6 describes how C&D is managed at OCRRA's transfer stations to maximize recycling and then energy recovery. Section 8.8 discusses the goal to further increase diversion.

S.21 (Specific Response to Comments 20O and 21K, related to agricultural plastics):

Section 7.3 mentions agricultural plastic recycling as a potential area for regional collaboration.

Comment Letter ID	Last Name	First Name	Organization/Affiliation	Address	City	State	Zip	e-mail address	Phone No.	Comment Format	Dated
1	Cherry	Robert	None noted	7996 Green Lakes Rd	Fayetteville	NY	13066	cherryra@earthlink.net	Not provided	email	12/3/2014
2	Warguleski	Robert	None noted	Not provided				bobbiewarg111@gmail.com	Not provided	email	12/15/2014
3	Marko	Matt	None noted	311 Deforest Road	Syracuse	NY				verbal	12/16/2014
4	Warner	Deborah	CenterState CEO	Not provided	Syracuse	NY				verbal	12/16/2014
5	Prehn	Phil	None noted	Not provided	Syracuse	NY				verbal	12/16/2014
6	Bouvia	Thomas	Southwood Volunteer Fire Dept.	Not provided	Syracuse	NY				verbal	12/16/2014
7	Burger	Mark	Soil & Water Conservation District of Onondaga County	Not provided						verbal	12/16/2014
8	Karpinska	Beata	None noted	Cumberland Ave.	Syracuse	NY				verbal	12/16/2014
9	Peterson	Jennifer	home/business owner	Not provided						verbal	12/16/2014
10	Esposito	Joseph	contractor for Covanta	Not provided						verbal	12/16/2014
11	Brown	Patrick	None noted	Not provided	Jamesville	NY				verbal	12/16/2014
12	Mt. Pleasant	Liz	None noted	Not provided						verbal	12/16/2014
13	King	Peter	None noted	Thurber St.	Syracuse	NY				verbal	12/16/2014
14	Hughes	Don	Sierra Club	Not provided						verbal	12/16/2014
15	Hunter	Ian	Last Chance Recycling	Not provided						verbal	12/16/2014
16	Jenkins	Pam	Cortland County Environmental Advisory Board	Not provided						verbal	12/16/2014
17	Wolfson	Michael	None noted	Bradford Parkway	Syracuse	NY				verbal	12/16/2014
18	Brown	Kate	None noted	Not provided						verbal	12/16/2014
19	Carroll	Kathleen	Covanta Energy	Not provided						verbal	12/16/2014
20	Baker	Vicki	Jamesville Positive Action Committee	PO Box 182	Jamesville	NY	13078	vbaker002@twcny.rr.com	Not provided	email	1/16/2015
21	Brown	Patrick	None noted	6471 E. Seneca Turnpike	Jamesville	NY	13078	pjbrown@skanschools.org	Not provided	email	1/17/2015
22	Stacey	James E.	None noted	121 Paddock Drive	Dewitt	NY	13214	james.e.stacey@gmail.com	(315) 446-7202	email	1/17/2015

From:	Robert Cherry
To:	Amy Miller
Subject:	Comments on Onondaga County Comprehensive Solid Waste Management Plan 2014 Update (CSWMP)
Date:	Wednesday, December 03, 2014 7:04:59 PM

Dear Ms. Miller:

The CSWMP is an impressive document and Onondaga County is to be congratulated in the success of its recycling programs. I will limit my comments to section 8.5 regarding the Waste to Energy Facility (WTE). To date, the WTE has clearly been an economic asset and has played a major role in the success of the County's recycling program. Those who were against the WTE construction because it would discourage recycling have clearly been proven very wrong. A very vocal group has been against the regional partnership with Cortland County because such a partnership would increase air emissions within Onondaga County. That is certainly a valid, but narrow and short-sighted viewpoint.

There will always be trash that needs recycling or disposal. Recycling is often the most environmentally sound means of disposal and needs to be encouraged whenever feasible, but not all trash can be recycled. Where recycling a material requires more energy use or has more negative environmental impacts than landfilling or burning, recycling is probably not a desirable option.

The question is, should non-recyclable trash get burned or landfilled? For the overall region, which option results in the lowest overall environment impact? Which is worse: a small increase in WTE emissions or the negative environmental impacts caused by constructing acres of landfills that have the potential to contaminate both air and water supplies over the landfill life. What is the expected life of a landfill and what are costs of treating landfill leachate and collecting landfill gas over the landfill life? It is my understanding that emissions from the plant are strictly monitored and controlled and that air quality monitors in the area have not shown any unacceptable air quality conditions resulting from the WTE operation. It is further my understanding that the proposed partnership with Cortland County would result in emissions similar to those prior to 2008.

Assuming this is the case, I fully support the partnership with Cortland County.

I have one question regarding risks, before I can support extending the contract with OCRRA. The facility apparently has a debt of $45 million. As owner, I assume that OCRRA is paying for this debt out of revenues from tipping fees and WTE electric sales revenues. What will be the impact on tipping fees, Onondaga County taxpayers, and recycling programs if OCCRA remains the WTE owner and the WTE becomes inoperable for an extended period, or requires major unforeseen repairs? How would this change if Convanta purchases the facility?

Robert A Cherry, P.E.

7996 Green Lakes Rd.

Fayetteville, NY 13066

Amy Miller

From: ROBERT WARGULSKI [bobbiewarg111@gmail.com]
Sent: Monday, December 15, 2014 2:43 PM
To: Amy Miller
Subject: SWMP

Amy;
In light of the fact I know very little about garbage except I do my best to keep my area clean, recycle my waste at home(it all goes to the same land fill) recycle in public and follow the rules.
It is my hope that the specialists in the business will do what's best for all concerned.
Bob Warguleski

STATE OF NEW YORK : COUNTY LEGISLATURE

COUNTY OF ONONDAGA

In the Matter of

ONONDAGA COUNTY SOLID WASTE MANAGEMENT PLAN

PUBLIC HEARING in the above matter, conducted at the Onondaga County Court House, Legislative Chambers, 4th Floor, 401 Montgomery Street, Syracuse, New York before, JOHN F. DRURY, CSR, Notary Public in and for the State of New York, on December 16, 2014 at 6:30 p.m.

LEGISLATORS PRESENT BY DISTRICT:

1st BRIAN F. MAY
2nd JOHN C. DOUGHERTY
3rd JIM CORL
4th (Judith A. Tassone - not present)
5th KATHLEEN A. RAPP
6th MICHAEL E. PLOCHOCKI
7th DANNY J. LIEDKA
8th CHRISTOPHER J. RYAN
9th PEGGY CHASE
10th KEVIN A. HOLMQUIST
11th PATRICK M. KILMARTIN, Floor Leader
12th DAVID H. KNAPP
13th DEREK T. SHEPARD, JR.
14th CASEY E. JORDAN
15th J. RYAN McMAHON, Chairman
16th MONICA WILLIAMS
17th LINDA R. ERVIN
Clerk Deborah Maturo

Reported By:
John F. Drury, CSR, RPR
Court Reporter 471-7397

INDEX TO SPEAKERS

Calling Roll

CHAIRMAN McMAHON: Good evening. The public hearing for the Onondaga County Solid Waste Management Plan is now called to order. Just for a couple housekeeping items. The exits in the

building. At this time if you please turn off your cell phones. Would the clerk please call the roll.

CALLING ROLL BY CLERK MATURO:

Q. Legislator May?
A. Here.
Q. Dougherty?
A. Here.
Q. Corl?
A. Here.
Q. Tassone. (No response) Rapp?
A. Here.
Q. Plochocki?
A. Here.
Q. Liedka?
A. Here.
Q. Ryan?
A. Here.
Q. Chase?

A. Here.
Q. Holmquist.
A. Here.
Q. Kilmartin?
A. Here.
Q. Knapp?
A. Here.
Q. Shepard?
A. Here.
Q. Jordan?

A. Here.
Q. Williams?
A. Here.
Q. Ervin?
A. Present.
Q. Mr. Chairman?
A. Present.

CLERK MATURO: 16 present, 1 absent.

CHAIRMAN McMAHON: Thank you. Would the clerk please read the notice of public hearing or should we waive reading?

MR. KILMARTIN: So move.

CHAIRMAN McMAHON: Any objection?

Hearing none, the reading of the notice is hereby waived. Was the notice of this hearing duly published?

CLERK MATURO: It was.

CHAIRMAN McMAHON: Thank you. We have speakers who signed up already tonight. If anyone else during the process would like to sign up and speak please come and see our staff in the front of the room. I would ask each speaker, because there is quite a few, try to keep your remarks to three or four minutes.

The first speaker is Matt Marko,

Syracuse, New York.

MATT MARKO: Thank you, Mr. Chairman. Good evening, Legislators. My name is Matt Marko, I live at 311 Deforest Road in Syracuse, New York. My professional credentials include professional engineer, board certified environmental engineer, fellow of the American Society of Civil Engineers, I manage the office of an environmental consulting firm here

in Syracuse, vice chair of the SUNY College of Environmental Science and Forestry Board of Trustees. But today I'm speaking as a resident of Onondaga County. And one that lives less than three miles away from the OCRRA owned and Covanta operated waste-to-energy facility.

I would like to commend the County Executive and the Legislature for their leadership in putting the message to reduce, reuse and recycle first. However, until recycling eliminates the very real need to manage hundreds of thousands of tons of the municipal solid waste from our community our management plans need to think regionally if not globally, and in the best interest of the environment and future generations.

The proposed plan and specifically the Regional Partnership with Cortland County is not perfect, but it does address head on the reality of our consumption base economy and our

consumption driven society. The plan responsibly balances the environment, economics, and social impacts, specifically eliminating the troubling situation of emergent facility.

The plan did not create OCRRA, the waste-to-energy facility or the contract between Onondaga County and Covanta, but it does appropriately suggest how we should move forward, based on where we are at this time.

I urge you too approve this update and ensure we re-evaluate in 10 years time. Thank you.

CHAIRMAN McMAHON: Thank you Mr. Marko. The next speaker Deb Warner, Syracuse, New York.

DEBORAH WARNER: Good evening, Mr. Chairman, Legislators. My name is Deborah Warner, I am the vice-president for Public Policy in Government Relations at CenterState CEO. We are a regional business and economic

development organization representing

Warner

about 2,000 businesses in a 12 County region. I'm a resident of Syracuse, I live in the Valley and I'm pretty sure that's less than five miles from the Rock Cut plant.

Thank you for the opportunity to comment on the Onondaga County Solid Waste Plan. Specifically we want to commend you for incorporating the "trash for ash" swap that has been negotiated with Cortland County into your plan. Years ago Onondaga County took bold steps to initiate a waste management ecosystem that created OCRRA, built the Rock Cut Road waste-to-energy facility and launched a world class recycling program.

Our community has distinguished itself nationally for our outstanding recycling programs and for progressive modern waste management. It's important for us to continue these efforts and the reputation we have deservedly earned. We commend OCRRA, Cortland County and

Warner

Covanta for their leadership in forging

a win-win-win approach to our ash and Cortland's trash for several reasons:

This brings long term operational sustainability to both OCRRA and Cortland County operations. Onondaga County will be able to continue our best in class recycling and special waste program and extend them into Cortland County. Covanta, having demonstrated a strong track record will continue to run the waste-to-energy facility and will make $21 million in plant upgrades starting with $6 million in enhanced pollution control and monitoring equipment.

This is an environmentally responsible step, will reduce greenhouse gas emissions, equivalent to taking 15,000 cars off the road. This plan will cut ash travel in half from 80 miles to 40 miles a trip. And trucks will now travel full both ways. More waste-to-energy electricity will be

generated at Rock Cut Road. Bringing in additional, up to half a million dollars a year into those operations and saving over $50,000 in Thruway tolls.

My message to you is also to

emphasize where why this agreement makes good economic development sense and has advantages. Good government makes good sense and does not go unnoticed by the business community. Having modern waste disposal facilities and future viability for these operations makes us more attractive to keep, grow and attract new jobs and economic activity to our community.

The financial stability of OCRRA is important, because it provides predictability and cost for residents and businesses. Predictability for budgeting and a cost of operations is useful and attractive to businesses.

Another important aspect is this intermunicipal agreement is government modernization. Modern, well run

municipal services speak positively to the community and to businesses when they're looking at their decisions where to start to expand or move. Savings and avoided costs for municipalities, school districts and government entities will benefit taxpayers at all these levels.

The savings from this new agreement with Cortland will be spread amongst residential households, businesses,

institutions and municipalities in both counties. Also, given how precious infrastructure dollars are now, deficit reduced wear and tear on the road miles and the miles traveled, especially by heavy trucks, is an important benefit that also benefits taxpayers.

We respectfully urge acceptance of the Plan with its inclusion of the new opportunities between Onondaga and Cortland County. Thank you.

CHAIRMAN McMAHON: Thank you, Deborah. Our next speaker Phil Prehn from Syracuse, New York.

PHIL PREHN: Phil Prehn, Syracuse, New York. Good evening, thank you Mr. Chairperson and Legislators for holding this public hearing. My name is Phil Prehn, I am a resident of the city of Syracuse. And I guess I win the lottery, because I'm a mile away from the trash-burning plant as we have it now. And my mother-in-law lives on Thurber, she can practically see it from her house.

I am here because I have a personal stake in this issue. Many times I've had to call the hot line and tell

Covanta that I smell acrid smelling foul chemical smells in my neighborhood. I had a hard time finding the number to call. I had a hard time getting them to return my calls. I still don't know what they did. They claim they did something, and eventually the smell after a few days evaporated. But it gave me pause and didn't actually instill me with the confidence in the

management of the operation.

I've been a life long resident of the city of Syracuse, and in fact I was a dues-paying member of Recycle First, back in the '80s, when the trash burning plant was first being proposed. And the opposition at the time, including myself, said that your building this way too big. If you're really serious about recycling you won't build such a large trash burning plant, obviating the ability of the recyclers to do their job.

And one of the things that was told to us at the time was, well, don't worry, we'll never import trash. So I'm here some 30 years later to witness you're going back on your promises. I don't know, somebody earlier talked about the benefits to municipalities.

Having an irresponsible Legislature that you can't trust to honor the agreements certainly isn't a benefit to other municipalities, certainly not to residents.

Prehn

Another statement was made about the world class status of the OCRRA and recycling. They have won awards and they have done a good job as far as its done, given the fact that they've had a lot of potential recycling diverted from their operation into the trash-burning plant. But world class now, as we've heard when an expert was brought to town recently to talk about the promising new ventures in recycling, world class now means that real progressive communities are shooting for zero waste. We're nowhere near that. And I don't see how, you know, having an extensive burning program is going to make us world class any longer.

And I urge the Legislature to not approve ash-for-trash, to keep your promises, not go back on the promises you made 30 years ago. And to look into establishing recycling as a true economic engine for our community. It's

proven in other places that it creates

Bouvia

jobs. And it's much more beneficial for people like myself and my in-laws and my friends and family that have to put up with what's coming out of the stacks over on Rock Cut Road. Thank you, very much.

CHAIRMAN McMAHON: Thanks, Phil. Next speaker is Thomas Bouvia, Jamesville, New York.

THOMAS BOUVIA: Good evening, my name is Tom Bouvia, I'm the First Deputy Chief of the Southwood Volunteer Fire Department. The Covanta facility is within our fire protection district, and we get the pleasure of going there once in a while, but more to train than for any emergencies, so that's good. But they do open their facility to us several times throughout the year for training exercises. And I'm honored to be here in support of this proposal.

The Solid Waste Management Plan proposes adding another 25,000 tons of waste from Cortland to be processed at

Bouvia

the facility. Since the facility is

permitted by New York State DEC to process over 361,000 tons of waste annually, There is no issue with bringing in this additional waste. Even with this additional waste the facility will not be exceeding the permitted tons of the air and solid waste permits which are tied to the over 361,000 tons.

Currently the facility is operating well under capacity at 315,000 tons per year, and has been for the last three to four years. With Cortland's proposed waste the facility will be at or about 340,000 tons per year, still well below the permitted capacity.

Covanta and OCRRA have both been great community citizens. Covanta is a superior operator at the facility for the last twenty years, and it has operated a facility with an impeccable safety record since it was constructed in 1995. I'm confident the proposed addition of bringing in Cortland County's

waste will have no negative impact on the facility. Thank you.

CHAIRMAN McMAHON: Thank you, Thomas. Next we have Mark Burger with Onondaga County Soil and Water Conservation

District.

MARK BURGER: Thank you, Mr. Chairman, and thank you Legislature for holding this hearing. Mark Burger, the Director of the Soil to Water Conservation District of Onondaga County. And on behalf of our Board of Directors I'm here to provide support for Covanta Energy and the community education and outreach programs that they strengthen through their support of the Onondaga County Soil and Water Conservation District.

Covanta Energy has been a primary sponsor of our Regional Envirothon since 1997. Envirothon is a hands-on competition for school students, high school students that promotes awareness to our natural environment. Teams

compete in such subject matters as aquatics, forestry, wildlife, soils and current environmental issues. To date 3,844 students have been through this program in a five county region of Central New York.

Covanta's sponsorship for this program has exceeded $85,000 since 1997. And that money has gone to providing the annual newsletter, awards, scholarships

and T-shirts for participating students and the volunteers. One of your former Envirothon competitors has gone on to become the Public Information Specialist for Onondaga County Water Environment Authority, and another is a conservation officer in Sitka, Alaska.

In 2015 and 2016 Covanta has been secured as a primary sponsor of the New York State Association of Conservation Districts Water Quality Symposium. It's the first time that this Symposium has ever been held in Syracuse, New York, and with the financial support of

Karpinska

Covanta Energy along with hard work of the Syracuse Convention Visitors Bureau and your Soil and Water District, it's going to bring hundreds of environmentally minded conservationist from around New York State and the northeast to Syracuse in March of 2015 and 2016.

So on behalf of the Onondaga County Board of Directors for the Soil and Water Conservation District, we would like to lend our support to the updated Solid Waste Management Plan and to the ash-for-trash opportunity with Cortland County. We see it as a great way to

grow and expand community education and outreach programs well into the future. Thank you for your time.

CHAIRMAN McMAHON: Thanks, Mark. Next we have Beata Karpinska, Syracuse.

BEATA KARPINSKA: Good evening everybody. My name is Beata Karpinska, I'm a resident of Cumberland Avenue in the City of Syracuse. And I just wanted to tell you today in this hearing that

burning trash is a terrible, terrible outdated idea. We have much better technological advances and means to do a better job. And here is my concern:

We do not have any added value when we burn trash. We just destroy and just give more chemicals in the air and soil in our land, polluting. We do not have any new jobs that we create from burning trash. We can create jobs from recycling and new programs for recycling and making sure that we have clear waste programs. But we are not doing it with burning trash, it has absolutely no value.

There is a picture on the wall when I was going by that says early 20th century manufacturing giant. Over there if I can direct you to it. It has smoke

stacks. This is early 20th century. We have to move into the 21st century. And we have to embrace the new technologies that we have wonderful facilities for, like ESF and S.U. and students. And

Karpinska

there is so much other already on the market that we can use to make sure that we take advantage of those technologies to be able to recycle more, not to expand our trash burning.

I think it's really important. We cannot go out and import trash from Cortland. This is just going to make our already polluted environment from 81 and in that area much worse. Our air, our soil and water will be more polluted. And what I'm concerned about, that this is going to cost us much more money than we can save at all in any way by burning trash. Because we're going to have to clean it up, just like we had to clean up the Onondaga Lake.

All this pollution of air, soil and especially water, our reservoir in Jamesville, and Clark Reservation, all those other areas, and especially also health costs of the residents like myself. I also live within a mile from

this plant. And I'm very concerned with

Karpinska

the air pollution there. All of our health care costs. This all has to be taken into consideration by you, because you are our public officials that we elected for you to make that important decision today.

So I think we have to look at much more beyond just saving money. And this Plan that you have that you have been planning to go all the way to Cortland, I think I'm very concerned that Cortland is not going to be enough. Next place will be another County that you're going to be going to importing trash, which will bring more pollution. So those are the concerns as a resident I have.

I very much urge you today to start thinking about expanding recycling and do not approve this plan to go ahead with importing trash from Cortland County, because all we're going to create is more illness, cancer in the community among residents. Vote against, please vote against this

Peterson

expansion. You're going to vote against

residents if you vote for expansion and for trash burning. I truly believe you're voting against us, the residents. Thank you, very much.

CHAIRMAN McMAHON: Beata, thanks. Next we have Jennifer Peterson.

JENNIFER PETERSON: Good evening. My name is Jennifer Peterson, and I own a home in the Southwood area, which is less than two miles from the Covanta energy plant. I have lived at my home for over 15 years and I represent an average home household in Onondaga County. It is myself, my husband, my nine year old son, my seven year old daughter and our two dogs. We produce a typical amount of trash each week and we recycle and have a compost pile, but we do have trash that needs to be taken care of weekly.

I had often wondered what the building off 481 did as I passed it each day on my way to work. I knew there was

concern about it being there and I knew it produced or processed trash. But that was all I knew until I received a call in 2004 from a company called Covanta Energy, who was looking for

janitorial provider.

See I'm a business owner who provides commercial janitorial services for Onondaga County businesses. Since 2004 we have been working closely with Covanta not only to ensure they have a clean facility, but we have also helped them implement green cleaning within the facility, as well as installing green paper products and dispensers. I have learned from my many years with Covanta that this County produces a lot of trash. I was overwhelmed when I saw how much is disposed of daily.

As a parent and a homeowner I wondered where can we possibly put all this trash? In the ground? And then what issues would we have? I highly suggest to anyone here to have the

opportunity to visit the facility to do so. It is astonishing what is put to the curb weekly.

I'm consistently working with Covanta to make certain we have our following and necessary guidelines that they strictly adhere to for the cleanliness and safety of their environment as well as ours. I am confident and comfortable living where I

do, because I know what happens behind the scenes. I know what Covanta employees do to ensure a cleaner environment, while addressing our excessive trash demands and providing energy to support this area.

I do want to recognize those that do have concerns with the facility. So I want to leave you with one thought. In the part of Jamesville where I live there are many large open fields and farm areas. It's very common for my neighbors to burn barrels or fire-pits of wood, trash and leaves. It is a

fairly common practice in the area. One burned barrel can produce the same amount of emissions or pollutants as Covanta does in one year.

In closing, I care very much about the environment as a parent, homeowner and business owner. I have two small children who rely on me to make decisions that are in their best interest. Based on my personal experience with Covanta Energy I feel confident they are always keeping the community in mind while providing a much needed resource. Thank you.

CHAIRMAN McMAHON: Thank you Jennifer. We have Joseph Esposito from Jamesville, New York.

JOSEPH ESPOSITO: Good evening. I have the opportunity to be a contractor at the garbage burning steam plant and I live a mile and-a-half downwind along with my children, my wife and my grandchildren; my parents live in Fayetteville.

But I have the unique opportunity to be there since the place was started. The scrubber technology in that plant is phenomenal. It's what we needed in the Midwest, so we wouldn't pollute the Adirondacks. Now I understand to all our other residents the confused mind says no. But that place runs like a nuclear plant. The care and the concern that they give to the environment and what the previous speaker just said about the air that comes out of that stack is true.

We should all strive to help them. We have to live with Onondaga Lake, that's a big black eye for us. But not only do we gain financially from this plant, all us residents here, but it is a state-of-the-art. We all come from a

day when our fathers put oil behind the garage. We should encourage this and we should work to educate the citizens of this County how good that place is. It's a state-of-the-art, you can't go

anywhere in the world and find clean -- what we should be more worried about is China. Those people care about the environment. My family works there. I worked there almost since the day it was opened. I have no problems with anything that's emitted there. I spend hours and hours plowing their snow.

As a matter of fact when Enron went out of business they spun into a little bit of a problem financially with their bond rating. And they made sure I didn't get hurt. They care about this community. I was down 6,000 in their bankruptcy, and they came and they made sure that I got all that money out of the bankruptcy proceedings.

So they do care. But more importantly it's great for our community. It's great for the air. What else do we have? There is no recycling that can take care of all our trash. It doesn't exist. That's a needed facility and it

makes us all money. And we should be

Brown

thankful and help them expand if we can. Not only that, but if the Plan that's in place right now that they're proposing makes good use of the fuel, we're going to take the trash from Cortland and bring it here and we're going to bring the ash down there. As a contractor that's a win-win situation. They're great people and we should support them. Thanks.

CHAIRMAN McMAHON: Thank you. Next we have Patrick Brown, Jamesville, New York.

PATRICK BROWN: Thank you, Chairman, thank you Legislators for hearing us tonight and allowing us to comment. I am a resident of Jamesville, I've been a life long resident of Jamesville. I'm here as a resident this evening. And in my career I've been a long term educator and I'm a school administrator of an award winning blue ribbon school district in Central New York.

Tonight I would like to discuss the

P. Brown

education section of the actual Solid

Waste Management Plan that's proposed, which is on page 81 Section 8.6.3, which is Implementing Interactive and Engaging School Curriculum. The educational program proposed or that's on the website now intends to reach over 12,000 3rd through 5th grade students, that's what it states, with common core aligned lessons, videos and games.

I've had a chance to review the content of the curriculum materials on the site. The videos, the games and the lessons. And I find that there are several positive messages to our students that are around composting, that are around recycling, reduction and reuse.

However, the section on waste-to-energy does not give our children the full story, and the understanding on waste-to-energy facilities. The continued message to the students and the videos, games and materials that are

produced on the website for the lessons in grades 3 through 5 is that waste-to-energy or incineration is the answer for all unrecyclable or non-reusable items. By burning, we're doing the best we can.

And that is simply not the reality. The message has been sent to our youth and their teachers for several years, and for specific reasons. And that could quite possibly be one of the reasons we don't have a lot of young people in the room tonight. I have a few I see, but I brought them.

Nowhere in the materials does it really discuss a plan for zero waste. And to think about asking our kids based on the inputs from the videos to think about how we would get there. That's true critical thinking. The lessons on incineration and waste-to-energy are very rote, repetitive on the topic of glorification of incineration. How clean and how healthy it is for the environment. And it glorifies the

mounds of energy that's created.

It states in the video that there is no harm to our environment from burning trash. It also states that burning trash has a positive impact to our environment, several times in the videos and in the materials. This is simply not a true statement. And it's a message that's being sent to the youth of our County.

The videos also say that the waste-to-energy facility has a high-tech pollution control system that keeps our environment clean and healthy. If we're going to make a statement like that to kids, what do we expect them to believe? The expectation from those types of statements is that everything is just fine. What the presentation materials that our kids are being exposed to doesn't show are additional facts about incineration, such as that waste-to-energy industry's sales pitch emphasizes the energy production of a

waste-to-energy facility, even attempting to portray it as green or renewable energy. The sales pitch for the waste-to-energy industry does not address any human health concerns at all.

Waste incineration systems produce a wide variety of pollutants which are detrimental to human health. Far from eliminating the need for a landfill, waste incinerator systems produce toxic ash and other residues. The waste-to-energy program to maximize energy recovery is technologically

incompatible with reducing dioxin emissions. Dioxins are the most lethal persistent organic pollutants, which have irreparable environmental health consequences. The affected populace includes those living near the incinerator as well as those living in the broader region. So it's not just the residents of Jamesville.

People are exposed to toxic compounds

in several ways: By breathing the air, which affects both the workers in the plant and people who live nearby; by eating locally produced foods or water that have been contaminated by air pollutants from the incinerator; and by eating fish or wildlife that have been contaminated by the air emissions.

Dioxin is a highly toxic compound, which may cause cancer and neurological damage and disrupt reproductive systems, thyroid systems, respiratory systems, etc.

We are requesting three things.

1. That the educational materials be re-evaluated to show the entire picture of waste-to-energy incineration; positive and pitfalls for the children of Onondaga County. Let's tell them the

truth.

2. That the waste amount of chemicals that are being released from the stacks of the Rock Cut Road waste-to-energy facility not be

Mt. Pleasant

increased by bringing trash in from Cortland County or any other County to feed it.

3. We are also requesting that the importation law not be changed for the sustainability of our environment and for our future generations of children.

A true common core aligned lesson regarding waste-to-energy would include students researching several different types of waste-to-energy strategies and forming their own opinion supported by research. Thank you.

CHAIRMAN McMAHON: Thank you very much. Liz Mt. Pleasant, West Shore Manor Road.

LIZ MT. PLEASANT: Good evening, thank you for giving me this opportunity. I moved to Onondaga County when I was 10 years old from Tompkins County, and I've lived in Syracuse most of that time. Five years ago I moved out to Jamesville, right on the reservoir. And when I saw

in the paper that this was in the works,

Mt. Pleasant
that we were trying to figure out a better way to handle our waste management I thought well, I better study up on it. And that was daunting, let me tell you. There are a lot of documents, and so many of them say, well this was already handled here, and this was established 26 years ago and we think it's still current.

I have received, I have reviewed documents, listened to learned scientist interviewed OCRRA staff, professional environmentalists, city residents, suburban residents, asthmatic cancer survivors, geographers, journalists. I rent apartments up in the University area, we had a geographer who was doing the geography of disease. And I think our County health commissioner probably could use that tool to help identify and make recommendations for what is a healthy situation here. I don't think we've heard from that person yet, which kind of disturbs me. But I'm told that

Mt. Pleasant
it's in the works.

The history, the law, the project development. Tonight I've heard some great things about Covanta's operation. But the people that I talked to really don't trust what they hear. They're just not convinced, and maybe it's because the data isn't there for them to see or easily available. I haven't seen it myself. Maybe transparency is something I'm talking about there.

I think we really ought to take a look at transporting garbage and ash, you know. And I thought when I first read about it, that really sounds like that's a really smart idea. Bring the trash in, take the ash away. And then I drove by the place and I said, hey, there is a railroad track here, not far away at all. And that's the cheapest way to transport stuff. Maybe we wouldn't have to spend all the money on building up this other area. Maybe we could just put it on a rail and get it

out of here real easy. And cheaper. No tolls. Just a lot easier sort of a thing.

Of course I'm prejudiced. My grandfather was a, he was a real

recycler. When he got off the boat at Ellis Island he went through a barrel of potatoes and threw away the rotten ones and sold the good ones. And from there on he was on his way up. And he found jobs for a lot of people. And I think he's my model.

And I think there is a better way than what we're talking about here, because I have to breathe that air, not too far from the plant, and swim in the water, and our boat livery sends people out to catch fish for dinner. I'm wondering, what are they having for dinner?

So I'm really concerned about this whole thing. And I haven't called Warren Buffet yet to get an estimate on how much it would cost, but I really am.

So you might laugh about it, why not? Why do we put that plant there in that valley? And I thought, you know, okay, so there is a lot to think about. I don't think we've come to the best conclusion in the contract that I've seen.

I saw that and I know we're talking now about a ten year review, but when I saw that the dump was going to last for

17 or 18 years and they had a 20 year contract, I thought that doesn't quite fit. And the idea that the foxes are guarding the hen house is not convincing to me. I think we need outside checks more than once a year with a week's notice on what's coming out of those stacks.

And I'm real pleased that this company is a good employer, I'm happy to hear all the good stuff about them. But I think we've got a responsibility to hear the people here before we jump into this. And I know it's a lot of time is

King

spent, but I think we need to broaden, open up our eyes, like we are asking the children, to study other plants and see what works and then make a decision. And maybe that's been done, but I just saw too many questions in my reading.

The idea that recycling -- I really hope that we will stick with that proposal that the federal government gave us in ELC, ETL 27 0. 106, the Act of 1987, the hierarchy of solid waste management. And respect that, and really know that there has got to be a better way than the way we're doing it.

Thank you.

CHAIRMAN McMAHON: Thank you, Liz. Next we have Peter King, Thurber Street, Syracuse, New York.

PETER KING: Good evening County Legislature and people. My name is Peter King, I'm a resident of the city of Syracuse, actually live probably under a mile from the incinerator itself on Thurber Street in Syracuse. And I

must confess, I have not read the Solid Waste Plan. I am aware of some of the negotiations surrounding the Plan as I've been involved with some decision that were before, just to ask questions about this a few years ago.

However, my first question really is about lock-in. That I'm wondering does the County want to be in a 20 year position of lock-in with any agreement or negotiation that cannot be gotten out of? As a practical matter that doesn't make good business sense.

And my second point being, there is no way that incineration, as with any garbage disposal, you really have to consider full-life cycle analysis. Incineration is frankly not clean from the data I've seen. There is always

residual and it certainly is about air, not only soil and water.

This is an environmental justice issue, and I don't believe in forcing toxic residues or waste on anybody,

whether it is someone from Cortland County who is receiving ash or someone living in the Valley of Syracuse who is unknowingly breathing, you know, things they don't want. I'll have to say as a resident, I sometimes notice it in the summer less some years than others.

But that what I have seen is that the soil PCBs, this is data I requested from the County on what is called South Campus, which is immediately adjacent to Rock Cut Road, which is inhabited by students from Syracuse University. There are PCBs and I think dioxins measured routinely on that soil.

On the other side of that Valley at Clark Reservation there's been scientific papers written by University professors, again, and very well known professors, regarding the mercury in the fish there. That it is rising in distinction to mercury measured in other lakes in New York State which is declining. And so

this also raises my question.

King

I have also seen an unpublished paper by the US Forest Service at SUNY ESF in Syracuse. And this has nothing to do with the incineration, this is just measuring the meteorology of the Valley of Central Syracuse, which stretches from the south side to downtown. And that the main forcing function there is downward winds every night. And so it's called cold air return. You see it often on farms, where the air will drop down to the lowest position.

And the point of this is that in urban studies we find that there is often what's called the urban ventilation pattern. And some cities make use of this to clean out their air. In this case I think that Rock Cut Road should be examined for being a ventilation corridor. As I say, I live near the incinerator and sometimes I go up on the cemetery near there and I have taken photographs of the incinerator

King

smoke blowing towards the city. And

this raises concerns.

And so as to health concerns, the Valley of Syracuse is noted for having 17 times the asthma rate of the rest of the County. And this could be for a variety of reasons. We have a coal plant up to the northwest. We have I-81 going through there, which is currently being discussed. But that it is rising as is predicted for asthma. And as being observed for cities worldwide, and there is a whole discussion around that. We're actually getting possibly lower wind speeds in New York state so that the air becomes more stagnant. And these, I'm just reporting these, this is what's in the literature.

As far as the air quality in the city, we have no measurements at all because all the air monitors are outside the city near 690. There was a monitor by East Adams Street which was decommissioned because it was in

compliance but it was carbon monoxide, which is the one pollutant which EPA has made the most progress on in getting out of our cars. Meanwhile ozone and particulate matter, which causes the

most disease are actually measured by 690 by Home Depot, you can drive over there and take a look.

And so ozone is less easily solved, as is asthma. There is an asthma section in the greenhouse gas, an action plan, which is an official state plan available through NYSERDA, you can read that. And frankly these things are connected. We couldn't understand it, because for a hundred years urban health has been completely separated from urban planning. And so it is more recently that things like environmental justice are coming into some kind of understanding. And I think this is something that in Syracuse we should be taking note of.

And as far as solutions in

King

Binghamton. Binghamton is our closest friend, they actually rejected an incinerator a number of years ago. There are people from Binghamton who are very willing to come here and discuss their vision and how they got there. Our own recycling rate is, as somebody has mentioned, not bad. It's in the what, 60 percent or thereabouts. We can go from recycling 101 to 102. We can

start recycling what's called the wet stream waste. We can compost that. That is maybe 60 or 70 percent of the waste and it's not good to burn wet stuff anyway, it doesn't give a good burn.

And finally, I'm a member of the Urban Jobs Task Force in Syracuse and I'm not speaking for the Urban Jobs Task Force here, but just to say that we need jobs in Syracuse, and incineration will not provide jobs. Recycling will. There are recycling industries springing up all over the country in cities which

hire local residents, and they also build greenhouses. And this can build a whole eco systems of services that we haven't seen yet. We haven't seen that benefit. So until, I don't think we can say we've seen the whole menu of options there. Thank you.

CHAIRMAN McMAHON: Thanks Peter. Next, Don Hughes. Like to remind people to try to be respectful to the three or four minute time frame. We've been going drastically over that.

DON HUGHES: Well, I'll try. So my name is Don Hughes, and I've been a

resident of Onondaga County, Syracuse, for a while now, since 1985. My credentials include professional engineering license in New York state, and I hold a Ph.D. from SUNY College of Environmental Science and Forestry; and that's in environmental chemistry. I also served on the OCRRA Board for about six years, 2003 to 2009. So I know a bit about the subject.

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Hughes

My first point that I want to raise here is that this document, we're commenting on something which is a Solid Waste Management Plan update. This is not really a Plan. This is simply an update. And the original Plan came out in 1991. Supposed to be updated every five years. That never happened. So this is the first update. That was 23 years ago, if I did the math right. A lot happens in 23 years.

In 1991 OCRRA was just a planning agency. The trash burning plant had not yet been built, that was to come three years later. Recycling programs were in their infancy. And today obviously things are dramatically different. We have mature recycling markets, we have a lot more plastics in the waste stream.

We have newspapers that have gone away or shrunk, literally. Electronic waste has become a major factor. Every time I walk the dog I see more broken TV sets by the curbside. And of course the

state and federal regulations on solid waste and the vision for solid waste has changed dramatically.

The new New York state solid waste strategy has adopted a completely different paradigm from what it used to be. It's about sustainability and not so much about an end of pipe solution. And I would like to quote to you from Beyond Waste. This was issued December of 2010. This is New York DEC's update of the state Solid Waste Management Plan. They say, New York State's Beyond Waste Plan sets forth a new approach for New York State. A shift from focussing on end of the pipe waste management techniques to looking upstream, and more comprehensively at how materials that would otherwise become waste can be more sustainably managed through the state's economy. This shift is central to the state's ability to adapt to an age of growing pressure to reduce demand for

energy, reduce dependence on disposal,

Hughes

minimize emission of greenhouse gases and create green jobs.

Fundamentals of Beyond Waste is a 20 year goal of reducing the average amount of MSW, municipal solid waste that New Yorkers dispose. And the ultimate goal being .6 pounds per person per day, in 20 years. In the year 2030. We're above that right now.

And if we succeed in achieving a great reduction, and I certainly hope we do, because that's clearly the most environmentally sustainable thing to do, with this Plan we're going to be looking to fill a gap. Bringing in 25,000 tons from Cortland is not going to be enough. We're going to be hunting for more trash, because that is what incinerators are all about. You must feed them. If we do not come up with the required trash we, the County residents, have to pay a penalty, about $6 a pound. So that's point Number 1.

Point Number 2 is that this document,

Hughes

which makes lots of good points, I don't

want to disparage it, but it doesn't talk about a essential, which is money. How much will it cost? No mention whatsoever of cost. We need an honest evaluation of cost. How can we have a Plan that ignores that? Economic considerations have to be taken into account. Not only includes the cost of residents of the County and the institutions and businesses in our County for waste disposal, but it should also include the economic costs associated with increased health exposures -- expenses rather, associated with the operation of the incinerator. For the transport of solid waste and ash and all that.

And furthermore, economics should look into job creation associated with the various forms of waste disposal. Recycling and waste reuse generates far more jobs compared to land-filling incineration.

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Hughes

Recycling and waste reduce creates added value as well as creating new products from old materials. And recycling is, well reduction and recycling is by far the cheapest

alternatives. You get paid for materials that you recycle. Other average costs, $44 a ton for composting, $61 a ton for land-filling. Incineration $92 a ton. If we commit to incineration we're going to see the highest possible cost.

And finally, environmental considerations have been partially addressed but not fully addressed. The inflated claims made about the greenhouse gas impacts on incineration compared to land-filling. For one thing the power generated by the plant does not replace a lot of power generated by fossil fuels. That's the claim that's being made. But most of our electricity comes from nukes. Nuclear power, 80 percent. That figure is from Mr. Carrick over at the Regional Planning and Development

Board. And the other 20 percent, a lot of it is hydroelectric. So we're not getting a benefit.

And finally, I would like to refer to a comparison of CO2 emissions, so we're concerned about greenhouse gases, which we should be. The amount of emissions from a municipal solid waste fired incinerator is about 3,000 pounds compared to 2,200 pounds for coal. Coal

is the next worst. Oil is at 1,500. Natural gas is at 1,200. This is not an improvement, folks. So what I would urge you to do is take this Plan, send it back and tell them we need a Comprehensive Plan, not just an update. And we should not commit ourselves to this relationship between Covanta and OCRRA. It's not good policy for this County, it's not good for this -- for the residents, not good for the environment. Thank you.

CHAIRMAN McMAHON: Next speaker Ian Hunter, Last Chance Recycling. We

actually got worse with that last speaker with our time requirement, so I'm going to start enforcing it.

IAN HUNTER: I'm glad to follow that last man because he's the first one that talked about the economics of that, and I'm going to go into it a little further.

CHAIRMAN McMAHON: If you want to press the button right there, the light should pop up.

IAN HUNTER: All right, that's better. My name is Ian Hunter and I operate a company called Last Chance

Recycling, and I ran it for about 17 years now. And I'll give you a little background. When we had the storm back in 1998, I processed and disposed of 37.5 percent of the entire storm. So we know what we're doing about recycling yard waste.

When I first came here tonight I talked with about I think a half dozen, at least a half dozen Legislators, and I

asked them a simple question. The simple question was: How much is Cortland County going to pay us to take their garbage? And I worked out the numbers. If we save $16 a ton it costs to take the ash down to Seneca Meadows, and now High Acres and add to it $8 a ton to transport it, that's a $24.00 saving by taking it down to Cortland.

Right now the price to get rid of garbage, this next year is $89 a ton. A lot of you people don't know it but they raised it $10 in anticipation of giving more goodies to Covanta. So if you take $24 that we saved from the $89 that the taxpayers, the citizens of this County are paying to get rid of their garbage or will be next year, that means the number, the dollar amount that Cortland

County should be paying would be $65 a ton just to break even. Any less than that would be a direct subsidy from the families of this County to the families of Cortland County. But nobody seems to

know what the price is. So you know, I'd like a little transparency here.

I have attended many meetings at OCRRA, and they go through all the committee reports and fixing the trucks and all that baloney and at the end they always go into executive session that we can't go to. And we never hear what they talk about in executive session. They always tell us it's about the Covanta contract coming down to Cortland. But it's never published. I don't think there are any numbers, I would like to know what they are.

Now I worked out the numbers on the difference between taking the garbage next year, making the deal with Covanta, and versus what it would cost to get rid of it down to Seneca Meadows or High Acres. The number I come up with, and I've given this number up, nobody challenged it yet. It's been 20 years, the taxpayers in this County will save

$288 million just by getting rid of the

Hunter

flow control we have in effect now.

The haulers, most of them have their own trailers, and most of them already paid for it out of the residue taken down to Seneca Meadows. Items that aren't, material that isn't covered by the flow control law. So if you get rid of the flow control law there would be no problem.

Now scare tactics are used in this County. The scare tactic is this. If we let Covanta buy the plant they could buy it for a dollar, and they can import all the garbage from anywhere they want in the country, because the Supreme Court says they can do that. That happens to be true. But what's not true it's just not a dollar, they would have to pay $42 million to pay off the existing bonds on the plant.

By the way, I'm getting all this information off their own report, 2012. For your information the only audit ever done on it in the last years. One audit

Hunter

in 20 years. We haven't got the 2013

audit, and they're not even preparing the 2014. Until that's done you folks shouldn't do anything. You've got to get those numbers. Let the people see them, let your constituents see them and then you can make a decision.

The other scare tactic they use is that if Covanta buys it, which they won't. But let's say they do. They can take garbage from anywhere in the country. The only problem is this, when those trucks come down the Thruway from Peekskill and those counties down along the Hudson River, they pass on the Thruway right through Onondaga County. So when they get that far, they would have a choice, if Covanta was in the business. And that would be to turn off, take their trash and deliver it for $89 a ton or continue down the Thruway an additional $7.00 a ton cost and dumping it for $22.

And what I've done is I've taken the

cost of letting the contractors, the haulers take it down there, and what it would cost. That's where I come up with the $288 million, which is $75 a household per year for the next 20

years. If anybody wants to challenge that, please tell me. Because if I'm making a mistake I don't want to continue to make a fool of myself by saying these things. But I'm not making a big mistake, I'm using their numbers and those are what the numbers are.

The other issue is recycling. They say, well, we all want to reduce the garbage by recycling. But OCRRA stifles that. Because what will happen, if we renew the contract with Covanta there is going to be a reason to extend as much of that burning plant as they can. Because if we don't reach a certain threshold we're going to pay extra money. And nobody is going to invest in money to come up with a technology and the equipment to recycle more of a waste

stream with Covanta -- or with OCRRA in the room, because you never know what OCRRA is going to do next.

In my business, I compost. I'm a composter. I've got $2 million worth of equipment. My private competitors are in Onondaga County, and there is five others, have over a million dollars worth of equipment. And it costs me, and I assume the rest of them the same,

it costs me $6 to grind the material, put it in a pile, let it heat up, turn it over, introduce water in it, turn it over again. And when it cools off, screen it out, and you end up with the finished compost. It costs me $6 a cubic yard.

Antonacci, Bob Antonacci, I pressured him to do a report. And he did a report for 2012. And it turns out that the cost for producing compost is subsidized by OCRRA. And it cost them $55.60 to make the same yard of compost that I make for $6. And if somebody in

this County wants to go into, as an example, C&D sort, they've got no worry, I buy the equipment, set up the process, get all of the permits I need. What happens if OCRRA does it? Puts you out of business. That's the problem we have here. So my contention is, as long as OCRRA is out there with that waste-to-energy plant and they can charge this $89 a ton charges so they can subsidize their recycling, real recycling won't happen.

CHAIRMAN McMAHON: Wrap it up please.

IAN HUNTER: So if anybody has any

problems with my numbers, please tell me. Okay, thank you, very much.

CHAIRMAN McMAHON: Thank you. Pam Jenkins, Cortland County Environmental Advisory Board.

PAM JENKINS: Good evening Legislators, my name is Pam Jenkins, I live in Cortland County. Many of us in Cortland are working very hard to ensure that you will not have the option of

using the Cortland landfill for your incinerator ash; and our momentum is growing.

Cortland Town and County officials are joining us to prevent an incinerator ash dump from being built in the recharge zone of our sole source aquifer.

In shameful violation of Open Meetings laws and SEQR laws the siting process has been a sham. With numerous closed door meetings. Requested documents are continually concealed. And we were given an incomplete final scope and an incomplete DEIS. Documents were not read or reviewed but were approved. And the project has been pushed forward by officials who do not have much of a clue about what the project entails or about how much it

will cost or what the likelihood is of catastrophic consequences to Cortland's sole source aquifer.

In fact our landfill couldn't even be permitted by the DEC for, I think it

was several decades, because of the DEC's concerns of groundwater being so close to the surface over most of the landfill.

Incineration of some plastics causes dioxins and furans to be created. You must know that these are the most hazardous and persistent organic pollutants known to man. Dioxins and furans either go out the stack with emission or they are temporarily trapped in the ash or they are trapped in the pollution control devices. The pollution control residue then requires disposal. We don't want that stuff in our landfill, and we don't want the ash in the Cortland landfill either.

Onondaga could save greenhouse gas and transportation costs by using the landfill in Onondaga County for its waste disposal needs. Incinerators cause greenhouse gas emissions and emit lead, mercury, cadmium, ammonia,

formaldehyde, sulfuric acid and fine

Jenkins

particulates.

The OCRRA incinerator does not even monitor or control for 2.5 PM, the smallest and most hazardous of the fine particulate. It is completely untrue that OCRRA uses state-of-the-art equipment. This is a blatantly empty statement. I learned that OCRRA burns recyclables and I think it burns C&D waste also. There are much more modern ways to deal with waste.

Why have you allowed this situation to persist? There are 46 schools, 16 recreation areas and 20 water sources within a four mile radius of OCRRA. The incidences of breast cancer, lung cancer and prostate cancer are higher in Onondaga County as compared to New York State and the US. Why is this? Is OCRRA partially to blame? Please put an end to the use of dark age technology of waste incineration.

Additionally, if Cortland begins to recycle above the 8 percent that

Jenkins

currently occurs in Cortland County

there will not be much trash to send to the OCRRA incinerator and you will have to look further for trash.

There is a particularly heinous provision in the contract that is being negotiated behind closed doors between OCRRA and Onondaga County. The requirement is for Cortland to guarantee a certain number of tons of trash to OCRRA or pay a penalty per ton. This is called put or pay. And this provision has caused many localities to go into a huge amount of debt to pay penalty to incinerators when their waste streams shrink due to recycling and composting. Burning trash is a disincentive to recycling and composting.

Onondaga and Cortland can do much better in managing their waste. Much better than tying our future to an aging technology and toxic ash. Thank you.

CHAIRMAN McMAHON: Next we have Michael Wolfson, Bradford Parkway,

Syracuse.

MICHAEL WOLFSON: My name is Dr. Michael Wolfson, I'm a physician, I live in Dewitt. My background is that I've been licensed as a physician in

Massachusetts since 1982, in New York State since 1993. My training is in primary care first, family medicine, I'm board certified. I'm also board certified in occupational and environmental medicine with a master's in public health from Harvard and clinical training in the Harvard program in occupational environmental health, environmental medicine.

In addition, I have training and a fellowship in addiction medicine from Brown, where I was invited to come back after I completed my program at Harvard. I've been practicing occupation and environmental medicine for the past 25 years or actually longer than that.

I have not heard anyone with my credentials or my clinical experience or

my experience in the field in evaluating toxic waste sites and other toxic polluters and toxic emitters, give any testimony at all the hearings that I've been to in the last 16 years. However, I'm very glad to hear that those individuals who are opposed to this incinerator on the basis of health concerns are speaking today.

And I would suggest to those

proponents of the incinerator who continue to insist that there is no harm to the health, public health or the environment, that I'm available for a public debate with anyone that you can bring forward with my credentials who wants to have an open public debate about the health risks to the community from this incinerator. I'll be happy to make arrangement to have that debate in public.

Now, what I would like to address is two things fairly quickly. One is the health risks and the other is the, what

Wolfson

I believe now having reviewed the federal, Code of Federal Regulations regarding the disposal of solid waste as well as the Clean Air Act, and the hazardous waste disposal is governed in large part by RCRA, the Research Conservation Recovery Act. I've opposed this incinerator, since I moved back here in 1992, I'm originally from Syracuse. And every time that I submit testimony or testify before this Legislature or Legislative Committees, every time I've given that testimony I've not received any response that

gives me any kind of logical or reasonable opposition to what I've said in terms of my concerns about health.

Now, I looked at, the Office of the Environment from Onondaga County has put out a 2014 proposed Comprehensive Solid Waste Management Plan update. And I think it's telling what it has to say in the first sentence of the second paragraph.

Wolfson

"It's been nearly 25 years since the development and approval of Onondaga County's Comprehensive Solid Waste Management Plan. And although the 1991 Plan is still quite relevant today," which is absolutely false, "to remain current with state requirements the County has proposed updates to the Solid Waste Management Plan that reflect revisions to evolving state requirements."

Now when I have evidence, I'm not going to discuss it today, it's in plenty of places so that nobody is going to be able to tamper with it, we've got evidence in writing that the Onondaga County Health Department, the DEC, the State Health Department and EPA, have all ignored all of the health concerns

that have been raised about this plant since it opened. So let's talk about what those are.

First of all, OCRRA has ads running on TV that say that they've taken

325,000 tons of waste out of the waste stream by burning it in the incinerator. Just not true. Now, I had a discussion with the director of OCRRA after the OCRRA Board meeting, which was in my view somewhat laughable, since we were allowed three minutes to speak and since it was pretty obvious to me, in my opinion, that the decision of the Board and what they were voting on had already been predetermined. And they allowed half a dozen or more of us to speak for three minutes then they just voted.

Now, at that meeting I stated that in fact dioxins were a cancer risk. And I would now label this facility, as I have in the past, although I couldn't really determine a proper name for it, this is a cancer factory. The fact is that medical and scientific agreement of the vast majority of physicians and scientists is, that carcinogens, cancer causing materials are unsafe at any

level. Certainly unsafe at any measured

Wolfson

level.

And I have the documents here that show the measurements of dioxins in the soil, at a whole variety of off-site monitoring locations. We also have the indication that the ash that's being dumped from this incinerator is loaded with dioxins, dibenzofurans, which are relatives, PCBs and then the other carcinogens, I won't name all of them: arsenic, nickel, chromium, cadmium, lead is now considered a carcinogen. Actually lead was not considered a carcinogen when the original health assessment for this incinerator was done, over 20 years ago.

Over 20 years ago when the Health Risk assessment, which we demanded to be repeated was done, dioxins were not known to be a thousand or more times as toxic as they are now. So if that Health Risk Assessment were repeated, which we are again demanding, I'm demanding this and other individuals in

Wolfson

this room and other people who have

spoken at these hearings have demanded a new Health Risk Assessment. If that Health Risk Assessment were done the incinerator would have to be shut down. On DEC regulations it could not operate. And that's the reason that the Health Risk Assessment has not been repeated, because the operator and apparently the County, want the incinerator to continue operating.

Now the director of OCRRA stated to me, and it would be laughable if it weren't pathetic, that all of us who are opposed to the incinerator are self-interested. Well, I spent several thousand hours researching this incinerator and speaking at hearings like this for the last 20 years. I don't get paid for this. There is nothing in it for me. If this incinerator gets shut down, the only thing that's in it for me is the protection of the public health and the

environment.

The people who are self-interested in keeping this incinerator open are the executives and staff at OCRRA who are getting paid. Because a lot of their

income comes from running the incinerator. The incinerator operator itself, which is making money on this. And interestingly, Connecticut has just legislated a plan to get rid of all of their so called waste-to-energy incinerators in the next 10 years. And three of those nine incinerators are operated by Covanta. And what does Covanta have to say about that? Well, it's pretty interesting.

Covanta says, we support the state's goals to increase recycling and we hope to help. Covanta spokesman, James Reagan said, "we will be an extremely important part of waste disposal in the state." In other words, they know, they can see the writing on the wall and they're not opposing the closing of

their incinerators.

Now when we're talking about again, dioxins, let's just go back quickly to the health risks. There are no levels of cancer-causing chemicals or other materials that are safe for humans. If you can measure it, then there is a cancer risk. The cancer risk from dioxins, I did a brief calculation while I was sitting in the back. When you

measure dioxins at City Lights, in the soil of the homes of people who live in City Lights, it's a pretty expensive development. And you measure those dioxins and then you calculate the way the EPA does, how much of that toxin, or toxic I should say, from the soil gets into people's homes? And then how much those individuals will ingest or inhale every day?

Because all of you in your homes if you're adults the numbers vary, but it's about a hundred milligrams of dust or dirt that you're going to eat or inhale

every day in your homes. Children, 200 milligrams. If you calculate how much dioxin is in that soil, and you use conservative estimates from the EPA, that at least a quarter of that will end up in your home or in your workplace, for example in the South Campus of Syracuse University, which has elevated dioxin and arsenic levels among other things. Then you recognize that in fact the cancer risk for those people is something like one in a thousand -- or one in a thousand to one in 10,000. The acceptable risk from EPA is one in a

million. Now one in 10,000 risk means a hundred extra cancers per year per million population. That is clearly from a public health standpoint unacceptable.

Now, the last thing that I wanted to get to, all of these toxins that I mentioned are all cancer-causing. Arsenic causes cancer in almost every organ in the body. It is also

responsible along with dioxins. You can go online and read the Vietnam Veterans and Agent Orange publication that comes out every two years from the National Academy of Sciences, and take a look at that. Dioxins are responsible for causation of Type 2 diabetes, multiple cancers, including prostate, brain, lymphomas, leukemias, soft tissue sarcomas. All right, that's just the beginning of the list.

Arsenic, I won't even tick off the number of different organ systems in which arsenic causes cancer. All of these substances have been found in soil in levels that are considered to be elevated by EPA standards, which are still too conservative. That's if you're willing to accept the EPA numbers

that say that at these levels one extra cancer per million population above what would be expected is going to occur.

CHAIRMAN McMAHON: Dr. Wolfson, please wrap up.

Wolfson

MICHAEL WOLFSON: Just about done. The one other thing I would mention, having read now, I didn't read all 337 pages because some of it was bibliography, but having read now the TCLP regulations, which is the test, a discredited test that's being used by OCRRA to prove that its ash is safe to bury in an unregulated landfill.

I found that there are three instances in which you're not allowed to dispose of that waste except as hazardous waste. One: If it contains any cancer causing materials. Doesn't matter whether you do a so called TCLP test. If there are carcinogens in the waste it's hazardous waste. If it contains dioxins it's hazardous waste.

And last, I looked at the report and in OCRRA's recent publication, and I got to believe in the mail in or the newspaper. And it said, "we tested by TCLP, and we found that cadmium and

lead, both of which are cancer causing

Wolfson

agents, meet the EPA's TCLP standard, and it's not hazardous waste. Well, lead and cadmium are both carcinogens, so therefore it is hazardous waste. Besides that, the TCLP regulations state you have to test for 39 different toxic components. And if one of them exceeds the EPA standards it's hazardous waste.

That means that this incinerator and the County have been violating federal law for as long as these regulations have been in force. And it's been many many years.

So I'll tell you now, we have increased rates of breast cancer in the 13078 zip code, which I mentioned the last meeting I attended. More than 50 percent higher than what's expected. That's approximately 30 plus thousand women downwind of the incinerator in Jamesville and in surrounding areas. Now the wind changes, so that's the biggest area of exposure. But there is exposure all over, within easily 5 to 10

Wolfson

miles of the incinerator you're going

for exposure to those carcinogens.

The fact that we have a 15 percent increase in the incidence, in other words new cancers, compared with when the year the incinerator opened in 1994 is, to my mind and my opinion, evidence that it's highly likely that it's the incinerator that's responsible.

We've lost other industries, the only emitters of those carcinogens that are causing these excess cancers is the incinerator. It should be shut down. If it's shut down, if a Health Risk Assessment is done and it's shut down there is no cost supposedly, according to what the Legislature promised this community 20 years ago, there is no cost to the taxpayers. The people who will take the hit are the bondholders, who have been making money off the suffering of the people who have been getting sick for the last 20 years, in my opinion. And possibly the people who work for

OCRRA who are going to have to scramble to make sure that they find enough work to do to keep their jobs.

The bottom line is that we're not making money from this. And I'm very

glad to hear the opinions of the other folks who spoke earlier. We are putting the public health and the environment at risk. And it's quite clear to me the increase of cancer, which has been noted by the American Cancer Society, the Susan G. Komen Foundation, the County Health Department in its report that I just cited a few minutes ago. Every authority you look at says, we've increased our rate of cancer by over 15 percent since the year the incinerator opened.

Industry has been leaving the County. There is no other good reason for this increase in cancers. And certainly the breast cancers in those areas downwind, including the 13078 area, are, in my mind, no question in my

mind, in my opinion, that at least some if not most of those are related to exposures from the incinerator.

So I would ask this Legislature to postpone any decision about further contracts and to protect the public health and the environment. We're not going away. I've been doing this, I might be stupid for doing it, I've been doing this for over 15 years. I'm going

to keep on talking about it. As far as I'm concerned, as I said, this is a cancer factory. You vote to keep this incinerator going you're voting for cancer. That's my opinion. Thank you.

CHAIRMAN McMAHON: Kate Brown.

KATE BROWN: Hi, my name is Kate Brown, I'm 12 years old, and I'm in 7th grade, and I live in Jamesville, New York. I kind of want to get with the education topic of this because when I was in 3rd grade my class, the entire grade, we took a field trip to the incinerator. And prior to the trip we

were told all the good things that the incinerator was going to be doing for our County, and the smoke was going to be filtered through the stack and it was actually improving our air quality.

But I was in 3rd grade and we had no other idea than to believe what they were telling us. Yet, later we learned that not everything they told us on that field trip is true. Because the emission coming from the smokestack may be lightly filtered, but it does not remove all the harmful chemicals, mercury, arsenic, lead and dioxin.

Now we plan on bringing in another County's trash. The pollution coming from the trash being burned already is enough. But bringing another County's trash is actually going to increase that amount by the amount of trucks that have to bring in the trash as well. They're letting off pollution.

And as I grow up here in Onondaga County, I won't have to be worried that

Carroll

I might get cancer from this. And I'm really urging you guys to think about what's going to happen if we bring in another County's trash and we increase the amount of pollution in the area.

Tons of other counties and different states around the country have eliminated these incinerators and have brought in more recycling. And that's something that I think we should do here. Thank you.

CHAIRMAN McMAHON: Kate, I can tell you're a great student because you're the only one tonight that fell within the time limit. Some others out there, if they can take lessons from you that would be great. Next we have Kathleen Carroll from Marcellus, New York.

KATHLEEN CARROLL: I'll try to beat

the 12 year old, but she's a hard act to follow. My name is Kathleen Carroll, I live in Marcellus, New York, I've been a resident of the County for 20 years. I'm a Red Sox fan, so I apologize. I

actually moved to this area for a job opportunity. And I'm glad to promote that statistic because obviously we've had some downsizing in the area, which as a business manager I hate to see.

But I speak here tonight first as a resident of the community that I live in, Marcellus; a mother of two children; and an employee of Covanta, where I've worked at the facility in very good health for 20 years.

The studies, there have been several studies that have shown communities such as the OCRRA-Covanta partnership that recycle and process and waste-to-energy facilities, they run in parallel. Meaning that waste-to-energy and recycling grow at the same effects.

There have been statistics that OCRRA does a great job. If you want to look at our environmental record, every year we test, every day, every hour, the facility is regulated 24 hours a day

seven days a week, 365 days year. And

Carroll

someone earlier mentioned, we welcome anyone to come in and tour the facility and see what's it is, we're very transparent as is OCRRA. We have a great relationship.

Since 2008 we fell, as everyone knows, into one of the most severe recessions since like the '30s. This community has struggled until recently for the loss of jobs; New Venture Gear, Carrier, Bristol Myers, lots of big jobs have left this area. We have maintained in this area and we have grown.

At the same time recycling has been reduced due to things like thin wall packaging. You know, you go out and everyone is buying their Christmas presents now and packaging is a lot less than five years ago, which is great. Because I come from a community in Massachusetts, where they have a green bin and it's all they recycle is newspapers. So when I came here, I was very happy to see a person at my door

Carroll

with a blue bin and a list of the items

that I could put in it before it went into my trash can. Which I didn't have to buy three trash cans like I did in Massachusetts, instead of one.

So at the same time, like I said, recycling has really worked. One of the largest recycling volumes also has been reduced from seven to three days, that being our newspaper. My children have toured the facility several times through the years. I think my daughter and son were in when we first started up, they were four years old and one year old. They feel that energy-to-waste is the best technology as opposed to land filling. Because right now even though OCRRA does one of the best jobs in the country for recycling, there has to be somewhere to put the stuff that can't be recycled.

You have a landfill, where you put garbage in the ground. And garbage in the ground can leach and cause very

severe impact to your health. That's also been cited.

At the facility OCRRA is able to, we recycle it into energy. And those energy revenues support all of the OCRRA

programs that we have all come to love in the community, such as household hazardous waste days, such as the additional shredding events, shred-o-ramas, all of those programs you hear and see through OCRRA are all financed through the revenues from the plants.

We recycle over 9,000 tons a year of metal and what's called non-ferrous metal, you know, bicycle parts and all sorts of things that don't burn we pull out and recycle on the back end. 9,000 tons, which is about 3 percent of what comes in is recycled and resold.

None of OCRRA's revenue are coming from the Onondaga County Legislature, as you all know. OCRRA is entirely funded by the revenues associated with the

Carroll

plant. If that waste can't be recycled it is an alternative. The only alternative for that waste is to bring it to a landfill. That would mean a reduction in OCRRA's revenues of approximately 8 to 10 million dollars a year. And if you look at that statistics and compare it. For every $250,000 that's a dollar reduction in your tip fee or a dollar increase. So

if you do the math, which I heard some tonight doing the math, you'll see that would add many, many dollars to us as taxpayers that would dribble down to our bill to pay. And like I said, the alternative is land-filling.

I moved up to this area to start up a plant with the OCRRA team in 1995. At the time, before I came here I lived less than two miles away from a landfill. And I can tell you, every day when I left for work or I came back from work I had the droppings of pigeon covering my car. When you leave raw garbage out in

a landfill, no matter if you have dirt or you have beneficial use ash on it, it still smells and it emits odors and you get your car covered with pigeon droppings. Those are the realities. I lived six years within two miles of a landfill.

And I would also state just like I would like everyone to come tour the facility to also tour a landfill. It's not pretty, it smells really bad. And that's the only other alternative we face here or anywhere for everything else that we can't recycle.

OCRRA and Covanta work together to encourage residents from disposing of waste at the curb that comes to the facility. We recently hosted a mercury removal residential collection in October. We had over 300 residents bring to us mercury thermometers, thermostats and other mercury containing products which were collected and sent to mercury recovery facilities.

Carroll

Next on our plan is to host a e-waste collection event to gather, as I see when I come to work every day, the TVs that are left at the curbs that have nowhere to go at this point. So we're looking forward to doing that, it's another collaborative partnership between the two of us and the community we have here tonight.

We support the OCRRA trash-for-ash into the municipalities initiative. And as a resident and taxpayer I'm very pleased that my taxes do not include any additional fees to support all of the programs that OCRRA provides me as a resident of the community. I am very proud to live in an environmentally responsive community, and I urge you to vote for the trash-for-ash

instrumentality agreement between Onondaga County, Cortland County and OCRRA. Thank you.

CHAIRMAN McMAHON: Any other speakers? Ask one more time, anyone

else like to address us in the public hearing? Seeing none, the hearing is now closed.

* * * *

C E R T I F I C A T E

This is to certify that I am a Certified Shorthand Reporter and Notary Public in and for the State of New York, that I attended and reported the above entitled proceedings, that I have compared the foregoing with my original minutes taken therein and that it is a true and correct transcript thereof and all of the proceedings had therein.

_____

John F. Drury, CSR, RPR

Dated: December 22, 2014

25

Amy Miller

From: Vicki Baker [vbaker002@twcny.rr.com]
Sent: Friday, January 16, 2015 4:25 PM
To: Amy Miller
Subject: comments on SWMP
Attachments: Comments,SWMP.doc; Waste Impacts Climate Change graphics.doc; Zero Waste.docx

Attached are my comments on the SWMP and Fact sheet: Waste Impacts Climate Change and Zero Waste.

Vicki Baker
Jampac
Po box 182
Jamesville, NY. 13078

Comments: SWMP-Onondaga Co. 1/16/15

The purpose of the SWMP is to look at current practices and plan for the future to minimize impact on health and environment. It should provide a look at alternatives and financial advantages/disadvantages of those alternatives. There is no such discussion in this document.

WE OBJECT TO THE NEGATIVE DECLARATION AND REQUEST THAT A FULL ENVIRONMENTAL IMPACT BE UNDERTAKEN!

> Tue 12/2/2014 8:49 AM
> Lynch, Kenneth (DEC) <kenneth.lynch@dec.ny.gov>
> RE: SEQRA determination
>
> I checked and I don't believe we had any specific discussion regarding SEQR for the County's SWMP update. Our Albany office has informed us that typically second generation Local Solid Waste Management Plans receive negative declarations. Most of the first generation LSWMPs were part of a statewide Generic Environmental Impact Statement where the comprehensive environmental impacts were assessed.
>
> Under SEQR, it is the lead agencies responsibility to render the SEQR determination based on the proposed action. If you have concerns I would suggest you express them to the County as lead agency. You may also comment to DEC when the SWMP is noticed for public comment.

THE New York STATE SOLID WASTE MANAGEMENT ACT:
a) First, to reduce the amount of solid waste generated;
b) Second, to reuse material for the purpose for which it was originally intended or to recycle the material that cannot be reused;
c) Third, to recover, in an environmentally acceptable manner, energy from solid waste that cannot be economically and technically reused or recycled;
And
d) Fourth, to dispose of solid waste that is not being reused or recycled, or from which energy is not being recovered, by land burial or other methods approved by the department.
THIS IS NOT WHAT IS BEING PLANNED. We will be fined if we do not produce enough waste!

Pg. 8 "While OCRRA's CSWMS is already highly consistent with the State's solid waste management hierarchy, OCRRA strives for continuous improvement for even greater consistency with the hierarchy (i.e., increased waste reduction, reuse, recycling, and composting)". The priorities identified by this SWMP update does not present an opportunity to set the bar even higher: OCRRA NEEDS TO **REACH** THE BAR-WASTE REDUCTION DOES NOT MEAN BURNING TO REDUCE VOLUME.
• Extend public-private partnership for Waste-to-Energy (WTE) Facility-NEEDS TO BE made PUBLIC BEFORE MAKING BACKROOM DEALS.
• Pursue proposed Regional Solid Waste Partnership with Cortland County-REGIONAL NEEDS TO BE EXPLAINED.
• Expand food waste composting
• Increase textile recycling BY ENGAGING BUSINESSES AND NON-PROFITS TO ADD JOBS YEAR ROUND
• Develop interactive and engaging school curriculum THAT EXPLAINS THE HAZARDS AND COSTS OF INCINERATION AND IT'S IMPACT ON CLIMATE CHANGE. Education must include information on pollution generated from trash disposal AND STEADY FUNDING FOR GREEN PROGRAMS.

Mandate toxic waste prevention program AND YEAR ROUND COLLECTION SYSTEMS.
CREATE A Put or Take Facility

• Perform another waste quantification and characterization study-TO DO WHAT? INCINERATE THEM?
• Advocate for extended producer responsibility (EPR) initiatives
• Evaluate alternative transfer station processing technologies?????
• Explore alternatives for biosolids management
Onondaga County and OCRRA strive to serve the community and member municipalities with an economically, environmentally, and socially sustainable system for comprehensive solid waste

management over the next 10-year planning horizon-NOTE: THIS CONTRACT IS FOR 20YEARS- Where are the financials on the true costs of incineration versus achieving zero waste? This SWMP update DOES NOTHING TO provide the road map BUT FOLLOW THE SAME OLD SYSTEM. WE BELIEVE THAT OCCRA SHOULD DO AS IT WAS ENVISIONED: waste reduction, reuse, recycling, and composting.

According to the OCRRA GHG committee:
"As we think strategically about OCRRA's future relationship with the WTE facility, we should consider carefully how to restructure that relationship so that it reinforces our stated priority on environmental protection and waste reduction. The Board should take pains to clarify whether OCRRA's main mission is to be waste management (trash disposal) or waste reduction (including recycling and re-use). If the agency will continue to do both, then it is appropriate to ask the county and municipalities to separate the funding for the two, or to consider other ways to return to OCRRA some of the social and environmental benefits from waste reduction. As things stand at present, OCRRA suffers a financial penalty when it is successful at reducing waste or increasing recycling. It would also be appropriate to seek changes in regulations where they discourage or fail to reward waste minimization. For example, the requirement in the WTE permit that 40% of burnable materials be recycled may appear to be enlightened, but it gives no credit for waste reduction. Similarly, state and federal grant funds should be allocated to bring about GHG reductions, not just reward underachievers or the most politically populous areas."

A NEW Health risk assessment from this waste disposal plan MUST BE DONE. INCLUDING EXPOSURE TO Combined sources, STACK, DIESEL FUMES, AND ASH for 20 years!

Global warming impacts must be included in the SWMP as NYSDEC must develop climate pollution remedies by 2016. DEC Goal should be Zero Waste Platform when considering disposal options. Attached: Waste Impacts Climate Change-

Single stream recycling discourages public participation and DECREASES THE VALUE OF RECYCLING FEEDSTOCK.
OCRRA must ban recyclables from being trashed-clear bags were never used, the recycling program never enforced.
Wood waste -we burn it. Maximize deconstruction efforts and provide facilities to support that.
Where is discussion of agricultural plastic recycling?

1.2.3 BEYOND WASTE: A SUSTAINABLE MATERIALS MANAGEMENT STRATEGY FOR NEW YORK
In late 2010, twenty three years after the State's initial Plan, the DEC released its "Beyond Waste" Plan, which reinforces the 1988 solid waste management hierarchy and lays out new, even more aggressive, materials management strategies to guide the DEC and local planning units. The "Beyond Waste" Plan emphasizes the "upstream" sustainable management of materials to fully capture their economic value, maximize use of natural resources, conserve their embedded energy, minimize environmental impacts, and, ultimately, reduce the reliance on "end-of-pipe" waste disposal options.
Why aren't the DEC comments on this plan included in this document? It would help the public versus appear that DEC is working against them.

2.3.2 PROHIBITION OF WASTE IMPORTATION
In 1989, the Onondaga County Legislature also adopted Local Law No. 10 of 1989, which prohibits the importation of waste generated outside of Onondaga County into Onondaga County for disposal in a landfill within Onondaga County without authorization of the Onondaga County Legislature. This law was amended in 1992 by Local Law No. 9 of 1992 (see Appendix E) to expand the importation restrictions such that they would also apply to WTE facilities within Onondaga County. That is, the amendment prohibited the importation of waste generated outside of the County for landfilling or processing in an incinerator within Onondaga County, without express written consent of the Legislature. As a legislator who sponsored this, why would DEC ignore local law?

Incinerators are not clean, renewable energy and should not be included in SWMP. According to Energy Justice: Trash incinerators are the most expensive and polluting way to make energy or to dispose of waste. Since they impact health and property values, they're one of the most unpopular technologies in the world, and are actually on the decline in the U.S.

In a recent letter to Onondaga County Legislators, Neil Seldman (ISLR) wrote:

6 May 2014

Dear Onondaga County Legislators,

This letter introduces alternative solid waste management options available to Onondaga County and the OCCRA.

For the past 30 years, incineration has been the key to solid waste management in the county. This facility has been a financial burden on taxpayers, with operating costs far above comparable ways of managing these materials through recycling, reuse and composting with residues going to landfill. The facility has also been a source of pollution. The county and OCCRA are now considering new arrangements for incinerator ash disposal and increased incineration that will continue this financially and environmentally expensive and risky pathway.

OCRRA and the county can choose to implement recycling and economic development programs that will handle as much material as the incinerator without polluting. This investment will also reduce the overall cost of solid waste management in the county, and create hundreds of jobs, new small businesses and expand the local tax base. All in all, a better future for the county than continued reliance on outmoded incineration technology.

The alternative path requires source separation from households and businesses based on direct economic incentives such as Pay As You Throw and Rewards for Recycling programs. Backyard, community scale and county wide composting programs and facilities are necessary to capture and add value to organics in the waste stream. ILSR has documented the economic value of such composting. Reuse companies that focus on appliances, furniture and mattresses, cars, window pane glass and other reusable products in the waste stream are also available. Indeed these enterprises are the most labor intensive and pay the highest entry level wages in the recycling field, $14 per hour plus health insurance benefits. One non-profit company, St Vincent De Paul, Eugene, OR (SVDP, has grants from national foundations to help plan and finance reuse enterprises in partnership with Onondaga County based non-profit organizations. These companies make ideal partners in solid waste management as they divert materials from the waste stream. SVDP has created over 500 jobs. Since the onset of the deep recession in 2008-9, the company has hired over 100 new workers and raised wages.

Finally, the county can attract major companies that need recycled materials as their prime feedstock. This includes a company that builds small scale (40 tons per day) paper mills for high quality products, a company that uses old tires to make permeable street and road surfaces, and a company that processed CRT screens into industrial glass and lead. Each of these companies brings over 100 jobs at industrial wages.

ILSR working with such agencies as the NY State Center for Excellence, non-profit organizations and businesses can help design and implement a new approach to solid waste management based on sound economic and environmental policies. These can relive the county of future burdens presented by the incinerator and prepare the county for sustainable resource management for decades to come.

Sincerely,

Neil Seldman
President
Institute for Local Self-Reliance
2001 S Street NW, Suite 570
Washington, DC 20009
202 898 1610 X 210
nseldman@ilsr.org

IT IS TIME TO REVISIT OUR SWMP TO INCLUDE ALTERNATIVES TO INCINERATION.

Vicki Baker
On behalf of jampac (Jamesville Positive Action Committee)
PO Box 182
Jamesville, N.Y.13078

Zero Waste

Zero Waste Defined

Zero Waste is a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles, where all discarded materials are designed to become resources for others to use.

Zero Waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them.

Implementing Zero Waste will eliminate all discharges to land, water or air that are a threat to planetary, human, animal or plant health.

Zero Waste Hierarchy

Reduce
Reuse
Source Separate:

- Clean Compostables ⇒ Aerobic Composting ⇒ Non-food landscaping/agriculture uses
- Recycling ⇒ Material Recovery Facility (MRF):
  - Recyclables to Highest-end, Most Local Markets Possible
  - Residuals ⇒ Waste (below)
- Waste ⇒ "Dirty MRF" (a.k.a. Mechanical / Biological Treatment):
  - Additional Recyclables captured and marketed
  - Residuals ⇒ Anaerobic Digestion ⇒ Digestate to Landfill
- Special Collections ⇒ e-Waste, Household Hazardous Waste and other special/dangerous materials to proper recycling option

See our more detailed zero waste hierarchy.

General Framework

Story of Stuff (excellent short, fun film on how materials move through our economy, from extraction to production to distribution to consumption to waste):

Eco-Cycle's What is the best disposal option for the "Leftovers" on the way to Zero Waste? (Full Report in PDF)

The Zero Waste Solution - Untrashing the Planet One Community at a Time, by Paul Connett

Energy Justice Network, 1434 Elbridge St, Philadelphia, PA 19149 | 215-743-4884 | niaby@energyjustice.net

Waste Impacts Climate Change

- Wasting directly impacts climate change because it is directly linked to resource extraction, transportation, processing and manufacturing, all of which use energy and generate emissions. Two recent reports examined the greenhouse gas impacts of products and packaging, the first from EPA found 37% of GHGs associated with non-food products and packaging. The second report was a follow-up and included global trade, although food was still not included; it found 44% of GHGs associated with products and packaging. (Both reports available at **www.productpolicy.org**)

- For every bag of trash a household puts at the curb, 70 bags of trash were created upstream in the production process.

- Zero waste strategies-waste reduction, reuse, recycling, and composting-- are the fastest, cheapest and most effective strategies to protect the climate and the environment. All are associated with greenhouse gas reductions, in addition to many other benefits.

- Using zero waste strategies and significantly decreasing disposal in landfills and incinerators can reduce GHGs the equivalent of closing 1/5 of all US coal-fired power plants. (See **www.stoptrashingtheclimate.org** for this excellent report.)

- Waste reduction and material recovery strategies are ESSENTIAL to putting us on a path to stabilize the climate by 2050. Greenhouse gas reductions of 80% are needed and we cannot accomplish this goal without adequately addressing waste.

- Waste incineration and other thermal technologies* do not produce clean, renewable energy. It relies on destroying precious resources, is environmentally polluting and puts out 36% more CO_2 than coal-fired power plants. Recycling is renewable energy saving 4-5 times more energy than an incinerator recovers.

- Biodegradable materials like food and yard waste degrade in landfills and produce methane, a powerful greenhouse gas with 72 times the global warming potential of CO_2 over a twenty year period. Adequate control of greenhouse gases is even more essential over the next twenty years, because of the possibility of a runaway situation for warming.

- Landfills even ones with good gas capture systems are able to collect only about 20% of the methane that is generated. (PCC 4th Assessment, Working Group III, Mitigation of Climate Change, 10.4.2.)

- Composting of biodegradable material results in a valuable product that improves soil-- increasing nutrients, water retention, and healthy plant growth while reducing plant diseases and the need for synthetic fertilizers. Increasing soil carbon is an added climate change benefit.

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*Newer thermal technologies include gasification, pyrolysis, plasma arc and other creative descriptions. All are commercially unproven for mixed waste, but their claims sound wonderful.

Greenhouse gas emissions inventories often inappropriately deal with the issue of Biogenic Emissions.

Biogenic emissions are considered natural emissions from the carbon cycle. However burning waste should not be considered renewable because it relies on the destruction of resources rather than preservation. Often inventories do not count the biogenic emissions (CO_2 emissions generated by burning paper, wood, food and yard waste) from incinerators. This could arise from a misunderstanding of IPCC guidance. The IPCC states, "If incineration of waste is used for energy purposes, both fossil and biogenic CO_2 emissions should be estimated."

- All incinerators and thermal technologies use fossil fuel to operate, but this is often not quantified.
- What is burned is not just unprocessed biogenic material, but material that has had large energy inputs in the processing to a finished product. Incineration does not recover this embodied energy, but recycling does.
- Green organic materials have high water content and thermal treatments are using energy largely to remove water.
- There are higher and better uses for all materials to be burned in an incinerator and any alternative processing costs for composting and recycling are always less than thermal treatment.
- Raw material resources are destroyed in thermal treatment. To get more paper, cardboard, etc. you have to cut down more trees. As EPA states, "forest carbon sequestration increases as a result of source reduction or recycling of paper products because both source reduction and recycling cause annual tree harvests to drop below otherwise anticipated levels (resulting in additional accumulation of carbon in forests). " *Solid Waste Management and Greenhouse Gases*, 2006 EPA Report.

EPA assumes landfills reach 75% gas collection efficiency. In reality:

- Landfills are not properly enclosed with an impermeable cap until they are closed.
- The majority of a landfill's operating life (62%) occurs before this impermeable cap and LFG collection system are installed.
- EPA has no factual basis upon which it settled on 75% collection efficiency; it represents wishful thinking.
- There are no field measurements of efficiency of landfill gas collection systems.
- The best evidence of lifetime capture rates are closer to 20%. (IPCC 4th Assessment, Working Group III, Mitigation of Climate Change, 10.4.2.)
- Significant carbon sequestration in landfills is thus highly questionable.

ZERO WASTE STRATEGIES can significantly reduce disposal and greenhouse gas emissions. ZW strategies provide cost savings, while also creating jobs and economic development. ZW strategies are good for New York and good for our climate.

For 2004, New York recycling reduced greenhouse gas emissions by 5,212,571 metric tons of carbon equivalents (MTCE) in a one year period. New York's recycling saved a total of 230,964,227 Million BTUs of energy. Recycling 811,057 tons of newspapers, phone books, office paper, textbooks, magazines and cardboard in 2004, New York resulting in forest carbon sequestration benefits equal to 54,885,090 tree seedlings grown for 10 years.(Northeast Recycling Council, NY 2004 fact sheet.)

Prepared for NY Zero Waste Alliance, managed by Citizens' Environmental Coalition, 33 Central Ave. Albany, NY 12210, 518-462-5527. Contact Barbara Warren also at 845-754-7951 or warrenba@msn.com

Amy Miller

From: Brown, Patrick J [pjbrown@skanschools.org]
Sent: Saturday, January 17, 2015 1:35 PM
To: Amy Miller
Cc: Brown, Patrick J
Subject: SWMP Comments
Attachments: Comments for SWMP 011715.docx

Attached are my comments for the SWMP. Thank you.

"Learning is not some of the time; it's all of the time - for all of us."

Patrick J. Brown
Director of Professional Development K-12
Assistant Elementary Principal - Waterman and State Street Schools
Coordinator of English as a Second Language Programs K-12

Skaneateles Central School District
55 East Street
Skaneateles, New York 13152
315 291-2353 Waterman (K-2)
315 291-2252 State Street (3-5)

Patrick J. Brown

Comments for SWMP:

From the current SWMP:
The “Beyond Waste” Plan sets the bar very high with its quantitative and qualitative objectives. The quantitative goal is fairly straightforward – to progressively reduce per capita waste disposal from an estimated 4.1 pounds/day in 2010 to 0.6 pounds/day by 2030. The “Beyond Waste” Plan identifies numerous qualitative goals:
• Minimize Waste Generation
• Maximize Reuse
• Maximize Recycling
• Maximize Composting and Organics Recycling
• Advance Product and Packaging Stewardship
• Minimize Waste Disposal
• Create Green Jobs
• Maximize the Energy Value of Materials Management
• Minimize the Climate Impacts of Materials Management
• Reemphasize the Importance of Comprehensive Local Materials Management Planning
• Minimize the Need for Long-range Export of Residual Waste
• Engage all New Yorkers—government, business, industry and the public—in Sustainable
Materials Management
• Strive for Full Public Participation, Fairness and Environmental Justice
• Prioritize Investment in Reduction, Reuse, Recycling and Composting Over Disposal
• Maximize Efficiency in Infrastructure Development
• Foster Technological Innovation
• Continue to Ensure Solid Waste Management Facilities are Designed and Operated in an
Environmentally Sound Manner
While the “Beyond Waste” Plan itself is not legally enforceable, it provides a new framework for solid waste management in the State and makes legislative, regulatory, and programmatic recommendations for advancing the objectives. It importantly acknowledges that goals can only be achieved with strong and cooperative participation from many key players, including the State, local governments, planning units, private sector solid waste managers, product manufacturers, distributors, retailers, and individual consumers.

Comments/Questions:
According to Beyond Waste on the SWMP, I see nothing about burning or

incineration in the plan. Why are we proposing 20 more years of burning instead of creating green jobs and moving toward a goal of zero waste. It's about educating the public to continue to reduce, reuse and recycle. That is what the education needs to focus on. Also, consultants are available that don't cost millions of dollars to help bring in companies that can recycle all sorts of things that you now burn. This creates jobs. How are you addressing the Beyond Waste by bringing in more trash and feeding the incinerator? There is very little logic in the thought process. What about Start Up NY as a way of bringing in companies who recycle several products currently in our waste stream? The current plan only scratches the surface of the Beyond Waste.

Under 3.1 Public Education

All of the materials on the WTE facility should be reevaluated. The materials are misleading to the public. They glorify the Waste to Energy plant as a source of renewable energy. This is just not so. The public should also be informed that the plant releases several emissions that could be harmful to the environment. The commercials are very misleading. Powering 30,000 homes costs taxpayers much more than the actual cost of that energy. It is really important that the public understands this. They are misled in the advertising campaigns.

The purpose of the SWMP is to look at current practices and plan for the future to minimize impact on health and environment. It should provide a look at alternatives and financial advantages/disadvantages of those alternatives. There is no such discussion in this document.

Under 8.6.3 Education

The educational materials that center on Waste to Energy need to be re-evaluated. The materials give students a false sense of the concept around these plants. The children should also be informed that the plant releases several emissions that could be harmful to the environment. A common core lesson should revolve around students learning about all aspects of the incinerator and forming their own opinion of what would be the best technology or methodology through research.

A NEW Health risk assessment from this waste disposal plan MUST BE DONE. INCLUDING EXPOSURE TO Combined sources, STACK, DIESEL FUMES, AND ASH for 20 years!

Global warming impacts must be included in the SWMP as NYSDEC must develop climate pollution remedies by 2016.

DEC Goal should be Zero Waste Platform when considering disposal options.

Single stream recycling discourages public participation and DECREASES THE VALUE OF RECYCLING FEEDSTOCK.

OCRRA must ban recyclables from being trashed-clear bags were never used, the recycling program never enforced.

Wood waste -we burn it. Maximize deconstruction efforts and provide facilities to support that. Where is discussion of agricultural plastic recycling?

Incinerators are not clean, renewable energy and should not be included in SWMP. According to Energy Justice:

Trash incinerators are the most expensive and polluting way to make energy or to dispose of waste. Since they impact health and property values, they're one of the most unpopular technologies in the world, and are actually on the decline in the U.S.

Patrick J. Brown

6471 East Seneca Turnpike

Jamesville, NY 13078

Amy Miller

From: James E. Stacey [james.e.stacey@gmail.com]
Sent: Saturday, January 17, 2015 4:32 PM
To: Amy Miller
Subject: SWMP Comments

Onondaga County

Draft Comprehensive Solid Waste Management Plan Update

(November 2014)

Ms. Amy Miller

Attention: Onondaga County Solid Waste Management Plan

100 Elwood Davis Road

North Syracuse, NY 13212

amiller@occra.org

17 January 2015

Dear Ms. Miller,

The following comments on the Onondaga County Draft Comprehensive Solid Waste Management Plan Update (November 2014) (referred to as the SWMP).

I am a retired science and sociology teacher with has a planning degree (from Syracuse University!). I have also worked as an environmental and urban planner, been a member of the American Institute of Certified Planners (AICP), taught and done research in management schools. I have been directly or indirectly engaged in the issues presented in the plan off and on for over four decades of teaching, research and activism.

A comprehensive solid waste management plan demands a broader scope than just mining the waste stream for resources and energy which would make it more consistent with the stated goals of developing a "top-performing, environmentally sound, cost-effective, financially sustainable, and comprehensive (solid waste management plan) that is a model for other planning systems." (pages 9 & 10)

Throughout the document and especially pages 41 43 the Waste-To-Energy (WTE) Facility is discussed but nowhere (based on a quick read) is it mentioned that this is an incinerator. Using euphemisms clouds the discussion and is reminiscent of excesses where engineers would call an explosion in a nuclear reactor a "containment excursion incident." Perhaps a better name could be found that indicates that this is an incinerator with some materials and energy recovery capability.

A nice visual indication of the problem is found in the typical inverted triangle hierarchy of Reduce, Reuse, and recycle with Recover and Bury. For many years a more appropriate model for planning in waste management has been the concept of materials and energy flow through the entire system. This more complete system includes inputs, processes, and outputs and needs to be addressed, more aggressively, in the Plan over a longer time-frame.

The input side includes all those sources of trash that consumers acquire from food waste to plastic toys. The processes include all the things that consumers do with their stuff. And, finally, outputs are what basically show up in the liquid, gaseous, and solid waste streams. This latter portion is plainly the focus of the SWMP, seen as an "end of the pipe" approach – not a systems approach.

This document includes some general discussion of inputs is included in (Chapter 6) on future planning unit projections and solid waste changes. Population projections and per capita waste generation estimates are made based on Moody's materials (p. 57) and a single New York Times article. This begs the question of why the plan did not use local, independent demographers to make projections. They might have a clearer grasp of local development and population shift issues. Or, they could have used U.S. Bureau of the Census forecasts. And using only one article from a newspaper raises the question as to how much serious research has been done.

Other issues emerge in this section that reveal a poverty of approach and vision. In the factors influencing recycling (6.4.2), some discussion of "thin-walling", thinner newspapers, Extended Producer Responsibility (EPR) is provided. EPRs are especially timely given emerging local issues. An article in the PS last week highlighted some of the disposal issues associated with electronics especially old tube TVs.

The section (7.2, page 68) on funding covers much of the required territory. However, more emphasis should be given to ways of overcoming the limits to funding relative to taxing powers, which may require restructuring OCRRA to some extent.

No system like this should be tied in any way to a "profit" standard. The economic viability of any part of the system, such as the incinerator, should not depend on its ability to generate a "profit" or cover its costs. Such discussion inevitably leads to a corruption of the goals of Reduce, etc. if we have to generate, or import, more waste to cover the cost of operating an incinerator. Perhaps a smaller one should have been built, or none at all. Be as it may, better to subsidize the current facility until it can be replaced with other systems rather than feeling we have to cover its costs through direct fees, etc. The discussion is thin and does not cover issues of obsolescence of products through wear and tear, technology changes, or changes in desire. All of these impact the waste stream.

A major fault of this section, given a systems view, is the assumption that existing and slight changes in the inputs and processes are all that are needed and that nothing can, or should be done, to impact these components. Yes, there is a discussion of the educational efforts of OCRRA with respect to recycling but the focus is too narrow. What can be done to encourage consumers to buy less or use what they have better and longer

A more thorough approach would look at the inputs and processes with greater accuracy and precision with an end to reducing demand. Social and educational changes might have to be encouraged to make significant changes in the waste system. As an example, schools have converted from non-disposable trays, plates, and flatware, etc. to plastic disposables. What if OCRRA worked with local schools to reduce the use of disposables? Has this been done in other communities? We have no idea based on the limited scope of the Plan.

This last thought leads to another concern that the Plan did not explore in sufficient depth and research the many, many initiatives done in this country and world-wide to deal with waste materials issues. I have no sense from this document that the planners are familiar with the decades of work done by organizations like the Institute for Local Self-Reliance (www.ilsr.org) and individuals such as Paul Connett (his book is The Zero Waste Solution: Untrashing the Planet One Community at a Time, 2013). In fact, a simple internet search, as many of us have done, turns up lots of information relative both to the hazards of a WTE (incinerator)-based solution and the numerous alternatives out there – many more successful alternatives than presented in the Plan's alternatives section.

So, Conceptually I would encourage you to go back to page 76 and add two broader levels to the Resource Management Hierarchy. One, the broadest and at the top, would be Reducing Inputs. The second, and next, would be a Process/Reduce layer. This would broaden our perspective to the larger waste issue system.

Finally, this Plan should be withdrawn and an extension, if needed, to the Convanta contract done, don't commit to an Ash-for-Trash solution and spend more time coming up with a better plan. In this new plan, OCRRA would engage the broader community members who have been so active on these issues. In addition, with the resources in this area, including – but not limited to – Syracuse University, SUNY-Upstate, SUNY-

ESF, and Le Moyne College, I’m sure we could come up with a plan that would surpass the one currently proposed and act as a model for other communities.

We still have time – it’s important to get this right!

Thank you,

James E. Stacey, Ph.D.

121 Paddock Drive

DeWitt, NY 13214

(315)446-7202

APPENDIX C – State Environmental Quality Review Documents

48.

December 2, 2014

236

Motion Made By Mr. Plochocki

RESOLUTION NO. _____

APPROVING THE CLASSIFICATION OF AN UNLISTED ACTION UNDER THE STATE ENVIRONMENTAL QUALITY REVIEW ACT; DECLARING LEAD AGENCY STATUS; ACCEPTING THE ENVIRONMENTAL ASSESSMENT FORM; AND ACCEPTING AND ADOPTING THE NEGATIVE DECLARATION FOR THE ONONDAGA COUNTY SOLID WASTE MANAGEMENT PLAN

WHEREAS, the action under consideration is the preparation of an updated Solid Waste Management Plan (SWMP) for Onondaga County; and

WHEREAS, an analysis of the potential environmental impacts of the proposed action has been undertaken pursuant to the State Environmental Quality Review Act (SEQRA); and

WHEREAS, there exists a statutory and regulatory, independent obligation to update the generally applicable SWMP; and

WHEREAS, the manner by which the County of Onondaga manages solid waste generated within the County will not be materially impacted should the County enter into the proposed Regional Solid Waste Partnership currently being contemplated with Cortland County; and

WHEREAS, it is appropriate to undertake an environmental review of updating the Onondaga County SWMP that is independent from the review of the proposed Regional Solid Waste Partnership because the SWMP update is functionally independent from the Partnership; and

WHEREAS, updating the SWMP is required in order to achieve conformance with and derive the benefits of meeting the State's goals of improving upon sustainable materials management through enhanced recycling and reuse; and

WHEREAS, the functionally independent nature and benefits to be derived from each action assure that conducting concurrent environmental reviews, which focus on the distinct environmental impact of each action, will be no less protective of the environment; now, therefore be it

RESOLVED, that the County is hereby authorized, directed, and designated to act as the Lead Agency under SEQRA for the proposed action; and, be it further

RESOLVED, that the Environmental Assessment Form for this project has been prepared and reviewed and is on file with the Clerk of the Legislature and that the County has classified the proposed action as an unlisted action pursuant to SEQRA; and, be it further

RESOLVED, that this Onondaga County Legislature does hereby accept and adopt the Negative Declaration for the proposed action, and has determined that such action will not have a significant effect on the environment; and, be it further

RESOLVED, that the Onondaga County Executive, or her designee, is authorized to take action to comply with the requirements of SEQRA, including circulation of the proposed findings of no significant effect on the environment and corresponding negative declaration to other involved agencies, if any, the execution of documents and filing of the same, and any other actions to implement the intent of this resolution.

SWMP - Lead Agency, Neg. Dec..docx
PEJ
kam

ADOPTED
DEC 02 2014

FILED WITH CLERK
ONON. CO. LEG.
Oct. 27, 2014
KMF

I HEREBY CERTIFY THAT THE FOREGOING IS A TRUE AND EXACT COPY OF LEGISLATION DULY ADOPTED BY THE COUNTY LEGISLATURE OF ONONDAGA COUNTY ON THE
2nd DAY OF December, 2014.
Deborah A. Mahan

CLERK, COUNTY LEGISLATURE
ONONDAGA COUNTY, NEW YORK

14 NOV 26 AM 9:51
RECEIVED
ONONDAGA COUNTY
LEGISLATURE

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Sponsor Information.

Name of Action or Project: Update of Onondaga County Comprehensive Solid Waste Management Plan (CSWMP)		
Project Location (describe, and attach a general location map): Not site-specific. This is a local solid waste management plan for 33 of 35 municipalities within Onondaga County		
Brief Description of Proposed Action (include purpose or need): The proposed action is an update of Onondaga County's Comprehensive Solid Waste Management Plan (CSWMP). Onondaga County is the local solid waste management planning unit for 33 of 35 municipalities within the county. Like many other local planning units, Onondaga County developed its first CSWMP in the early 1990s. Since that time the Onondaga County Resource Recovery Agency (OCRRA), a public benefit corporation, has implemented the County's CSWMP and Comprehensive Solid Waste Management System (CSWMS) on behalf of Onondaga County. The objective of the updated CSWMP is to chart the course for an economically, environmentally and socially sustainable CSWMP for the next 10-year planning period. While the County's CSWMP and the CSWMS implemented by OCRRA are already highly consistent with the NY State and USEPA solid waste management hierarchy, the County's CSWMP update incorporates the State's most recent sustainable materials management goals, as outlined in the "Beyond Waste" solid Waste Management Plan.		
Name of Applicant/Sponsor: County of Onondaga	Telephone: (315)435-2647 E-Mail: davidcoburn@ongov.net	
Address: 421 Montgomery Street		
City/PO: Syracuse	State: New York	Zip Code: 13202
Project Contact (if not same as sponsor; give name and title/role): David Coburn, Environmental Director	Telephone: E-Mail:	
Address:		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor):	Telephone: E-Mail:	
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)		
Government Entity	**If Yes: Identify Agency and Approval(s) Required**	**Application Date (Actual or projected)**
a. City Council, Town Board, or Village Board of Trustees ☐Yes☑No		
b. City, Town or Village Planning Board or Commission ☐Yes☑No		
c. City Council, Town or Village Zoning Board of Appeals ☐Yes☑No		
d. Other local agencies ☐Yes☑No		
e. County agencies ☐Yes☑No		
f. Regional agencies ☐Yes☑No		
g. State agencies ☑Yes☐No	Approval of CSWMP by NYSDEC	Spring 2015
h. Federal agencies ☐Yes☑No		

i. Coastal Resources.
i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☐Yes☑No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☑Yes☐No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☐Yes☐No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐Yes☐No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☐Yes☐No

If Yes, identify the plan(s):

_____

_____

_____

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐Yes☐No

If Yes, identify the plan(s):

_____

_____

_____

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☐Yes☐No
If Yes, what is the zoning classification(s) including any applicable overlay district?

_____

_____

b. Is the use permitted or allowed by a special or conditional use permit? ☐Yes☐No

c. Is a zoning change requested as part of the proposed action? ☐Yes☐No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? _____

b. What police or other public protection forces serve the project site?

_____

c. Which fire protection and emergency medical services serve the project site?

_____

d. What parks serve the project site?

_____

_____

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)?

_____

b. a. Total acreage of the site of the proposed action? _____ acres
b. Total acreage to be physically disturbed? _____ acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ acres

c. Is the proposed action an expansion of an existing project or use? ☐Yes☐No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☐Yes☐No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)

_____

ii. Is a cluster/conservation layout proposed? ☐Yes☐No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will proposed action be constructed in multiple phases? ☐Yes☐No
i. If No, anticipated period of construction: _____ months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

_____

_____

f. Does the project include new residential uses? ☐Yes ☐No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase				
At completion of all phases				

g. Does the proposed action include new non-residential construction (including expansions)? ☐Yes ☐No

If Yes,

i. Total number of structures _____

ii. Dimensions (in feet) of largest proposed structure: _____height; _____width; and _____ length

iii. Approximate extent of building space to be heated or cooled: _____ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐Yes ☐No

If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐Other specify:

_____

iii. If other than water, identify the type of impounded/contained liquids and their source.

_____

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

_____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? ☐Yes ☐No
(Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)

If Yes:

i. What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

_____

_____

iv. Will there be onsite dewatering or processing of excavated materials? ☐Yes ☐No
If yes, describe. _____

_____

v. What is the total area to be dredged or excavated? _____ acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? ☐Yes ☐No

ix. Summarize site reclamation goals and plan: _____

_____

_____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐Yes ☐No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

_____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

_____

_____

_____

_____

iii. Will proposed action cause or result in disturbance to bottom sediments? ☐Yes☐No

If Yes, describe: _____

iv. Will proposed action cause or result in the destruction or removal of aquatic vegetation? ☐Yes☐No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____

_____

- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

_____

c. Will the proposed action use, or create a new demand for water? ☐Yes☐No

If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☐Yes☐No

If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? ☐Yes☐No
- Is the project site in the existing district? ☐Yes☐No
- Is expansion of the district needed? ☐Yes☐No
- Do existing lines serve the project site? ☐Yes☐No

iii. Will line extension within an existing district be necessary to supply the project? ☐Yes☐No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

_____

- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐Yes☐No

If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

_____

vi. If water supply will be from wells (public or private), maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☐Yes☐No

If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

_____

_____

iii. Will the proposed action use any existing public wastewater treatment facilities? ☐Yes☐No

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? ☐Yes☐No
- Is the project site in the existing district? ☐Yes☐No
- Is expansion of the district needed? ☐Yes☐No

- Do existing sewer lines serve the project site? ☐Yes ☐No
- Will line extension within an existing district be necessary to serve the project? ☐Yes ☐No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

_____

_____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐Yes ☐No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans):

_____

_____

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

_____

_____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☐Yes ☐No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or _____ acres (impervious surface)

_____ Square feet or _____ acres (parcel size)

ii. Describe types of new point sources. _____

_____

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

_____

_____

- If to surface waters, identify receiving water bodies or wetlands: _____

_____

_____

- Will stormwater runoff flow to adjacent properties? ☐Yes ☐No

iv. Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☐Yes ☐No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☐Yes ☐No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

_____

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

_____

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

_____

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐Yes ☐No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐Yes ☐No

ii. In addition to emissions as calculated in the application, the project will generate:

- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☐No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

_____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☐No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

_____

_____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐Yes ☐No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐Weekend

☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of semi-trailer truck trips/day: _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐Yes ☐No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

_____

_____

_____

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☐Yes ☐No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

_____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

_____

iii. Will the proposed action require a new, or an upgrade to, an existing substation? ☐Yes ☐No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: _____
- Saturday: _____
- Sunday: _____
- Holidays: _____

ii. During Operations:

- Monday - Friday: _____
- Saturday: _____
- Sunday: _____
- Holidays: _____

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☐Yes ☐No

If yes:

i. Provide details including sources, time of day and duration:

_____

_____

ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐Yes ☐No

Describe: _____

_____

n.. Will the proposed action have outdoor lighting? ☐Yes ☐No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

_____

_____

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐Yes ☐No

Describe: _____

_____

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐Yes ☐No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

_____

_____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐Yes ☐No

If Yes:

i. Product(s) to be stored _____

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally describe proposed storage facilities: _____

_____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☐No

If Yes:

i. Describe proposed treatment(s):

_____

_____

_____

_____

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☐ Yes ☐No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: _____

_____

- Operation: _____

_____

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: _____

_____

- Operation: _____

_____

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☐ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☐ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☐ Urban ☐ Industrial ☐ Commercial ☐ Residential (suburban) ☐ Rural (non-farm)
☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other (specify): _____

ii. If mix of uses, generally describe:

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces			
• Forested			
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)			
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: _____			

c. Is the project site presently used by members of the community for public recreation? ☐Yes ☐No

i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☐Yes ☐No

If Yes,

i. Identify Facilities:

_____

_____

e. Does the project site contain an existing dam? ☐Yes ☐No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

_____

_____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐Yes ☐No

If Yes:

i. Has the facility been formally closed? ☐Yes ☐ No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

_____

_____

iii. Describe any development constraints due to the prior solid waste activities: _____

_____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐Yes ☐No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

_____

_____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☐Yes ☐ No

If Yes:

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐Yes ☐No

☐ Yes – Spills Incidents database Provide DEC ID number(s): _____

☐ Yes – Environmental Site Remediation database Provide DEC ID number(s): _____

☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures: _____

_____

_____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☐Yes ☐No

If yes, provide DEC ID number(s): _____

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

_____

_____

v. Is the project site subject to an institutional control limiting property uses? ☐Yes ☐No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐Yes ☐No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? _____ feet

b. Are there bedrock outcroppings on the project site? ☐Yes ☐No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____%

c. Predominant soil type(s) present on project site: _____ _____%
_____ _____%
_____ _____%

d. What is the average depth to the water table on the project site? Average: _____ feet

e. Drainage status of project site soils: ☐ Well Drained: _____% of site
☐ Moderately Well Drained: _____% of site
☐ Poorly Drained _____% of site

f. Approximate proportion of proposed action site with slopes: ☐ 0-10%: _____% of site
☐ 10-15%: _____% of site
☐ 15% or greater: _____% of site

g. Are there any unique geologic features on the project site? ☐Yes ☐No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☐Yes ☐No

ii. Do any wetlands or other waterbodies adjoin the project site? ☐Yes ☐No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☐Yes ☐No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name _____ Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐Yes ☐No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐Yes ☐No

j. Is the project site in the 100 year Floodplain? ☐Yes ☐No

k. Is the project site in the 500 year Floodplain? ☐Yes ☐No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☐Yes ☐No
If Yes:

i. Name of aquifer: _____

m. Identify the predominant wildlife species that occupy or use the project site: _____

_____ _____ _____

_____ _____ _____

n. Does the project site contain a designated significant natural community? ☐Yes ☐No

If Yes:

i. Describe the habitat/community (composition, function, and basis for designation): _____

_____

ii. Source(s) of description or evaluation: _____

iii. Extent of community/habitat:

- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☐Yes ☐No

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐Yes ☐No

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐Yes ☐No

If yes, give a brief description of how the proposed action may affect that use: _____

_____

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐Yes ☐No

If Yes, provide county plus district name/number: _____

b. Are agricultural lands consisting of highly productive soils present? ☐Yes ☐No

i. If Yes: acreage(s) on project site? _____

ii. Source(s) of soil rating(s): _____

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐Yes ☐No

If Yes:

i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature

ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____

_____

_____

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐Yes ☐No

If Yes:

i. CEA name: _____

ii. Basis for designation: _____

iii. Designating agency and date: _____

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on, the State or National Register of Historic Places? ☐ Yes ☐ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☐ Historic Building or District

ii. Name: _____

iii. Brief description of attributes on which listing is based:

_____

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☐ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☐ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☐ Yes ☐ No

If Yes:

i. Identify resource: _____

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____

iii. Distance between project and resource: _____ miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☐ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name County of Onondaga Date October 20, 2014

Signature _____ Title Environmental Director

PRINT FORM

Agency Use Only [If applicable]

Project :

Date :

Full Environmental Assessment Form
Part 2 - Identification of Potential Project Impacts

Part 2 is to be completed by the lead agency. Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

Tips for completing Part 2:

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer "**Yes"** to a numbered question, please complete all the questions that follow in that section.
- If you answer "**No"** to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box "Moderate to large impact may occur."
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the "whole action".
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

1. Impact on Land

Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1) ☐ NO ☐ YES

If "Yes", answer questions a - j. If "No", move on to Section 2.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may involve construction on land where depth to water table is less than 3 feet.	E2d	☐	☐
b. The proposed action may involve construction on slopes of 15% or greater.	E2f	☐	☐
c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E2a	☐	☐
d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material.	D2a	☐	☐
e. The proposed action may involve construction that continues for more than one year or in multiple phases.	D1e	☐	☐
f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D2e, D2q	☐	☐
g. The proposed action is, or may be, located within a Coastal Erosion hazard area.	B1i	☐	☐
h. Other impacts: _____ _____		☐	☐

2. Impact on Geological Features

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g) ☑ NO ☐ YES

If "Yes", answer questions a - c. If "No", move on to Section 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Identify the specific land form(s) attached: _____ _____	E2g	☐	☐
b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____	E3c	☐	☐
c. Other impacts: _____ _____		☐	☐

3. Impacts on Surface Water

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h) ☑ NO ☐ YES

If "Yes", answer questions a - l. If "No", move on to Section 4.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may create a new water body.	D2b, D1h	☐	☐
b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D2b	☐	☐
c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D2a	☐	☐
d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E2h	☐	☐
e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments.	D2a, D2h	☐	☐
f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D2c	☐	☐
g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D2d	☐	☐
h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D2e	☐	☐
i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E2h	☐	☐
j. The proposed action may involve the application of pesticides or herbicides in or around any water body.	D2q, E2h	☐	☐
k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D1a, D2d	☐	☐

l. Other impacts: _____ _____		□	□

4. Impact on groundwater

The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer. (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t) ☐ NO ☐ YES

If "Yes", answer questions a - h. If "No", move on to Section 5.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D2c	□	□
b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____	D2c	□	□
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	□	□
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	□	□
e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D2c, E1f, E1g, E1h	□	□
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	□	□
g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	E2h, D2q, E2l, D2c	□	□
h. Other impacts: _____ _____		□	□

5. Impact on Flooding

The proposed action may result in development on lands subject to flooding. (See Part 1. E.2) ☐ NO ☐ YES

If "Yes", answer questions a - g. If "No", move on to Section 6.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in development in a designated floodway.	E2i	□	□
b. The proposed action may result in development within a 100 year floodplain.	E2j	□	□
c. The proposed action may result in development within a 500 year floodplain.	E2k	□	□
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	□	□
e. The proposed action may change flood water flows that contribute to flooding.	D2b, E2i, E2j, E2k	□	□
f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade?	E1e	□	□

g. Other impacts: _____ _____		□	□

6. Impacts on Air

The proposed action may include a state regulated air emission source. ☐NO ☐YES
(See Part 1. D.2.f., D,2,h, D.2.g)
If "Yes", answer questions a - f. If "No", move on to Section 7.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels:			
i. More than 1000 tons/year of carbon dioxide (CO_2)	D2g	□	□
ii. More than 3.5 tons/year of nitrous oxide (N_2O)	D2g	□	□
iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs)	D2g	□	□
iv. More than .045 tons/year of sulfur hexafluoride (SF_6)	D2g	□	□
v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions	D2g	□	□
vi. 43 tons/year or more of methane	D2h	□	□
b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants.	D2g	□	□
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour.	D2f, D2g	□	□
d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above.	D2g	□	□
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	□	□
f. Other impacts: _____ _____		□	□

7. Impact on Plants and Animals

The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) ☐NO ☐YES
If "Yes", answer questions a - j. If "No", move on to Section 8.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2o	□	□
b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E2o	□	□
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2p	□	□
d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E2p	□	□

e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E3c	□	□
f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____	E2n	□	□
g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E2m	□	□
h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____ _____	E1b	□	□
i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides.	D2q	□	□
j. Other impacts: _____ _____		□	□

8. Impact on Agricultural Resources

The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.) ☐ NO ☐ YES

If "Yes", answer questions a - h. If "No", move on to Section 9.

	Relevant Part I Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E2c, E3b	□	□
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, Elb	□	□
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	□	□
d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District.	E1b, E3a	□	□
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	El a, E1b	□	□
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	□	□
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	□	□
h. Other impacts: _____		□	□

9. Impact on Aesthetic Resources

The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.) ☐ NO ☐ YES

If "Yes", answer questions a - g. If "No", go to Section 10.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E3h	☐	☐
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	☐	☐
c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round	E3h	 ☐ ☐	 ☐ ☐
d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E3h E2q, E1c	 ☐ ☐	 ☐ ☐
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	☐	☐
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile ½ -3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	☐	☐
g. Other impacts: _____ _____		☐	☐

10. Impact on Historic and Archeological Resources

The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.) ☐ NO ☐ YES

If "Yes", answer questions a - e. If "No", go to Section 11.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on or has been nominated by the NYS Board of Historic Preservation for inclusion on the State or National Register of Historic Places.	E3e	☐	☐
b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E3f	☐	☐
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____	E3g	☐	☐

d. Other impacts: _____ _____		□	□
e. If any of the above (a-d) are answered "Yes", continue with the following questions to help support conclusions in Part 3:			
i. The proposed action may result in the destruction or alteration of all or part of the site or property.	E3e, E3g, E3f	□	□
ii. The proposed action may result in the alteration of the property's setting or integrity.	E3e, E3f, E3g, E1a, E1b	□	□
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	E3e, E3f, E3g, E3h, C2, C3	□	□

11. Impact on Open Space and Recreation

The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan.
(See Part 1. C.2.c, E.1.c., E.2.q.)
If "Yes", answer questions a - e. If "No", go to Section 12.

☐ NO ☐ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat.	D2e, E1b E2h, E2m, E2o, E2n, E2p	□	□
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	□	□
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C2a, C2c E1c, E2q	□	□
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	□	□
e. Other impacts: _____ _____		□	□

12. Impact on Critical Environmental Areas

The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d)
If "Yes", answer questions a - c. If "No", go to Section 13.

☐ NO ☐ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E3d	□	□
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E3d	□	□
c. Other impacts: _____ _____		□	□

13. Impact on Transportation

The proposed action may result in a change to existing transportation systems. ☐ NO ☐ YES
(See Part 1. D.2.j)
If "Yes", answer questions a - g. If "No", go to Section 14.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Projected traffic increase may exceed capacity of existing road network.	D2j	☐	☐
b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	☐	☐
c. The proposed action will degrade existing transit access.	D2j	☐	☐
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	☐	☐
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	☐	☐
f. Other impacts: _____ _____		☐	☐

14. Impact on Energy

The proposed action may cause an increase in the use of any form of energy. ☐ NO ☐ YES
(See Part 1. D.2.k)
If "Yes", answer questions a - e. If "No", go to Section 15.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action will require a new, or an upgrade to an existing, substation.	D2k	☐	☐
b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D1f, D1q, D2k	☐	☐
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	☐	☐
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	☐	☐
e. Other Impacts: _____ _____			

15. Impact on Noise, Odor, and Light

The proposed action may result in an increase in noise, odors, or outdoor lighting. ☐ NO ☐ YES
(See Part 1. D.2.m., n., and o.)
If "Yes", answer questions a - f. If "No", go to Section 16.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may produce sound above noise levels established by local regulation.	D2m	☐	☐
b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D2m, E1d	☐	☐
c. The proposed action may result in routine odors for more than one hour per day.	D2o	☐	☐

d. The proposed action may result in light shining onto adjoining properties.	D2n	☐	☐
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	☐	☐
f. Other impacts: _____ _____		☐	☐

16. Impact on Human Health

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.) ☐ NO ☐ YES

If "Yes", answer questions a - m. If "No", go to Section 17.

	Relevant Part I Question(s)	No,or small impact may cccur	Moderate to large impact may occur
a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E1d	☐	☐
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	☐	☐
c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E1g, E1h	☐	☐
d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction).	E1g, E1h	☐	☐
e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E1g, E1h	☐	☐
f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D2t	☐	☐
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	☐	☐
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	☐	☐
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2s	☐	☐
j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E1f, E1g E1h	☐	☐
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	☐	☐
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	☐	☐
m. Other impacts: _____ _____			

17. Consistency with Community Plans

The proposed action is not consistent with adopted land use plans. ☐ NO ☐ YES
(See Part 1. C.1, C.2. and C.3.)
If "Yes", answer questions a - h. If "No", go to Section 18.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C2, C3, D1a E1a, E1b	☐	☐
b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C2	☐	☐
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	☐	☐
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	☐	☐
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C3, D1c, D1d, D1f, D1d, Elb	☐	☐
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	☐	☐
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	☐	☐
h. Other: _____ _____		☐	☐

18. Consistency with Community Character

The proposed project is inconsistent with the existing community character. ☐ NO ☐ YES
(See Part 1. C.2, C.3, D.2, E.3)
If "Yes", answer questions a - g. If "No", proceed to Part 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	☐	☐
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	☐	☐
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	☐	☐
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	☐	☐
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	☐	☐
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	☐	☐
g. Other impacts: _____ _____		☐	☐

PRINT FULL FORM

Agency Use Only [If Applicable]

Project :

Date :

Full Environmental Assessment Form
Part 3 - Evaluation of the Magnitude and Importance of Project Impacts
and
Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:

To complete this section:

- Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
- Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
- The assessment should take into consideration any design element or project changes.
- Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
- Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
- For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
- Attach additional sheets, as needed.

There are no adverse environmental impacts associated with the proposed action, as the proposed action is an update of a previously approved Solid Waste Management Plan for Onondaga County. When a determination is made to pursue new or expanded existing solid waste management projects or activities considered within the plan, any such action will be evaluated pursuant to the State Environmental Quality Review Act (SEQRA) to determine the extent to which a new or supplemental environmental review may be required. One such action is consideration of the proposed Regional Solid Waste Management Partnership with Cortland County, which has resulted in a determination to undertake a concurrent environmental impact assessment with the County of Cortland acting as Co-Lead Agency with Onondaga County in order to assure the broadest and most comprehensive review of the environmental impacts of all actions required to be undertaken by each municipality entering into the proposed partnership within each County.

Determination of Significance - Type 1 and Unlisted Actions

SEQR Status: ☐ Type 1 ☑ Unlisted

Identify portions of EAF completed for this Project: ☐ Part 1 ☐ Part 2 ☐ Part 3

Upon review of the information recorded on this EAF, as noted, plus this additional support information

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the as lead agency that:

☑ A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.

☐ B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.d).

☐ C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action: Update of Onondaga County Comprehensive Solid Waste Management Plan

Name of Lead Agency: County of Onondaga

Name of Responsible Officer in Lead Agency: J. Ryan McMahon

Title of Responsible Officer: Chairman, Onondaga County Legislature

Signature of Responsible Officer in Lead Agency: Date: Dec. 02, 14

Signature of Preparer (if different from Responsible Officer) Date: October 20, 2014

For Further Information:

Contact Person: David Coburn

Address: 421 Montgomery Street, Syracuse, New York 13202

Telephone Number: (315)435-2647

E-mail: davidcoburn@ongov.net

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:

Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of)
Other involved agencies (if any)
Applicant (if any)
Environmental Notice Bulletin: http://www.dec.ny.gov/enb/enb.html

PRINT FULL FORM

APPENDIX D – Source Separation Law

C.

LOCAL LAW NO. 2 - 2012

A LOCAL LAW ENACTING A NEW ONONDAGA COUNTY SOURCE SEPARATION LAW, AND REPEALING LOCAL LAW NO. 12-1989, AS AMENDED BY LOCAL LAW NO. 14-1991

BE IT ENACTED BY THE ONONDAGA COUNTY LEGISLATURE OF THE COUNTY OF ONONDAGA, NEW YORK, AS FOLLOWS:

Section 1. Legislative Findings and Purpose

This Legislature finds and determines that the Onondaga County Resource Recovery Agency ("OCRRA") has been administering a county source separation law for over 20 years and, through this administration, has reported that the best way to ensure proper recycling of all County Recyclable Materials is to require onsite Source Separation of these materials by Waste Generators. This Legislature further finds and determines that OCRRA has ascertained that no entity is currently in the business of taking mixed streams of Solid Waste and Recyclable Waste from Waste Generators and source separating them offsite. This Legislature further finds and determines that the penalties and enforcement provisions in the prior Onondaga County Source Separation Law are outdated and need to be amended in order to deter violations of the law.

The purpose of the Onondaga County Source Separation Law is (a) to encourage and facilitate the maximum recycling practicable on the part of each and every household, business, apartment complex, industry, and institution within Onondaga County; (b) to establish, implement, and enforce minimum recycling-related practices and procedures to be applicable to all Waste Generators, Waste Haulers/Recyclable Collectors, and Materials Recovery Facilities/Recycling Facilities located within Onondaga County; and (c) to require onsite Source Separation by each and every Waste Generator within Onondaga County and to ensure that those County Recyclable Materials that are Source Separated are recycled properly and kept separate from Solid Waste.

Section 2. Definitions

For purposes of this local law, the terms listed below shall be defined as follows:

A. "County Recyclable Materials" means the following:

i. Corrugated Paper: Cardboard containers, boxes and packaging, including pizza boxes, which are cleaned of contamination by food wastes or polystyrene commonly called Styrofoam, and which have been flattened for transport;

ii. Glass: Empty, washed glass jars, bottles and containers of clear, green and amber (brown) that contained food and drink, caps removed. This term excludes ceramic, window glass, auto glass, mirror and kitchenware;

iii. Metal: All ferrous and non-ferrous metals, including: steel, aluminum and composite cans and containers (cleaned of food wastes) and empty aerosol cans that did not contain hazardous material. Scrap metal, wire, pipes, tubing, motors, sheet metal, etc. are recyclable but must be recycled through scrap dealers;

iv. Newspapers, Magazines, and Catalogues: Includes common machine finished paper made chiefly from wood pulp used for printing newspapers, as well as glossy inserts, magazines and catalogues. All must be

free of contaminants;

v. Office Paper: All bond paper, and also computer printout, stationery, photocopy and ledger paper of any color from all Waste Generators. This term excludes carbon paper, chemical transfer paper and tyvek or plastic coated envelopes;

vi. Plastics: All HDPE and PET type plastic bottles (#1 & #2), including empty, washed food, beverage, detergent, bleach and hair care containers. This term excludes all photographic film, vinyl, rigid and foam plastic materials, as well as plastics numbered 3, 4, 6, and 7 and HDPE oil bottles, as well as #1 and #2 containers that are not bottles or contained hazardous material. Also included as a recyclable, all #5 polypropylene containers, including baby bottles, cottage cheese/cream cheese containers, yogurt cups, margarine tubs, plastic ice cream containers, food storage containers, and take-out containers marked as #5 plastic;

vii. Kraft Paper: As found in brown paper bags and package wrapping;

viii. Beverage Cartons: Includes gable topped paper cartons that contained milk and juice products. Also included as a Recyclable, aseptic containers for juice, broth or soup;

ix. Paperboard: Includes paper packaging as found in cereal, cracker and tissue boxes, etc. and toilet tissue and paper towel tubes;

x. Mixed Paper: Includes discarded and bulk mail, computer paper, colored paper, envelopes, greeting cards, wrapping paper and carbonless multi-part forms. Excludes any paper coated with foil or plastic; and

xi. Soft Cover Books: Including paperback books, product manuals, and educational materials that do not have a hard cover, nor a metal or plastic spiral binding.

B. "Collection Service" means the collection, pick-up or removal of Solid Waste originating in any location within the County by a Waste Hauler pursuant to an arrangement with the Waste Generator.

C. "Curb" means that street curb immediately in front of the property from which Solid Waste and County Designated Recyclable Materials are generated or, in the absence of an actual curb, that portion of the property which is immediately adjacent to the street.

D. "Curbside Collection" means the use of collection receptacles for County Recyclable Materials, including, but not limited to, Recycling Containers for Waste Generators and the regular periodic transfer of the contents of such receptacles by a Waste Hauler/Recyclables Collector to a Materials Recovery Facility or Recycling Facility from the location of the Waste Generator.

E. "Disposal Facility" means a solid waste management facility to which solid waste is delivered for permanent disposal.

F. "Materials Recovery Facility" means any person, firm, corporation or other entity in the business of receiving and processing Recyclables into marketable commodities for sale to end markets.
G. "OCRRA" means the Onondaga County Resource Recovery Agency.

H. "Person" means any individual, firm, company, partnership or corporation or other business entity.

I. "Recyclables" means those materials defined in Section 2 above.

J. "Recyclables Collector" means any person, firm, corporation or other entity contracted with for the purpose of collecting Recyclables from Waste Generators for delivery to a Materials Recovery Facility or Recycling Facility.

K. "Recycle" means to process used materials into new products to prevent waste of potentially useful materials.

L. "Recycling Container" means the bin or other container supplied by the Onondaga County Resource Recovery Agency for use by Waste Generators. Such containers shall be used exclusively for the storage of County Recyclable Materials. Such containers shall, at all times, remain the property of the Onondaga County Resource Recovery Agency.

M. "Recycling Facility" means a public or private facility that receives Recyclables that have been separated from the waste stream for handling and resale to end markets without further processing.

N. "Recycling Receptacle" means a tote, dumpster or similar container provided by a hauler, business, apartment complex or institution for aggregating Recyclables.

O. "Recycling Services" means commercial services associated with the temporary storage, collection and transport of recyclable materials by a Waste Hauler or Recyclables Collector to a Materials Recovery Facility or Recycling Facility.

P. "Solid Waste" or "Disposable Materials" means all materials discarded as being spent, useless, worthless or in excess to the owners at the time of discard or rejection, including but not limited to garbage or refuse, but shall not include Recyclables, Yard and Garden Waste, human wastes, rendering wastes, major appliances, regulated medical waste, construction and demolition wastes, residue from incinerators or other destructive systems for processing waste, junked automobiles, pathological, toxic, explosive, liquid, radioactive material or other waste material which, under existing or future federal, state or local laws, require special handling in its collection or disposal.

Q. "Source Separation" means the segregation of County Recyclable Materials and Yard and Garden Waste from non-recyclable Solid Waste at the point of generation by Waste Generators, and the placement of County Recyclable Materials into Recycling Receptacles for collection and delivery to a Materials Recovery Facility or Recycling Facility.

R. "Waste Generator" means any individual or person (as defined herein to include any individual, firm, company, partnership or corporation or other business entity) that produces Solid Waste requiring off-site disposal. Classifications of Waste Generator are as follows:

i. Residential Waste Generator means any individual who resides in a single family residence or residential building that produces Solid Waste requiring off-site disposal.

ii. Nonresidential Waste Generator means the owner and/or operator of an Apartment Complex, a Commercial Facility, an Industrial Facility, or an Educational /Government Facility, referred to herein as Apartment Complex Waste Generator, Commercial Property Waste Generator, Industrial Facility Waste Generator and Educational/Government Waste Generator, that produces Solid Waste requiring off-site disposal.

a. "Apartment Complex" means any building containing more than two residential units.
b. "Commercial Property" means any office, retail location, warehouse or other general business setting.
c. "Industrial Facility" means a factory or manufacturing site or plant.

d. "Educational/Governmental" facility means an entity that produces Solid waste at or from a public or private educational facility or governmental building.

The term "Waste Generator" shall not include individuals or persons located in the Town or Village of Skaneateles.

R. "Waste Hauler" means any person, company, partnership or other entity engaged in the business of providing Collection Service pursuant to any contract, agreement, or other arrangement with any Waste Generator, where Solid Waste is collected for disposal at a permitted solid waste disposal or transfer facility, or a municipal department or other governmental division responsible for collection of Solid Waste from some or all Waste Generators in Onondaga County.

S. "Yard and Garden Waste" means grass clippings, leaves, brush, cuttings from shrubs, hedges and trees.

Section 3. Source Separation and Disposal

A. Every Waste Generator shall Source Separate, which means the segregation of County Recyclable Materials from non-recyclable Solid Waste at the point of generation by Waste Generators, and the placement of County Recyclable Materials into Recycling Receptacles for collection and delivery to a Materials Recovery Facility or Recycling Facility.

B. Every Waste Generator shall Source Separate Yard and Garden Waste from County Recyclables and Solid Waste, and shall dispose of Yard and Garden Waste pursuant to applicable local laws and ordinances of the pertinent town, village or city.

C. Every Waste Generator shall deliver or arrange for the delivery of County Recyclable Materials to a Recycling Facility or make source separated County Recyclable Materials available for collection by a Waste Hauler/Recyclables Collector and ultimate delivery to a Materials Recovery Facility or Recycling Facility.

D. No Waste Generator shall make Solid Waste that has not been Source Separated available for collection by a Waste Hauler, a Recyclables Collector, or a Materials Recovery Facility.

E. No Residential Waste Generator, Recyclables Collector, Materials Recovery Facility, or Waste Hauler shall dispose or attempt to dispose of County Recyclable Materials or Yard and Garden Waste as Solid Waste.

F. No Waste Generator, Recyclables Collector, Materials Recovery Facility, or Waste Hauler shall dispose or to attempt to dispose of Solid Waste as County Recyclable Materials or as Yard and Garden Waste.

G. Every Waste Generator shall set out County Recyclable Materials for recycling collection in such a manner as to prevent the contamination of such County Recyclable Materials by Solid Waste.

H. No Recyclables Collector, Materials Recovery Facility or Waste Hauler shall accept Solid Waste and County Recyclable Materials that have not been Source Separated or mix Solid Waste with County Recyclable Materials after accepting same.

I. No Recyclables Collector or Waste Hauler shall deliver or attempt to deliver County Recyclable Materials mixed with Solid Waste to a Materials Recovery Facility or Recycling Facility or dispose or attempt to dispose of such mixed materials as Solid Waste.

J. Every Waste Hauler and Recyclables Collector shall separately and properly label "trash" and "Recyclables" receptacles which it provides.

K. No Materials Recovery Facility shall accept for processing or transfer Solid Waste mixed with County Recyclable Materials that has not been Source Separated or mix Solid Waste with County Recyclable Materials after accepting same.

L. Every Commercial Property and Educational/Governmental Waste Generator that sells food or drinks for onsite consumption at such facility shall provide for the onsite source separation and recycling of Glass, Metal and Plastics (as defined herein under "County Recyclable Materials") in a manner that is readily accessible to consumers.

M. Every Apartment Complex Waste Generator shall provide recycling services for tenants, if the tenant is not required to directly arrange for such recycling services.

N. Every Residential Waste Generator residing in an Apartment Complex shall Source Separate as herein defined and place County Recyclable Materials into Recycling Containers for collection and delivery to a Materials Recovery Facility or Recycling Facility.

O. Every Waste Hauler and Recyclables Collector shall provide Recycling Services to their Waste Generator customers, unless it can be demonstrated that the Waste Generator customer has separately arranged for the transportation of Source Separated County Recycling Materials to a Materials Recovery Facility or Recycling Facility.

Section 4. Recycling Containers and Receptacles

A. Every Commercial Property Waste Generator shall provide, or require that the occupying tenants provide, an adequate number and capacity of Recycling Receptacles or Recycling Containers in sufficient number and capacity to accommodate the aggregated quantity of County Recyclable Materials.

B. Every Apartment Complex Waste Generator shall provide common area Recycling Receptacles or Recycling Containers in sufficient number and capacity to accommodate the aggregated quantity of County Recyclable Materials generated by all tenants. Recycling Receptacles shall be placed in locations at least as convenient to tenants as trash receptacles.

C. Every Commercial Property Waste Generator, Industrial Facility Waste Generator and Educational/Governmental Waste Generator shall make an adequate number of internal and external Recycling Receptacles as readily accessible as trash receptacles.

D. Every Apartment Complex Waste Generator shall ensure that all interior and exterior Recycling Containers and Recycling Receptacles are properly labeled and designated for "Recyclables", and shall provide recycling information to the residents, including instructions that identify County Recyclable Materials the tenants must Source Separate.

E. No Residential Waste Generator shall remove a Recycling Container from the County; willfully destroy a Recycling Container; dispose of an undamaged Recycling Container other than by returning such container to the issuing municipality at a designated location; or use such Recycling Container for other than the temporary storage of County Recyclable Materials.

F. Every Residential Waste Generator who changes place of residence shall leave the Recycling Container for the subsequent occupant of the property or, in the alternative, shall return the Recycling

Container to OCRRA or the issuing municipality. Every Residential Waste Generator who does not have a Recycling Container shall obtain a Recycling Container from OCRRA or the municipality within two weeks of taking possession of said property.

Section. 5. Unauthorized Removal of Recyclables. No individual other than a Waste Hauler or Recyclables Collector shall pick over, disturb, collect, pick up, remove or cause to be collected, picked up or removed any County Recyclable Materials that have been set out for collection.

Section 6. Violation

It shall be an offense punishable as provided herein for any person, as herein defined, to fail to comply with or violate the provisions of Sections 3, 4 or 5 of this local law.

Section 7. Enforcement

This local law shall be enforced within the geographic boundaries of Onondaga County, except for the Town and Village of Skaneateles, by any law enforcement agency having jurisdiction in the County, including but not limited to the Onondaga County Sheriff and Onondaga County Deputy Sheriffs, and any special deputies duly authorized to enforce this local law.

Section 8. Penalties

A. Conviction of a Waste Generator, Waste Hauler, Recyclables Collector, Materials Recovery Facility or Recycling Facility for failure to comply with any of the provisions of Section 3 or Section 4 of this local law shall result in a written warning for a first violation. Conviction for a repeat violation shall be punishable as set forth below in Sections B, C, D, and E.

B. Conviction of a Residential Waste Generator for failure to comply with any of the provisions of Section 3 or Section 4 of this local law shall be punishable by a fine of Fifteen Dollars ($15.00) for the second violation; Thirty Dollars ($30.00) for the third violation; Fifty Dollars ($50.00) for the fourth violation; and One Hundred Dollars ($100.00) for each subsequent violation.

C. Conviction of a Nonresidential Waste Generator for failure to comply with any of the provisions of Section 3 or Section 4 of this local law shall be punishable by a fine of not less than $100.00 and not more than $500.00 for the second violation. Conviction of each subsequent offense shall be punishable by a fine of not less than $250.00 nor more than $1,000.00 per violation.

D. Conviction of a Waste Hauler or Recyclables Collector for failure to comply with any of the provisions of Section 3 or Section 4 of this local law shall be punishable by a fine of not less than $250.00 and not more than $500.00 for the second violation. Conviction of each subsequent offense shall be punishable by a fine of not less than $500.00 nor more than $1,000.00 per violation. Every day or instance of noncompliance shall constitute a new and separate violation of the provisions of this local law.

E. Conviction of a Materials Recovery Facility or Recycling Facility for failure to comply with any of the provisions of Section 3 or 4 of this local law shall be punishable by a fine of not less than $250.00 and not more than $500.00 for the second violation. Conviction of each subsequent offense shall be punishable by a fine of not less than $500.00 nor more than $1,000.00 per violation. Every day or instance of noncompliance shall constitute a new and separate offense, including but not limited to a separate offense for acceptance of each load of material by a Materials Recovery Facility or Recycling Facility in violation of this local law.

G. Conviction of an individual for failure to comply with the provisions of Section 5 of this local law shall be punishable by a fine of not less than $100.00 and not more than $500.00. Conviction of each subsequent offense within twelve months of a prior conviction for the same offense shall be punishable by a fine of not less than $250.00 nor more than $1,000.00 per violation.

Section 9. Repeal and Amendment

Local Law No. 12 - 1989, as amended by Local Law No. 14 - 1991, hereby is repealed, effective January 1, 2012.

Section 10. Effective Date

This local law shall take effect January 1, 2012, and shall be filed pursuant to the New York State Municipal Home Rule Law.

Section 11. Separability

If any clause, sentence, paragraph, section or part of this local law shall be adjudged by a court of competent jurisdiction to be invalid, the judgment shall not effect, impair or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, section or part thereof directly involved in the controversy in which the judgment shall have been rendered.

Section 12. SEQR

This Onondaga County Legislature, acting as lead agency for purposes of the New York State Environmental Quality Review Act (SEQRA), has had prepared a Short Form Environmental Assessment Form, in which it was determined that the proposed project is an Unlisted Action and will not have an adverse impact upon the environment and, as a result, does hereby adopt a Negative Declaration under SEQRA.

OCRRA - source separation – DRAFT
kam
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I HEREBY CERTIFY THAT THE FOREGOING IS A TRUE AND EXACT COPY OF LEGISLATION DULY ADOPTED BY THE COUNTY LEGISLATURE OF ONONDAGA COUNTY ON THE 1st DAY OF November, 20 11.

Deborah L. Mahoney

CLERK, COUNTY LEGISLATURE
ONONDAGA COUNTY, NEW YORK

FILED WITH CLERK
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Oct. 17, 2011
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ADOPTED
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APPENDIX E – Waste Importation Law

F

LOCAL LAW NO. 9 - 1992

A LOCAL LAW AMENDING LOCAL LAW NO. 10 OF 1989 "A LOCAL LAW PROHIBITING THE BRINGING OF REFUSE GENERATED OUTSIDE OF ONONDAGA COUNTY INTO ONONDAGA COUNTY FOR DEPOSIT IN SANITARY LANDFILLS WITHIN ONONDAGA COUNTY WITHOUT AUTHORIZATION BY THE ONONDAGA COUNTY LEGISLATURE"

BE IT ENACTED BY THE COUNTY LEGISLATURE OF THE COUNTY OF ONONDAGA, STATE OF NEW YORK, AS FOLLOWS:

Section 1. Article I, Section 1.5 of Local Law No. 10 of 1989, is amended to read:

It is not in harmony with the Solid Waste Management Act of 1988, and the solid waste management program of the County of Onondaga that entities and communities located outside of Onondaga County be permitted, without the express authorization of this Legislature, to increase the amount of solid waste to be landfilled or processed in an incinerator in the County of Onondaga by bringing or causing to have been brought solid waste generated outside of the County of Onondaga into Onondaga County for landfilling or processing in an incinerator.

Section 2. Article I, Section 1.6, is amended to read:

The County of Onondaga and this Legislature, in order to insure and promote the health, safety and general welfare of the inhabitants of this County, and consistent with the Solid Waste Management Act of 1988, and the solid waste management program of Onondaga County, find it in the public interest to prohibit the bringing of solid waste of any type into Onondaga County for the purpose of landfilling or processing in an incinerator unless specifically authorized by this Legislature.

Section 3. Article III, Section 3.1, is amended to read:

It shall be unlawful for any person, firm, corporation, partnership or other legal entity to bring into Onondaga County or cause to be brought into Onondaga County, for the purpose of disposal, in whole or in part, in a landfill or processing in an incinerator, any solid waste which generated or was collected outside the territorial limits of Onondaga County, without the express written consent of the Onondaga County Legislature.

Section 4. This Local Law shall be effective pursuant to the provisions of the Municipal Home Rule Law.

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LOCAL LAW NO. 10, 1989.

A LOCAL LAW PROHIBITING THE BRINGING OF REFUSE GENERATED OUTSIDE OF ONONDAGA COUNTY INTO ONONDAGA COUNTY FOR DEPOSIT IN SANITARY LANDFILLS WITHIN ONONDAGA COUNTY WITHOUT AUTHORIZATION BY THE ONONDAGA COUNTY LEGISLATURE

BE IT ENACTED BY THE ONONDAGA COUNTY LEGISLATURE OF THE COUNTY OF ONONDAGA, NEW YORK, AS FOLLOWS:

ARTICLE I. PURPOSE

Section 1.1. The County of Onondaga finds that the generation of solid waste is, by its very nature, potentially dangerous to the health, safety, and general welfare of the inhabitants of Onondaga County.

Section 1.2. It is the duty and intent of this Onondaga County Legislature to protect the inhabitants of the County through exercise of its police powers in regulating and limiting the amount of solid waste to be landfilled in the County of Onondaga.

Section 1.3. The Legislature of the State of New York has enacted the Solid Waste Management Act of 1988, which Act requires the County, and similarly situated Counties, to adopt local solid waste management plans to reduce the volume of solid waste to be landfilled, and to site, construct and operate facilities for recycling, incineration and landfilling.

Section 1.4. Pursuant to said Solid Waste Management Act of 1988, and the regulations promulgated thereunder, the County of Onondaga has adopted a solid waste management program which includes recycling and incineration to reduce the volume of solid waste to be landfilled in Onondaga County.

Section 1.5. It is not in harmony with the Solid Waste Management Act of 1988, and the solid waste management program of the County of Onondaga, that entities and communities located outside of Onondaga County be permitted, without the express authorization of this Legislature, to increase the amount of solid waste to be landfilled in the County of Onondaga by bringing or causing to have been brought solid waste generated outside of the County of Onondaga into the County of Onondaga for landfilling, in whole or in part, in Onondaga County.

Section 1.6. The County of Onondaga and this Legislature, in order to insure and promote the health, safety, and general welfare of the inhabitants of this County, and consistent with the Solid Waste Management Act of 1988, and the solid waste management program of Onondaga County, find it in the public interest to prohibit the bringing of solid waste of any type into Onondaga County for the purpose of landfilling unless specifically authorized by this Legislature.

ARTICLE II. DEFINITIONS

Section 2.1 Solid Waste as means any garbage, refuse, or other waste material defined as solid waste by the New York State Department of Environmental Conservation in 6 NYCRR, Part 360, effective December 31, 1988.

Section 2.2. Incinerator means an enclosed device using controlled flame combustion, the primary purpose of which is to thermally break down solid, liquid or gaseous combustible wastes, producing residue that contains little or no combustible materials.

Section 2.3. Landfill means a disposal facility or part of a facility where solid waste is placed in or on land, and which is not a land treatment facility, a surface impoundment, or an injection well.

Section 2.4. Recycling means to separate, process and reuse materials that would otherwise be incinterated or landfilled as garbage (e.g., paperboard, glass, metal and certain plastics).

Section 2.5. Recyclable Materials means those materials able to be practically separated from non-recyclable waste for which reuse markets can be accessed for less than the cost of disposal.

ARTICLE III. CONDUCT

Section 3.1. It shall be unlawful for any person, firm, corporation, partnership or other legal entity to bring into Onondaga County or cause to be brought into Onondaga County, for the purpose of disposal, in whole or in part, in a landfill, any solid waste which generated or was collected outside the territorial limits of Onondaga County, without the express written consent of the Onondaga County Legislature.

Section 3.2. Nothing contained herein shall prohibit any person, firm, corporation, partnership or other legal entity from bringing recyclable materials into Onondaga County for the purpose of recycling.

ARTICLE IV. PENALTIES

Section 4. Any violation of any provision of this Local Law or any law, ordinance, rule, regulation or order adopted pursuant thereto, shall be punishable by a fine not to exceed TEN THOUSAND DOLLARS ($10,000) and imprisonment for a period not to exceed ONE (1) YEAR for each and every violation. Each day during which a violation of this Local Law continues shall be deemed a separate violation.

ARTICLE V. SEVERABILITY

Section 5. If any part or provision of this law or the application thereof to any person or circumstance be adjudged invalid by any court of competent jurisdiction, such judgment shall be confined in its operation to the part or provision or application directly involved in the controversy in which the such judgment shall have been rendered and shall not affect or impair the validity of the remainder of this law or the application thereof to other persons or circumstances.

ARTICLE VI. APPLICABILITY

Section 6. The provisions of this law shall not be interpreted as superceding any requirements or restrictions in effect in municipalities within Onondaga County prior to the effective date of this law.

ARTICLE VII. EFFECTIVE DATE

Section 7. This Local Law shall be effective pursuant to the provisions of Municipal Home Rule Law.

ADOPTED

FEB 06 1989

Draft #3
11/local garbage

APPENDIX F – Flow Control Law

D.

LOCAL LAW NO. 3 - 2012

A LOCAL LAW AMENDING LOCAL LAW NO. 5 - 2003 WHICH PROVIDED FOR THE REGULATION, COLLECTION AND DISPOSAL OF SOLID WASTE ORIGINATING IN THE COUNTY OF ONONDAGA

BE IT ENACTED BY THE ONONDAGA COUNTY LEGISLATURE OF THE COUNTY OF ONONDAGA, NEW YORK, AS FOLLOWS:

Section 1. Local Law No. 5 - 2003 hereby is amended in Section 1 to delete the phrase "(Local Law No. 12 of 1989)" and to substitute therefore "(the Revised Source Separation Local Law adopted November 1, 2011)".

Section 2. Local Law No. 5 - 2003 hereby is amended in Section 1 to delete the following phrase:

OCRRA has further advised the County that these sites were paid for with bonds issued by OCRRA, that the entire capacity of OCRRA's facility was purchased from the facility manager, that all of the facilities' capacity is exclusively dedicated to waste generated from the 33 participating municipalities in Onondaga County and that OCRRA receives the revenues from tip fees which it uses to pay on the bond debt and for the services of the facility manager.

and to substitute the following:

All of the facilities' capacity is exclusively dedicated to waste generated from the 33 participating municipalities in Onondaga County and that OCRRA receives the revenues from tip fees which it uses to pay on the bond debt and for the services of the facility manager.

Section 3. Local Law No. 5 - 2003 hereby is amended in Section 3 to strike Sections (I), (K), (Q), (V), (W) and (AA).

Section 4. Local Law No. 5 - 2003 hereby is amended in Section 3 to strike Section (U) and substitute the following:

(U) "Person" means any individual, firm, company, partnership or corporation or other business entity.

Section 5. Local Law No. 5 - 2003 hereby is amended in Section 3 to strike Section (Z) and substitute the following:

(Z) "Solid Waste" means all materials discarded as being spent, useless, worthless or in excess to the owners at the time of discard or rejection, including but not limited to garbage or refuse, but shall not include Recyclables, Yard and Garden Waste, human wastes, rendering wastes, major appliances, regulated medical waste, construction and demolition wastes, residue from incinerators or other destructive systems for processing waste, junked automobiles, pathological, toxic, explosive, liquid, radioactive material or other waste material which, under existing or future federal, state or local laws, require special handling in its collection or disposal.

Section 6. Local Law No. 5 - 2003 hereby is amended in Section 5 to delete paragraph (A)(2), paragraph (B) and paragraph (C).

Section 7. Local Law No. 5 - 2003 hereby is amended to delete Section 7.

Section 8. Local Law No. 5 - 2003 hereby is amended in Section 9 to delete paragraphs (B), (C) and (D).

Section 9. Local Law No. 5 - 2003 hereby is amended in Section 10 to delete paragraph (E).

Section 10. In all other respects, Local Law No. 5 - 2003 shall remain in full force and effect.

Section 11. This local law shall take effect upon adoption and shall be filed pursuant to the New York State Municipal Home Rule Law.

Section 12. Separability

If any clause, sentence, paragraph, section or part of this local law shall be adjudged by a court of competent jurisdiction to be invalid, the judgment shall not effect, impair or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, section or part thereof directly involved in the controversy in which the judgment shall have been rendered.

Section 14. SEQRA

This Onondaga County Legislature, acting as lead agency for purposes of the New York State Environmental Quality Review Act (SEQRA), had prepared a Short Form Environmental Assessment Form, in which it was determined that the proposed project is an Unlisted Action and will not have an adverse impact upon the environment and, as a result, does hereby adopt a Negative Declaration under SEQRA.

OCRRA Amending 2003 Local Law
kam

ADOPTED
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kms

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LEGISLATURE
ONONDAGA COUNTY

I HEREBY CERTIFY THAT THE FOREGOING IS A TRUE AND EXACT COPY OF LEGISLATION DULY ADOPTED BY THE COUNTY LEGISLATURE OF ONONDAGA COUNTY ON THE 1st DAY OF November, 2011.

Deborah L. Maturo

CLERK, COUNTY LEGISLATURE
ONONDAGA COUNTY, NEW YORK

STATE OF NEW YORK
DEPARTMENT OF STATE
ONE COMMERCE PLAZA
99 WASHINGTON AVENUE
ALBANY, NY 12231-0001

ANDREW M. CUOMO
GOVERNOR

CESAR A. PERALES
SECRETARY OF STATE

January 10, 2012

Katherine M French
Deputy Clerk
401 Montgomery Street
Court House, Room 407
Syracuse NY 13202

RE: County of Onondaga, Local Law 3 2012, filed on January 9, 2012

Dear Sir/Madam:

The above referenced material was filed by this office as indicated. Additional local law filing forms can be obtained from out website, www.dos.state.ny.us.

Sincerely,
State Records and Law Bureau
(518) 474-2755

LOCAL LAW NO. 5 2003

A LOCAL LAW REGULATING THE COLLECTION AND DISPOSAL OF SOLID WASTE ORIGINATING IN THE COUNTY OF ONONDAGA

BE IT ENACTED BY THE COUNTY LEGISLATURE OF ONONDAGA COUNTY AS FOLLOWS:

Section 1. Legislative Findings and Purposes

The reduction of the amount of Solid Waste and conservation of recyclable materials is an important public concern because of the increasing cost of Solid Waste collection and disposal and its impact on the environment. In Onondaga County (the "County") the separation and collection of recyclable materials serves the general public's interest by reducing the amount of Solid Waste in compliance with the Onondaga County Source Separation Law (Local Law No. 12 of 1989) and other applicable provisions of law. In 1988, in the interest of public health, safety and welfare and in order to conserve energy and natural resources, the State of New York enacted the New York State Solid Waste Management Act which established the following solid waste management hierarchy: waste reduction, reuse, recycling and waste to energy with land burial as a last resort only when reuse, recycling or waste-to-energy were unavailable. Section B-35 of the State Solid Waste Management Plan - recommended that Onondaga County take immediate steps to develop environmentally acceptable facilities to manage the Solid Waste generated in the County. In December 1991 Onondaga County adopted a comprehensive Solid Waste Management Plan that was subsequently approved by the State Department of Environmental Conservation. The County Plan, applicable to municipalities within the County, preferred waste-to-energy as a safe and sanitary alternative to the threat to the ground water supply and other liabilities posed by the burying of such waste.

This Local Law is enacted after legislative review of the integrated Solid Waste Management System established in Onondaga County in order to implement the County Plan through the joint efforts of Onondaga County and the Onondaga County Resource Recovery Agency (the "Agency"), and pursuant to § 10 of the Municipal Home Rule Law of the State of New York and based upon OCRRA's having

advised the County that it holds legal title to the Rock Cut Road, Ley Creek, and landfill sites, and leases its compost sites from the County. OCRRA has further advised the County that these sites were paid for with bonds issued by OCRRA, that the entire capacity of OCRRA's facility was purchased from the facility manager, that all of the facilities' capacity is exclusively dedicated to waste generated from the 33 participating municipalities in Onondaga County and that OCRRA receives the revenues from tip fees which it uses to pay on the bond debt and for the services of the facility manager. As a result of said review, in order to provide for the public health, safety and welfare, to comply with the provisions of § 120-aa of the General Municipal Law of the State of New York, to comply with the provisions of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C.§6901 et seq. and in conformance with the requirements regarding Solid Waste management set forth in § 27-0701 of the Environmental Conservation Law of the State of New York, it is hereby declared that it is in the public interest to adopt a Local Law to more fully implement and secure the benefits of our integrated system of Solid Waste management for the people of Onondaga County.

Onondaga County established a comprehensive recycling program in 1990 and was among the first to do so on a region-wide basis. This program was developed because it was and is our determination that a comprehensive, integrated Solid Waste management system is both necessary and desirable in order to provide for public health, safety and welfare and to facilitate the conservation of vital natural resources by: a) providing essential Solid Waste management services to the public, including efficient delivery of such services and a fair and equitable system of charging for those services, which promotes reduction and recycling; b) by developing the most appropriate method for handling Solid Waste and Recyclable Materials on a component-by-component basis and serving to ensure that there are markets for all Recyclable Materials required to be separated and recycled under this law; c) by minimizing the dependence on disposal facilities and thereby extending the useful life of current and future disposal facilities; and d) by promoting the use of secondary materials in the manufacture of new consumer products.

It is hereby found and declared, that pursuant to the authorizations and policy determinations set forth above, the Agency has established and maintained an integrated system of solid waste management consisting of the following major components: a) a comprehensive recycling program providing a reclamation site of last resort for all recyclables to be recovered from the waste stream through Source Separation and processing and thereby decrease the tonnage potentially taken to landfills; b) an extensive program of education and promotion of federal, New York State, and Onondaga County Solid Waste Management Plan policy goals of reduction, reuse, recycling, and composting; c) an effective means of collecting and disposing of Household Hazardous Wastes; and d) an environmentally secure and economically advantageous mechanism for the disposal of Non-Recyclable Solid Wastes generated by the people of the County through procurement of disposal capacity for said wastes at the Agency's public waste-to-energy facility on Rock Cut Road in the Town of Onondaga.

It is further found and declared that in order to achieve the public purposes of Onondaga County's integrated System of Solid Waste Management it is necessary to continue to implement and enforce a regulatory system governing Solid Waste collection and disposal in the County. The Onondaga County Legislature hereby finds and distinguishes between the provision of Collection Services with respect to Solid Waste and the provision of Disposal Services with respect to Solid Waste, as said terms are defined herein.

Section 2. Legislative Intent.

The Legislature finds with respect to the provision of Disposal Services for Solid Waste that there is a substantial public interest in ensuring the lawful disposal of said Solid Waste by designating an approved disposal site as defined herein for all solid waste originating in Onondaga County outside of the Town and Village of Skaneateles, and in the disclosure to the generators of Solid Waste of the ultimate place and manner of disposal. Therefore, in compliance with both the State and County Solid Waste Management Plans, Onondaga County has determined that all Solid Waste, both residential and commercial, generated in our County may not be disposed of at any place other than the Approved

Disposal Site designated herein. The basis of that determination is Reference Document No. 1 which is incorporated herein by reference. A copy of Reference Document No. 1 is on file with the Clerk of this Legislature. This Local Law will also establish and refine regulations governing hauler services for the collection and disposal of Solid Waste materials. This Local Law shall not (A) apply to the delivery to a material recovery facility, whether in the County or elsewhere, of Recyclables separated from the rest of the Solid Waste in accordance with Onondaga County's Source Separation Law or (B) apply to the price, route or service of any motor carrier with respect to the transportation of property prohibited by the Federal Aviation Administration Authorization Act of 1994, as amended (49 U.S.C.A. § 14501 et. seq.).

Section 3. Definitions.

(A) "Agency" means the Onondaga County Resource Recovery Agency.

(B) "Agency Facility" means any public facility operated by or designated by the Agency. Agency Facilities include the Agency Transfer Stations at Ley Creek and Rock Cut Road, Rock Cut Road Waste-to-Energy Facility, Agency Yard Waste Composting Facilities at Jamesville and Amboy, Construction and Demolition Processing Facility at Ley Creek and Agency designated Materials Recovery Facilities.

(C) "Approved Disposal Site" means the publicly owned Onondaga County Resource Recovery Waste-to-Energy Facility on Rock Cut Road in the Town of Onondaga or the Ley Creek or Rock Cut Road transfer stations for ultimate disposal at the Onondaga County Resource Recovery Waste-to-Energy Facility.

(D) "Legislature" means the Onondaga County Legislature.

(E) "Collection Service" means the provision of service, provided by a Commercial Hauler, to collect, pick-up or remove Solid Waste originating in any location within the County excluding the Town and Village of Skaneateles, pursuant to any arrangement between the Commercial Hauler and the generator of said Solid Waste.

(F) "Commercial Hauler" means any Person, company, partnership or entity engaged in the business of providing Collection Service pursuant to any contract, agreement or other arrangement with any waste generator or municipality, except the Town and Village of Skaneateles.

(G) "Construction and Demolition Debris" means discarded building material, concrete, stones, earth from excavations or grading and all other refuse material resulting from the erection, repair or demolition of buildings, structures or other improvements of property.

(H) "County" means the County of Onondaga.

(I) "County Designated Recyclable Materials" means those Recyclables designated by the County of Onondaga and the Onondaga County Resource Recovery Agency pursuant to Local Law No. 12, as may be amended from time to time, of 1989, including the following:

Corrugated paper: Cardboard containers, boxes and packaging, including pizza boxes, which are cleaned of contamination by food wastes or polystyrene commonly called styrofoam, and which have been flattened for transport.

Glass: Empty, washed glass jars, bottles and containers of clear, green and amber (brown) that contained food and drink, caps removed. This term excludes ceramic, window glass, auto glass, mirror and kitchenware.

Metal: All ferrous and non-ferrous metals, including: steel, aluminum and composite cans and containers (cleaned of food wastes) and empty aerosol cans that did not contain hazardous material. Scrap metal, wire, pipes, tubing, motors, sheet metal, etc. are recyclable but must be recycled through scrap dealers.

Newspapers, magazines and catalogues: Includes common machine finished paper made chiefly from wood pulp used for printing newspapers, as well as glossy inserts, magazines and catalogues. All must be free of contaminants.

Office paper: All bond paper and also computer printout, stationery, photocopy and ledger paper of any color from all waste generators. Paper should, if possible, be free of tape, adhesives, labels, rubber bands, paper clips, binders and other contaminants. This term excludes carbon paper, chemical transfer paper and tyvek or plastic coated envelopes.

Plastics: All HDPE and PET type plastic bottles (#1 & #2), including empty, washed food, beverage, detergent, bleach and hair care containers with lids removed. This term excludes all photographic film, vinyl, rigid and foam plastic materials, as well as plastics numbered 3 through 7 and HDPE oil bottles, as well as #1 and #2 containers that are not bottles or contained hazardous material.

Kraft paper: As found in brown paper bags and package wrapping.

Beverage cartons: Includes gabled topped paper cartons that contained milk and juice products.

Paperboard: Paper packaging as found in cereal, cracker and tissue boxes, etc. and toilet tissue and paper towel tubes.

Mixed paper: Includes discarded and bulk mail, computer paper, colored paper, greeting cards, wrapping paper and carbonless multi-part forms. Excludes any paper coated with foil or plastic.

(J) "Curb" shall mean that street curb immediately in front of the property from which Solid Waste material and recyclables to be collected are generated or in the absence of an actual curb, that portion of the property which is immediately adjacent to the street.

(K) "Curbside Collection" shall mean the use of collection receptacles for residential, commercial, and institutional Solid Waste generators and the regular periodic pick up and transfer of the contents of such receptacles by a Hauler at the location of a Waste Generator.

(L) "Disposal Service" means the provision of a service to dispose of Solid Waste generated in Onondaga County outside of the Town and Village of Skaneateles and received from Persons providing Collection Service in the County, or from generators of Solid Waste within the County, by means of landfilling, incineration, composting, energy recovery, materials recovery, or other means, including, but not limited to, the acceptance of said Solid Waste at a transfer station for re-transport to facilities located within or without the County and within or without New York State.

(M) "Hauler" - Any person, company or firm or municipality which engages in the collection, transportation, disposal or delivery of Solid Waste generated within our County outside of the Town and Village of Skaneateles.

(N) "Hazardous Waste" means:

(1) Any waste (excluding Household Hazardous Waste) which is defined or regulated as a Hazardous Waste, Toxic Substance, Hazardous Chemical Substance or mixture, or Asbestos (Regulated Waste) under federal, state or local

law, or under rules, regulations, policies or guidelines issued in relation thereof, as they may be amended from time to time including, but not limited to:

(a) The Resource Conservation and Recovery Act of 1976 (42 U.S.C. Sections 6901 et seq., as amended by the Hazardous and Solid Waste Amendments of 1984) and the regulations contained in 40 CFR Parts 260-281;

(b) The Toxic Substances Control Act (15 U.S.C. Sections 2601 et seq.) and the regulations contained in 40 CFR Parts 761-766;

(c) The State Environmental Conservation Law (Title 9 of Article 27) and the regulations contained in 6 N.Y.C.R.R. Parts 370, 371, 372, 373 (Subpart 373-3);

(2) Radioactive materials which are source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954 (42 U.S.C. Sections 2011 et seq.) and the regulations contained in 10 CFR Part 40; or

(3) Any other material that by Federal, State or local law, or under rules, regulations, policies, guidelines or orders having the force of law in relation thereto are regulated as harmful, toxic or hazardous to health and ineligible for processing at the Agency Facility.

(O) "Large Household Furnishings" means all other large and/or bulky articles actually used in the home and which equip it for living such as chairs, sofas, tables, beds or carpets.

(P) "Major Appliances" means a large and/or bulky household mechanism such as a refrigerator, washer, dryer, stove, furnace or hot water tank.

(Q) "Materials Recovery Facility" or "MRF" means a private or public facility for receiving and processing Recyclables into marketable commodities.

(R) "Medical Waste" means any Solid Waste which is generated in the diagnosis, treatment or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals.

(S) "Municipality(ies)" means any village, town or city in the County, except the Town and Village of Skaneateles.

(T) "Non-Recyclable Solid Waste" means Solid Waste which has been source separated to remove recyclable components, or is the residue of a processing system designed to remove recyclable components, or is otherwise not susceptible to the removal of recyclable components.

(U) "Person" shall mean any individual; chief executive officer, owner or manager of a Commercial or industrial establishment; public or private corporation; agency or authority; political subdivision, government, department or bureau of the state or federal government; municipality; industry, partnership, limited liability entity, association, firm, trust, estate or any other legal entity whatsoever.

(V) "Recyclable Materials" or "Recyclables" shall include materials, as designated pursuant to Local Law No. 12 of 1989, which are separated from the waste stream and held for their recycling or reuse value and any other items designated by the Agency from time to time as it deems appropriate. Any material not specifically designated shall be considered a Solid Waste, unless otherwise exempted.

(W) "Recycling Container" means the blue bin or other container supplied by the Agency or their designees for the storage of County Designated Recyclable Materials.

(X) "Recycling Law" means the Onondaga County Source Separation Law, Local Law No. 12, adopted March 6, 1989, as subsequently amended, and as may be amended from time to time.

(Y) "Regulated Medical Waste" means those medical wastes that have been listed in 6 NYCRR 364.9 paragraph (c)(1) and that must be managed in accordance with the requirements of that part.

(Z) "Solid Waste" means all materials or substances discarded or rejected as being spent, useless, worthless or in excess to the owners at the time of such discard or rejection, including, but not

limited to, garbage, refuse, residential, governmental, commercial and/or light industrial refuse but shall not include Recyclables, Yard and Garden Waste, human wastes, rendering wastes, major appliances, regulated medical waste, construction and demolition wastes, residue from incinerators or other destructive systems for processing waste (other than now existing individual building incinerators, the residue from which is presently collected as part of normal refuse collection practices), junked automobiles, pathological, toxic, explosive, liquid, radioactive material or other waste material which, under existing or future federal, State or local laws, require special handling in its collection or disposal.

(AA) "Source Separation" means the segregation of Recyclable Materials from the Solid Waste stream at the point of generation for separate collection.

(BB) "System" means Onondaga County's Solid Waste Management System as operated by the Onondaga County Resource Recovery Agency and every aspect thereof, including, but not limited to, the publicly owned Rock Cut Road Waste-to-Energy Facility, Yard Waste Composting Facilities at Jamesville and Amboy, Construction and Demolition processing facility at Ley Creek and the Rock Cut Road and Ley Creek transfer stations.

(CC) "Waste Generator" means any Person that produces Solid Waste requiring off-site disposal.

(DD) "Yard and Garden Waste" means grass clippings, leaves, brush, cuttings from shrubs, hedges and trees.

Section 4. Prohibition Against Unauthorized Dumping or Burning.

Except when undertaken at an Agency Facility, it shall be a violation of this local law for any Person:

(A) to place, without written permission, for the purpose of collection, Solid Waste at a property other than the property generating said material; or

(B) to place Solid Waste in dumpsters and/or containers designated for Solid Waste use by Commercial and/or industrial establishments where the Person has not been specifically authorized to place such Solid Waste; or

(C) to bury and/or burn Solid Waste and or Recyclable Materials on public or private property; or

(D) to throw, or cause to be thrown, dump, deposit or place Solid Waste along the roadside/curbside or on public and/or private property within Onondaga County.

Section 5. Preparation and Collection of Solid Waste

(A) No Person shall dispose of Solid Waste except as follows:

(1) Each Person shall provide for the removal of Solid Waste from the property on which it is generated either through a service provided by the municipality in which the property is situate or by a Commercial Hauler with a permit issued by the Agency or by direct haul by the individual generator to an Agency Facility.

(2) Each Person shall provide for the separation of Recyclables in a suitable container for recyclable material as authorized by the Agency. Recyclable materials shall be separated from other non-Recyclable material and placed in said container; the particular requirements for separation shall be established by the Agency. It shall be a violation of this Local Law for any Person to place at the roadside for collection any can or container other than one which has its contents separated into Solid Waste and/or Recyclable Materials. A resident may dispose of their Recyclable Materials by selling or donating the same, but these Recyclable Materials may not be picked up at the roadside/curbside except as provided by agency or municipal rules and regulations.

(B) Recyclable Industrial and Commercial By-products for recovery shall be exempt from this Local Law.

(C) It shall be a violation of this Local Law for any Person other than a Municipality or a Commercial Hauler with a permit issued by the Agency to pick over, disturb, collect, pick up, remove or cause

to be collected, picked up or removed any Recyclable Materials set out for collection pursuant to this Section. Each such collection, picking up or removal from a premises shall constitute a separate and distinct violation of this Local Law. Persons may dispose of their own Recyclable Materials by selling or by donating them, but these Recyclable Materials may not be picked up at roadside/curbside, except as may be provided by agency or municipal rules or regulations.

Section 6. Construction and Demolition Debris Not Regulated.

This Local Law does not apply to the disposal of Construction and Demolition Debris.

Section 7. Disposal of Yard Waste.

(A) No Commercial Hauler or Person shall deliver Yard Waste for disposal as Solid Waste.

Section 8. Rates and Fees: System Charge for Non-Recyclable Solid Waste.

Nothing herein shall affect the authority of the Agency to fix rates and fees for the services provided by the system.

Section 9. Solid Waste Collection.

(A) The Hauler will deliver all of the non-recyclable Solid Waste (residential and commercial) it collects within Onondaga County for disposal to the Approved Disposal Site specified in Section 3 above, except in the Town and Village of Skaneateles. It shall be unlawful to unload or deposit for disposal any Solid Waste hauled from any premises within the limits of Onondaga County at any place other than the Approved Disposal Site specified herein. Any Hauler failing to dispose of said Solid Waste at the Approved Disposal Site so designated shall be subject to the penalties and fines as set forth in Section 10.

(B) The County has adopted as its Source Separation Legislation, required pursuant to the General Municipal Law, Section 120-aa, the Onondaga County Source Separation Law (i.e. Local Law No. 12 of 1989) as adopted by the Onondaga County Legislature and subsequently amended

under its terms. The Hauler will supply a plan of operation for collection and transportation of Recyclables and which provides for a Recycling Plan as required by Onondaga County Local Law No. 12 of 1989 as it applies to Haulers, which it shall adhere to and comply with.

(C) It shall be a violation of this Local Law for any Commercial Hauler to commingle separated Recyclable Materials and Solid Waste from the time such materials are collected from the generator until they are finally delivered to either a Material Recovery Facility or the Approved Disposal Site. Each such act of commingling separated Recyclable Materials and Solid Waste at one or more premises, shall constitute a separate and distinct offense in violation of this Local Law.

(D) No Hauler shall dispose of Recyclable Materials picked up in Onondaga County as Solid Waste nor shall any Hauler accept Recyclable Materials for disposal as Solid Waste.

(E) Failure to comply with the provisions of this Section 9 or with the conditions and requirements of a permit issued hereunder, may subject the violator to the penalties and fines as set forth in Section 10.

Section 10. Enforcement: Penalties.

(A) Failure to comply with this Local Law by any Person shall be an offense punishable as provided herein.

(B) Conviction of an offense identified in Section 4, 5 and 7 of this Local Law, shall be punishable by a fine of not less than $100.00 and not more than $500.00. Conviction of each subsequent offense within one year of the conviction for a prior offense shall be punishable by a fine of not less than $250.00 nor more than $1,000.00 per violation.

(C) Conviction of any offense defined in this local law in Section 9 shall be punishable by a fine of not less than $250.00 and not more than $500.00 per violation. Conviction of each subsequent

offense within one year of the conviction for a prior offense shall be punishable by a fine of not less than $500.00 nor more than $1,000.00 per violation.

(D) Each day's violation or failure to comply with the provisions of this Local Law shall be considered a new and separate offense, and subject to the penalties set forth therein.

(E) OCRRA shall be authorized and shall undertake enforcement of this Local Law by all appropriate and necessary means. Nothing herein shall preclude OCRRA from enforcing this Local Law in any Court of competent jurisdiction and to pursue any and all available remedies in law and equity, including but not limited to instituting and maintaining an action or proceeding in a court of competent jurisdiction to compel compliance with or to restrain by temporary restraining order, preliminary and/or permanent injunction any violation of this Local Law.

Section 11. Effective Date.

This Local Law shall become effective upon filing with the State and also upon receipt by the Clerk of the Legislature of Onondaga County of a resolution of the OCRRA Board of Trustees approving this Local Law and accepting enforcement responsibility.

Section 12. Amendment.

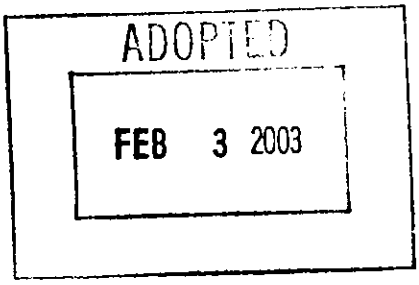
Any prior Onondaga County local laws or resolutions relating to collection and disposal of solid waste are hereby amended to the extent necessary to comply with the provisions of this local law.

Section 13. Severability.

If any part of this Local Law is found to be illegal by a court of competent jurisdiction, the remaining Sections shall remain in full force and effect.

Section 14. Limitation of Obligation.

Nothing contained herein shall be construed to obligate the County of Onondaga to pay, pledge, support or assume in any manner existing or future debts of OCRRA. Nothing contained herein shall be construed to impair the delivery agreements assigned to OCRRA by the County or other contracts between OCRRA and third parties.



APPENDIX G – Intrastate Waste Site Designation Law

Attachment 1:

Form of Municipal Intrastate Waste Site Designation Law

Town of _____

Local Law No. _____ of the year _____.

A Local Law regulating collection, removal and disposal of Solid Waste in the Town of _____.

Be it enacted by the Town Board of the Town of _____
as follows:

Section 1. Findings and Purpose

The reduction of the amount of Solid Waste and conservation of recyclable materials is an important public concern because of the increasing cost of Solid Waste collection and disposal and its impact on the environment. The separation and collection of recyclable materials serves the general public's interest in our Town by reducing the amount of Solid Waste and will otherwise comply with the Onondaga County Source Separation Law (Local Law No. 12 of 1989) and other applicable provisions of law. In 1988, in the interest of public health, safety and welfare and in order to conserve energy and natural resources, the State of New York enacted a New York State Solid Waste Management Act which established the following solid waste hierarchy: waste reduction, reuse, recycling and waste to energy (See New York Environmental Conservation Law Section 27-0106) with land burial as a last resort only when reuse, recycling or waste-to-energy were unavailable. Section B-35 of the State Solid Waste Management Plan - 1997-1998 Update recommended that Onondaga County take immediate steps to develop environmentally acceptable facilities to manage the Solid Waste generated in the County. In December 1991 Onondaga County adopted a comprehensive Solid Waste Management Plan that was subsequently approved by the State Department of Environmental Conservation. The County Plan, applicable to municipalities within the County, preferred waste-to-energy as a safe and sanitary alternative to the threat to the ground water supply and other liabilities posed by the burying of such waste. Those reasons are further delineated in Section 5 of the aforementioned County Plan. Public Authorities Law Section 2045-e(7) and (8) allows the Onondaga County Resource Recovery Agency to contract with municipalities for the delivery of such waste and, in furtherance thereof, to process such Solid Waste. In compliance with both the State and County Solid Waste Management Plans, the Town of _____ has determined that all Solid Waste, both residential and commercial, generated in our Town and destined for disposal in the State of New York, may not be disposed of at any place other than the Approved Disposal Site designated by the Town Board in Section 2 hereof. The basis of that determination is attached

hereto as Exhibit A and incorporated by reference. This chapter will also establish and refine regulations requiring the licensing of municipal haulers and governing hauler services for the collection and disposal of Solid Waste materials. This Local Law shall not regulate or otherwise restrict any disposal of solid waste generated within the Town that is to be disposed of out-of-state or any handling of recyclable materials separated from the rest of the solid waste in accordance with Onondaga County's Source Separation Law.

Section 2. Definitions.

"Agency" shall mean the Onondaga County Resource Recovery Agency.

"Agency Facility" shall mean any facility operated by or designated by the Agency. Agency Facilities include the Agency Transfer Stations at Ley Creek and Rock Cut Road, Rock Cut Road Waste-to-Energy Facility, Agency Landfill (when built), Agency Yard Waste Composting Facilities at Jamesville and Amboy, Construction and Demolition Processing Facility at Ley Creek and Agency designated Materials Recovery Facilities.

"Approved Disposal Site" shall mean the Onondaga County Waste-to-Energy Facility on Rock Cut Road in the Town of Onondaga.

"Construction and Demolition Debris" shall mean discarded building material, concrete, stones, earth from excavations or grading and all other refuse material resulting from the erection, repair or demolition of buildings, structures or other improvements of property.

"County" shall mean the County of Onondaga.

"County Designated Recyclable Materials" shall mean those Recyclables designated by the County of Onondaga and the Onondaga County Resource Recovery Agency pursuant to Local Law No. 12 of 1989, including the following:

> Corrugated paper: Cardboard containers, boxes and packaging, including pizza boxes, which are cleaned of contamination by food wastes or polystyrene commonly called styrofoam, and which have been flattened for transport.
>
> Glass: Empty, washed glass jars, bottles and containers of clear, green and amber (brown) that contained food and drink, caps removed. This term excludes ceramic, window glass, auto glass, mirror and kitchenware.
>
> Metal: All ferrous and non-ferrous metals, including: steel, aluminum and composite cans and containers (cleaned of food wastes) and empty aerosol cans that did not contain hazardous material. Scrap metal, wire, pipes, tubing, motors, sheet metal, etc. are recyclable but must be recycled through scrap dealers.

Newspapers, magazines and catalogues: Includes common machine finished paper made chiefly from wood pulp used for printing newspapers, as well as glossy inserts, magazines and catalogues. All must be free of contaminants.

Office paper: All bond paper and also computer printout, stationery, photocopy and ledger paper of any color from all waste generators. Paper should, if possible, be free of tape, adhesives, labels, rubber bands, paper clips, binders and other contaminants. This term excludes carbon paper, chemical transfer paper and tyvek or plastic coated envelopes.

Plastics: All HDPE and PET type plastic bottles (#1 & #2), including empty, washed food, beverage, detergent, bleach and hair care containers with lids removed. This term excludes all photographic film, vinyl, rigid and foam plastic materials, as well as plastics numbered 3 through 7 and HDPE oil bottles, as well as #1 and #2 containers that are not bottles or contained hazardous material.

Kraft paper: As found in brown paper bags and package wrapping.

Beverage cartons: Includes gabled topped paper cartons that contained milk and juice products.

Paperboard: Paper packaging as found in cereal, cracker and tissue boxes, etc. and toilet tissue and paper towel tubes.

Mixed paper: Includes discarded and bulk mail, computer paper, colored paper, greeting cards, wrapping paper and carbonless multi-part forms. Excludes any paper coated with foil or plastic.

"Curb" shall mean that street curb immediately in front of the property from which Solid Waste material and recyclables to be collected are generated or in the absence of an actual curb, that portion of the property which is immediately adjacent to the street.

"Curbside Collection" shall mean the use of collection receptacles for residential, commercial, and institutional Solid Waste generators and the regular periodic pick up and transfer of the contents of such receptacles by a Hauler at the location of a Waste Generator.

"Eligible Household" shall mean a household residing in a dwelling of four units or less and which is required to utilize Recycling Containers.

"Hauler" Any person, company or firm who engages in the collection, transportation, disposal or delivery of Solid Waste within our Town.

"Hazardous Waste" means:

(1) Any waste (excluding Household Hazardous Waste) which is defined or regulated as a Hazardous Waste, Toxic Substance, Hazardous Chemical Substance or mixture, or Asbestos (Regulated Waste) under federal, state or local law, or under rules, regulations, policies or guidelines issued in relation thereof, as they may be amended from time to time including, but not limited to:

(a) The Resource Conservation and Recovery Act of 1976 (42 U.S.C. Sections 6901 et seq., as amended by the Hazardous and Solid Waste Amendments of 1984) and the regulations contained in 40 CFR Parts 260-281;

(b) The Toxic Substances Control Act (15 U.S.C. Sections 2601 et seq.) and the regulations contained in 40 CFR Parts 761-766;

(c) The State Environmental Conservation Law (Title 9 of Article 27) and the regulations contained in 6 N.Y.C.R.R. Parts 370, 371, 372, 373 (Subpart 373-3);

(2) Radioactive materials which are source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954 (42 U.S.C. Sections 2011 et seq.) and the regulations contained in 10 CFR Part 40; or

(3) Any other material that by Federal, State or local law, or under rules, regulations, policies, guidelines or orders having the force of law in relation thereto are regulated as harmful, toxic or hazardous to health and ineligible for processing at the Agency Facility.

"Large Household Furnishings" shall mean all other large and/or bulky articles actually used in the home and which equip it for living such as chairs, sofas, tables, beds or carpets.

"Major Appliances" shall mean a large and/or bulky household mechanism such as a refrigerator, washer, dryer, stove, furnace or hot water tank.

"Materials Recovery Facility" or "MRF" shall mean a private or public facility for receiving and processing Recyclables into marketable commodities.

"Medical Waste" means any Solid Waste which is generated in the diagnosis, treatment or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals.

"Municipal Hauler License" shall mean the license issued by the Town to a hauler as a prerequisite to performing Solid Waste collection services within the Town's municipal limits.

"Person" shall mean a natural person, association, partnership, firm, corporation, limited liability company, trust, estate or governmental unit and any other entity whatsoever.

"Recyclables" shall mean those recyclable materials, including County Designated Recyclable Materials, which can be practically separated from non-recyclable waste for which reuse markets can be accessed for less than the cost of disposal.

"Recycling Container" shall mean the blue bin or other container supplied by the Agency, County, the Town or their designees for the use by Eligible Households within the Town. Such containers shall be used exclusively for the storage of County Designated Recyclable Materials. Such containers shall at all times remain the property of the Agency.

"Recycling Law" shall mean the Onondaga County Source Separation Law, Local Law No. 12, adopted March 6, 1989, as subsequently amended.

"Regulated Medical Waste" means those medical wastes that have been listed in 6 NYCRR 364.9 paragraph (c)(1) and that must be managed in accordance with the requirements of that part.

"Solid Waste" all materials or substances discarded or rejected as being spent, useless, worthless or in excess to the owners at the time of such discard or rejection, including, but not limited to, garbage, refuse, residential, governmental, commercial and/or light industrial refuse but shall not include Recyclables, Yard and Garden Waste, human wastes, rendering wastes, demolition wastes, residue from incinerators or other destructive systems for processing waste (other than now existing individual building incinerators, the residue from which is presently collected as part of normal refuse collection practices), junked automobiles, pathological, medical, toxic, explosive, radioactive material or other waste material which, under existing or future federal, State or local laws, require special handling in its collection or disposal.

"System" shall mean Onondaga County's Solid Waste Management System as operated by the Onondaga County Resource Recovery Agency and every aspect thereof, including, but not limited to, the Rock Cut Road Waste-to-Energy Facility, Agency Landfill (when built), Yard Waste Composting Facilities at Jamesville and Amboy, Construction and Demolition processing facility at Ley Creek and the Rock Cut Road and Ley Creek transfer stations.

"Town" shall mean the Town of _____.

"Town Board" shall mean the Board of Trustees of the Town of _____.

"Town Clerk" shall mean the Clerk of the Town of _____.

"Waste Generator" shall mean any Person which produces Solid Waste requiring off-site disposal.

"Yard and Garden Waste" shall mean garden waste, leaves, grass clippings, weeds and brush.

Section 3. Requirement of Haulers to Obtain Municipal Hauler License

It shall be a precondition of doing business as a Hauler in the Town that the person/firm intending to conduct such business obtain a Municipal Hauler License and a Town sticker. An application on a form approved and provided by the Town must be submitted to the Town Codes Enforcement Office in which the Hauler shall be bound by the following provisions:

A. The Hauler will deliver all of the non-recyclable Solid Waste (residential and commercial) it collects within the Town and destined for disposal in the State of New York to the Approved Disposal Site specified in Section 2 above. It shall be unlawful to unload or deposit any Solid Waste hauled from any premises within the limits of the Town and destined for disposal in the State of New York at any place other than the Approved Disposal Site specified by the Town in Section 2 above. Any Hauler failing to dispose of said Solid Waste at the Approved Disposal Site so designated shall be subject to having its license revoked.

B. The Hauler will supply a plan of operation for collection and transportation and which provides for a Recycling Plan as required by Onondaga County Local Law No. 12 of 1989 as it applies to Haulers, which it shall adhere to and comply with. The Hauler shall agree to provide for the collection of County Designated Recyclables in every waste hauler disposal agreement, written or oral, as part of its standard service and to include the cost of such collection in its standard waste collection rates.

Section 4. Distinctive Municipal Sticker

A. The Hauler shall attach a Municipal Sticker which must be visibly and securely affixed to the driver's side vent window or upper part of the driver's side of the windshield of each of the Hauler vehicles in operation.

B. No Hauler shall (1) duplicate or imitate a Municipal Sticker or (2) sell or transfer in any manner a Municipal Sticker.

Section 5. Duration of Municipal Hauler License

Municipal Hauler Licenses issued pursuant to this Local Law shall be effective for an annual term from _____ through _____ (one calendar year).

Section 6. Revocation of Municipal Hauler License.

The Town shall have the right to cancel any existing Municipal Hauler License upon thirty (30) days written notice to the Hauler if the Town shall enact legislation establishing a new system for collection of Solid Waste in the Town that is inconsistent with the continuation of said license. The Town shall revoke a Municipal Hauler License upon the happening of any or a combination of the following:

Failure of the Hauler to comply with any provision of Section 3 or Section 4 of this Local Law. Prior to any such revocation, the Hauler shall be notified by the Town of an opportunity for a hearing in the matter, which hearing shall be held not less than five days after the Hauler is notified in writing by the Town of the pending license revocation and the charges against it. All hearings shall be on a date and time and at a place determined by the Town. The hearing shall be informal and held before the Town Supervisor or his/her designee. Compliance with technical rules of evidence shall not be required, and the decision of the Town Supervisor or his/her designee shall be final.

Section 7. Recycling Plan.

The Town hereby adopts as its Source Separation Legislation, required pursuant to the General Municipal Law, Section 120-aa, the Onondaga County Source Separation Law (i.e. Local Law No. 12 of 1989) as adopted by the Onondaga County Legislature and subsequently amended under its terms.

A. No Hauler shall dispose of County Designated Recyclable Materials picked up in our Town as Solid Waste nor shall any Hauler accept County Designated Recyclable Materials for disposal as Solid Waste.

B. Recycling Containers shall at all times remain the property of the Agency or Town, as the case may be, and are provided for the use and convenience of Eligible Households in complying with this Chapter. No Hauler shall:

(1) Remove a Recycling Container from the Town;

(2) Willfully destroy a Recycling Container;

(3) Dispose of a Recycling Container other than by returning such container to the Town at a designated location; or

(4) Use a Recycling Container for other than the temporary storage of County Designated Recyclable Materials.

Section 8. Imposition of Fees

The Town Board, may by resolution, designate and impose such other fees as it deems reasonable and appropriate in relation to the collection and disposal of any Solid Waste. After any such fees are imposed, the manner of implementation and collection shall be by regulation of the Town Board or its designee not inconsistent with the terms of the resolution imposing such fees. The Town Board by resolution also from time to time establish fees to defray expenses in connection with the fee for the Municipal Hauler License and administration of this Local Law. Fees shall be paid by the applicant at the time of application.

Section 9. No Sunday Collection.

Haulers shall not collect Solid Waste in the Town on Sundays, Thanksgiving or Christmas.

Section 10. Insurance - Indemnity/Hold Harmless.

A. In consideration of the Town issuing a Municipal Hauler License to an applicant, the applicant shall agree, upon the issuance of such License to the applicant, that the applicant shall indemnify, hold harmless and defend the Town and its officers and employees from and against any and all claims, demands, losses, damages, costs, payments, actions, recoveries, judgments and expenses of every kind, nature and description, including without limitation all engineers' and attorneys' fees, fines, penalties and clean-up costs resulting from any such claim, etc., arising out of or connected in any way with the applicant's acting as a Hauler or the applicant's involvement or participation in the collection, distribution or transportation of Solid Waste.

B. The Hauler, as a condition of obtaining a Municipal Hauler License, shall provide and maintain the following insurance coverages at limits to be set from time to time by resolution of the Town of _____ Town Board:

(1) Public liability (CGL) including contractual coverage;

(2) Automobile liability coverage for all owned, hired and non-owned vehicles; and

(3) Worker's Compensation coverage.

C. The public liability policy aforementioned shall name the Town of _____ as an additional insured.

D. Each policy of insurance shall be endorsed to contain the following language:

"The Town will be given 30 days prior written notification of any cancellation, non-renewal or modification of this policy which reduces coverage or limits at the following address: _____."

E. Prior to the issuance of any Municipal Hauler License, the Hauler must provide to the Town Codes Office proof of insurance coverage in a form to be determined from time to time by resolution of the Town Board.

Section 11. Hours of Operation.

Haulers shall not operate earlier than _____ a.m., nor later than _____ p.m.

Section 12. Removal of Uncollected Waste

Where certain Solid Waste, Recyclables and/or other Waste Materials were not collected because those materials were not placed or prepared by the Waste Generator in accordance with the provisions of this Chapter, the Person who placed such materials for collection and the owner of the property adjoining the curb where such Waste Materials were placed shall remove those wastes from the location as soon as possible after the Hauler has refused collection and, in any event, by 6:00 p.m. on the designated collection day.

Section 13. Restrictions on Use of Vehicles and Handling of Waste

The collection, removal, and carrying of Solid Waste, Recyclables and/or material, and the transportation of Solid Waste, paper, and Recyclables on any highway, street, alley, or lane of the Town must be done in covered vehicles. No Hauler shall throw or scatter or cause to be scattered or deposited or to escape from the vehicle any Solid Waste or Recyclables on the streets or public places.

Section 14. Yard and Garden Waste Prohibited

Yard and Garden Waste may not be accepted for disposal at any Agency Facility but may be accepted for recycling at a yard waste composting facility of the Hauler's choice within the County or taken elsewhere.

Section 15. Dumping/Draining Leachate Prohibited

Except as specifically permitted in this Chapter, no Hauler shall deposit or cause to be deposited or stored for more than one (1) day upon any property any Solid Waste and/or Recyclables, and dumping thereof is hereby prohibited. No leachate or other obnoxious or contaminating substance shall be allowed to drain from any Hauler vehicle on the public streets.

Section 16. Accumulation/Storage of Solid Waste on Private Property

No Hauler shall suffer or permit Solid Waste to accumulate or remain upon private premises including extended storage in Hauler vehicles owned or operated by that Hauler so that the same shall emit odors or become offensive or dangerous to the public health or to any person or property.

Section 17. Outdoor Burning

No Hauler shall bury or burn any Solid Waste and/or Recyclables or cause to be buried or burned any Solid Waste and/or Recyclables, papers, trash, Hazardous Waste and/or materials within the limits of the Town, unless authorized to do so in writing by the Town Board.

Section 18. Special Events

This Local Law shall also apply to all special events held in the Town. The sponsor of said events shall be responsible for sorting all Solid Waste materials into appropriate containers or bags and making all arrangements for pickup and disposal of all Solid Waste materials. The Hauler may charge a fee to be determined by the Town Board for such pickups and disposal.

Section 19. Penalties and Remedies for Violation.

A. In addition to any revocation of the Municipal Hauler's License pursuant to Section No. 3 of this Local Law, each day's violation or failure to comply with the provisions of this Local Law shall be considered a new and separate offense, and subject to the penalties set forth in Section 20.

B. In addition to the above-provided penalties and revocations, or in lieu thereof, the Town Board may also institute and maintain an action or proceeding in the name of the Town in a court of competent jurisdiction to compel compliance with or to restrain by temporary restraining order, preliminary and/or permanent injunction any violation of this Local Law.

C. This Local Law shall be enforced by the Town Code Enforcement Officer, Town Police Department, Town Building Inspector, Town Fire Inspector, Superintendent of Highways, Onondaga County Sheriff's Department, New York State Police, Department of Environmental Conservation Officers and all local law enforcement agencies.

Section 20. Penalties

The failure of a Hauler to comply with the provisions of this Local Law shall be considered a Violation subject to the following specified fines for each offense pursuant to Section 80.05 (4) of the Penal Law as well as for corporate officers, directors and officials except for corporations in their corporate capacity which shall be fined pursuant to Section 80.10 of the Penal Law. Each day's violation

shall be considered a new and separate offense subject to a separate penalty as fixed below. Any fines collected under this Local Law shall inure to the Town and shall be deposited in the Town General Fund to use as it deems appropriate.

Section	**Violation**	**Fine**
3	Failure to obtain a Municipal Hauler License.	$250.00
3	Failure to deliver all Solid Waste collected within the Town and destined for disposal within New York State to the Town Approved Disposal Site.	$250.00 plus revocation
4a	Failure to attach a Municipal Sticker to the Hauler vehicle.	$250.00
4b	Duplication or imitating the Municipal Sticker or engaging in the selling of the Municipal Sticker.	Revocation
7a	Accepting and/or Disposing of County Designated Recyclable Materials as Solid Waste.	$200.00
7b	Removing, destroying or disposing of a Recycling Container or using same for other than storage of a County Designated Recyclable.	$150.00
9	Engaging in the collection of Solid Waste and/or Recyclables on Sundays, Thanksgiving or Christmas.	$50.00
10d	Failure to notify the Town, 30 days prior written notice of any cancellation, non-renewal or modification of required insurance policy.	$50.00
11	Failure to comply with the designated hours of operation.	$200.00
12	Failure to remove uncollected Solid Waste improperly set out for disposal.	$100.00

Section	Violation	Fine
13	Throwing, scattering or allowing deposit of any Solid Waste and/or County Designated Recyclables or other waste upon the streets.	$100.00
14	Engaging in the collection of Solid Waste and/or County Designated Recyclables in a non-covered vehicle.	$100.00
15	Dumping or depositing any Solid Waste and/or Recyclables material upon any property. Draining Leachate from hauler vehicle.	$100.00

Section	Violation	Fine
16	Allowing Solid Waste or other waste material and Recyclables to accumulate upon any property so that it becomes obnoxious, unsightly or offensive.	$250.00
17	Any Hauler engaging in the burial or private burning of Solid Waste and/or Recyclables, papers, trash, Hazardous Waste and/or materials within the limits of the Town.	$250.00

Section 21. Severability.

If any paragraph, section, sentence or portion of a sentence of this Local Law shall be found and determined to be invalid, unlawful and/or unconstitutional, such determination shall not invalidate or void any other paragraph, section, sentence or portion thereof, and such other parts thereof shall remain in full force and effect unless and until legally revoked, modified and/or amended.

Section 22. Revocation of Prior Local Law Regulating Collection, Removal and Disposal of Solid Waste in the Town of _____.

In 1992, the Town of _____ enacted Local Law No. ____ regulating collection, removal and disposal of Solid Waste in the Town of _____.

That Local Law is repealed in its entirety and replaced and superceded by this Local Law, effective upon the effective date of this enactment.

Section 23. <u>Effective Date.</u>

This Local Law shall take effect immediately upon its filing with the New York Secretary of State.

APPLICANT BUSINESS INFORMATION

NOTE: THIS APPLICATION MUST BE COMPLETED AND APPROVED BY THE TOWN LICENSING AGENCY. YOU MUST HAVE A VALID TOWN LICENSE TO PERFORM WASTE HAULING SERVICES IN THE TOWN OF _____ PURSUANT TO TOWN OF _____ LAW NUMBER _____. NO PERMITS WILL BE ISSUED UNTIL ALL QUESTIONS HAVE BEEN ANSWERED TO THE SATISFACTION OF THE TOWN.

1. TOWN OF_____

2. Name of Company _____

3. Contact person regarding this application:
   _____
   Phone No.: _____

4. Company Address: _____
   _____

5. Describe what type(s) of waste(s) your company will be hauling:
   _____
   _____
   _____

6. What part of the Town will you be operating out of?
   _____
   _____

7. Does the Applicant Agree that it will deliver all of the Solid Waste collected within the Town and destined for disposal within the State of New York to the Onondaga County Waste-to-Energy Facility on Rock Cut Road in the Town of Onondaga? _____. (Yes or No)

Dated:_____ _____
Applicant

Fill out the following Attachments A, B and C.

ATTACHMENT "A"

NAME OF COMPANY _____

BRIEFLY DESCRIBE YOUR PLAN OF OPERATION FOR COLLECTION AND TRANSPORTATION OF SOLID WASTE, AND ALSO INCLUDE PROVISIONS OF YOUR RECYCLING PLAN.

ATTACHMENT "B"

SCHEDULE OF INSURANCE

NAME OF COMPANY _____

has the following policies of insurance in full force and effect: (attach copies of policies showing endorsements and dates of coverage).

VEHICLE

Name of Insured: _____
Insurance Company: _____
Policy Limits: _____
Period of Coverage: _____
Vehicles Covered: _____

VEHICLE

Name of Insured: _____
Insurance Company: _____
Policy Limits: _____
Period of Coverage: _____
Vehicles Covered: _____

GENERAL LIABILITY

Name of Insured: _____
Insurance Company: _____
Policy Type: _____
Policy Limits: _____
Period of Coverage: _____

GENERAL LIABILITY

Name of Insured: _____
Insurance Company: _____
Policy Type: _____
Policy Limits: _____
Period of Coverage: _____

ATTACHMENT "C"

LIST OF VEHICLES

NAME OF COMPANY _____

OPERATES THE FOLLOWING NUMBER OF VEHICLES IN ONONDAGA COUNTY:

License Plate No.	Year	Make	Type	Vehicle ID
1. _____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____
5. _____	_____	_____	_____	_____
6. _____	_____	_____	_____	_____
7. _____	_____	_____	_____	_____
8. _____	_____	_____	_____	_____
9. _____	_____	_____	_____	_____
10. _____	_____	_____	_____	_____
11. _____	_____	_____	_____	_____
12. _____	_____	_____	_____	_____
13. _____	_____	_____	_____	_____
14. _____	_____	_____	_____	_____
15. _____	_____	_____	_____	_____

EXHIBIT A TO LOCAL LAW NO. _____

PURPOSES OF LOCAL LAW NO. _____

1. **Introduction.**

Local Law No. _____ is being adopted in furtherance of reducing the amount of solid waste and conserving of recyclable materials through the use of waste-to-energy as the preferred waste disposal alternative for all solid waste generated within the Town which is to be disposed of within New York State. This Local Law No. ____ shall not regulate or otherwise restrict any disposal of solid waste generated within the Town that is to be disposed of, out-of-state or any handling of any recyclable materials separated from the rest of the solid waste in accordance with Onondaga County Source Separation Law. The goals of Local Law No. ____ and the alternatives to achieve the goals are set forth below. The impacts of Local Law No. ___ on interstate disposal of solid waste are addressed below and are hereby determined to be incidental and outweighed by the benefits to be achieved.

2. **Goals to be Achieved.**

The Town desires to realize the following benefits through designation of a waste to energy facility for all solid waste generated in the Town which is to be disposed of within New York State:

(a) Achieve reductions in waste volume;
(b) Lessen contamination risk associated with the disposal of waste in landfills and reduce the potential for future Town liabilities arising from the disposal of waste in landfills;
(c) Track destination of waste;
(d) Maximize recycling to supplement the existing source separation law and reduce amount of waste to be disposed;
(e) Remove hazardous and radioactive wastes from the waste stream;
(f) Use waste to generate electricity and thereby conserve natural resources (fossil fuels);
(g) Promote composting; and
(h) Foster compliance with New York State Solid Waste Management Act and the New York State and Onondaga County Solid Waste Management Plans.

3. **New York State and Onondaga County Priorities.**

- New York State Waste Priorities. In 1988 the State of New York enacted a New York State Solid Waste Management Act to ensure the proper management of solid waste. The Act established a statutory hierarchy of solid waste management priorities as follows:

-- first, to reduce the amount of solid waste generated;

-- second, to reuse material for the purpose for which it was originally intended or to recycle material that cannot be reused;
-- third, to recover, in an environmentally acceptable manner, energy from solid waste that can not be economically and technically reused or recycled; and
-- fourth, to dispose of solid waste that is not being reused, recycled or from which energy is not being recovered, by land burial or other methods approved by the New York State Department of Environmental Conservation.

These priorities are incorporated in New York Environmental Conservation Law Section 27-0106(1) (a-d).

- Onondaga County Source Separation Law. In 1989, the Onondaga County Legislature enacted Local Law No. 12 of 1989 known as the Onondaga County Source Separation Law. The local law mandated that all designated recyclable materials be separated from the rest of the solid waste and sent to a material recovery facility ("MRF") for recycling. In Onondaga County all homeowners and businesses must recycle. A hauler may take recyclable materials to a MRF of its choice, whether in-state or out-of-state, as long as the materials are ultimately recycled.

Onondaga County Waste Management Plan. The New York State Solid Waste Management Act authorized governmental planning units to adopt local solid waste management plans to achieve the goals of the Act (see Environmental Conservation Law § 27-0107). The 1988 New York State Solid Waste Management Plan in Section B-35 recommended that municipalities in New York State take immediate steps to develop environmentally acceptable facilities to manage the solid waste generated within their jurisdiction. In December 1991 Onondaga County adopted a Comprehensive Solid Waste Management Plan ("County Plan") that was subsequently approved by the New York State Department of Environmental Conservation on November 6, 1992 pursuant to Environmental Conservation Law Section 27-0107. The County Plan, which applies to municipalities within the County, such as ours, and which we hereby adopt and accept herein, chose waste-to-energy operated by the Onondaga County Resource Recovery Agency (“OCRRA”) as the preferred waste disposal alternative (Cf. Environmental Conservation Law Section 27-0106).

4. **Benefits of County Plan and Waste to Energy Alternative.**

- Lessen Contamination and Future Liability. Waste-to-energy facilities are a safe and sanitary alternative to landfilling. Landfills retain a future threat of contamination as well as potential future legal liabilities arising from the burial of solid waste.

- Tracking of Waste. The County Plan also provides a benefit in allowing the County to track the destination of waste and promoting County-wide coordination of waste management.

- Reduction in Waste Volume. Reduction in waste volume is another environmental benefit of the waste-to-energy disposal process. The waste-to-energy process leaves a residue for burial that has been reduced by 90% in volume and 75% in weight in comparison to the

original waste. As a result, the ash byproduct of the waste-to-energy process consumes less landfill space than conventional solid waste disposal through dumping waste directly into landfill cells and covering the waste with soil cover. It is estimated that the County's waste-to-energy process saves approximately 600,000 cubic yards of landfill space annually in a state where over 4 million tons of solid waste have to be exported annually out of state. The ash residue generated by OCRRA's facility has been tested annually by an EPA process and shown to be non-toxic.

- Electricity Generation. Energy generation from burning solid waste provides revenue and conserves natural resources by reducing the need to burn fossil fuels to generate electricity.

- Compliance with New York State Solid Waste Management Act and County Plan. The use of the waste-to-energy process is in compliance with the State's solid waste hierarchy and the County Plan.

5. **Alternative Waste-to-Energy Facilities.**

- Alternatives. It is our finding that there are only two commercially available waste-to-energy disposal facilities proximate to our municipality and located within New York State. Both the American ReFuel facility near Niagara Falls, New York and the OCRRA facility ("Onondaga Facility") have records of being generally compliant with their State emissions permit requirements.

- OCRRA Benefits. The Onondaga Facility has environmentally beneficial programs uniquely associated with it that include the availability of a vigorous recycling program and other environmentally sound solid waste management practices:

  - Only the Onondaga Facility has a requirement in its operating permit that 40% or more of the waste that could be processed at the facility ("processables") must be recycled.

  - Only the Onondaga Facility dedicates a substantial portion of its tipping fee revenues to support community-based recycling programs. As a result, communities using the Onondaga Facility have achieved recycling rates of over 65% of the solid waste stream among its municipal users. Since the Onondaga Facility opened in 1994, OCRRA, which markets the facility's capacity, has utilized over $4 Million of its tipping fee revenues to support recycling in its users communities. The Onondaga Facility has received both state and national awards including:

    - EPA Environmental Excellence Award 1995
    - NYS Governor's Award for Waste Reduction and Recycling 1997
    - National Recycling Coalition "Best Urban Community Award" 1998
    - Solid Waste Association of North America Integrated Solid Waste
    - Management Excellence Silver Award 1999

- U.S. Conference of Mayors Outstanding Commercial Recycling Program 2000

•• This commitment to recycling of a significant portion of tip fee revenues from the Onondaga Facility has resulted in user communities achieving a recycling participation rate of 98% among households within those municipalities and more than 90% among businesses.

•• Tip fee revenues from the Onondaga Facility have been used to remove and properly dispose of over 5,000 55-gallon drums and cubic yard boxes of household hazardous waste.

•• Tip fee revenues from the Onondaga Facility have been used to fund a paint recycling program in Onondaga County with almost 4,000 gallons of paint recycled per year.

•• Tip fee revenues from the Onondaga Facility have been used to fund a battery collection/recycling program in Onondaga County that recycles and diverts over 56,000 pounds of batteries annually.

•• In addition to separating out and properly disposing of household hazardous waste, paint and batteries, the Onondaga Facility has radiation detection monitors that screen out radioactive waste from the solid waste stream, again, for proper separate disposal at a designated secure facility. In the first five years of the Onondaga facility's operation, 96 radioactive detections in the solid waste stream were addressed. These radioactive items are removed from the general waste stream and then disposed or otherwise handled in accordance with federal and state law.

•• The Onondaga Facility also supports a solid waste hotline that advises homeowners and businesses about proper waste recycling and disposal in Onondaga County. In 1999 alone this hotline fielded over 48,600 calls from County residents.

•• Tip fee revenues from the Onondaga Facility have supported two yard waste composting sites which have contributed to the recycling of yard waste into over 3,000 tons of mulch and compost which is then given away free to the public to promote environmentally friendly fertilizer. These materials are not sent to the Onondaga Facility thereby dramatically reducing nitrous oxide emissions to New York's environment. Prior to being given away, the compost is tested to ensure that contaminants are not present. This composting program diverts these materials from simply being disposed in a landfill and unnecessarily using available landfill space and furthers the state's environmental policies by a reuse and recycling of materials that would otherwise be landfilled.

•• The Onondaga Facility has provided free disposal for trash and garbage picked up along public roads, parks, etc. during Earth Day cleanup of municipalities in

Onondaga County. In 1999 some 136,000 pounds of such litter was accepted for disposal thereby helping the cleanup of public areas in the County.

•• The Onondaga Facility has safely processed over 1.5 million tons of solid waste since 1995. In Section S-7 of the 1988 NYS DEC Solid Waste Management Plan it was stated that "DEC has concluded that emissions from a properly designed and operated waste-to-energy facility, using state-of-the-art pollution controls, should not significantly or unacceptably increase risks to human health and the environment". The Onondaga Facility has installed over $15 Million in environmental controls and emissions scrubbers and annual emission tests are reported to the community on a publicly accessible internet website. On March 14, 2000 County Health Commissioner, Dr. Lloyd F. Novick, M.D., MPH, announced the results of a comprehensive, detailed five-year study (1994-1999) by the Health Department which confirmed the DEC's 1988 conclusion and which showed no evidence that the Onondaga Facility had any impact on the environment or was the source of any contaminants of any health significance.

•• The Onondaga facility uses solid waste as a fuel, thereby generating electricity for the local power grid. This conversion of solid waste for use as an energy fuel results in a very significant utilization of resources of materials that would otherwise be landfilled. In 1999, alone, the Onondaga Facility generated over 210,000 megawatts of electricity which, if generated by an oil fired plant, would be equivalent to burning some 330,000 gallons of oil, a resource whose shortages resulted in skyrocketing gasoline prices in 2000.

6. **Other Alternatives.**

- Neither the American ReFuel waste-to-energy facility near Niagara Falls nor any commercial landfill in New York provides the substantial environmental benefits summarized above. It is these environmental benefits that encouraged our municipality to become a member of the Onondaga County Solid Waste Management System and that forms the basis for designating the Onondaga Facility as the Approved Disposal Site in New York State. This finding is not meant to restrict haulers in any way from utilizing any out-of-state disposal facility for solid waste disposal or from using any facility, whether in-state or out-of-state, for the processing of recyclables collected from households, businesses or industries in our community.

7. **Independent Analysis.**

[Describe fact finding process and evaluation of goals, alternatives and impacts as they relate to the specific Town.]

8. **Impact on Interstate Commerce.**

The designation of the Onondaga Facility as the approved disposal site in New York State does not create any differential treatment of in-state and out-of-state economic

interests that benefits in-state and burdens out-of-state interests. The Local Law does not regulate or otherwise restrict any disposal of solid waste generated within the Town that is to be disposed out-of-state.

The Local Law also does not regulate or otherwise restrict the handling of any recyclables generated within the Town. A hauler may take recyclable materials to a MRF of its choice, whether that MRF is located in New York State or out-of-state, as long as the materials are ultimately recycled.

The impact, if any, on other solid waste facilities by the provisions of this Local Law is limited to facilities in New York State. Whatever may be such incidental in-State impacts are far outweighed by the benefits of the integrated waste system established by Onondaga County pursuant to the requirements and goals of the State and County Solid Waste Management Plans and the New York State Solid Waste Management Act that ensures disposal in accordance with strict environmental standards and compliance with the State waste hierarchy and fosters increased recycling and reuse of waste materials.

APPENDIX H – OCRRA's Resolutions on Extended Producer Responsibility

Resolution No. 1662, 2009

RESOLUTION SUPPORTING EXTENDED PRODUCER RESPONSIBILITY

WHEREAS, manufactured goods and packaging constitute approximately 75% of the materials managed by solid waste authorities in the United States, based on figures reported by the U.S. Environmental Protection Agency; and

WHEREAS, residents and businesses in Onondaga County are required to spend large sums of money to manage discarded manufactured goods and packaging; and

WHEREAS, hazardous and hard-to-recycle product management costs are expected to increase substantially in the short term unless policy changes are made; and

WHEREAS, there are significant environmental and human health impacts associated with improper management of hazardous products; and

WHEREAS, New York State policy currently makes local governments responsible for achieving waste diversion goals, which is an unfunded mandate; and

WHEREAS, the municipal waste management system in the United States was established a century ago to manage far simpler and more homogeneous wastes like ashes, food scraps and horse manure, rather than the manufactured goods and packaging which dominate today's municipal waste; and

WHEREAS, local solid waste authorities such as OCRRA have no input into the design or marketing of products, make no profit from the products, and do not have the resources to adequately address the rising volume of discarded products; and

WHEREAS, costs paid by citizens and local governments to manage products are, in effect, subsidies to producers that enable and encourage producers to design products for disposal and without regard to end of life management; and

WHEREAS, some corporate producers have implemented take-back efforts which have been helpful but there is a need for consistent industry-wide practices and this can only be accomplished by EPR legislation on a State or Federal level, and

WHEREAS, Extended Producer Responsibility (EPR) is an environmental policy approach in which producers (brand owners and importers) accept responsibility for the management of post-consumer products, so those who produce products bear the costs of recycling and responsible disposal; and

WHEREAS, when producers are responsible for ensuring their products are reused or recycled responsibly, and when health and environmental costs are included in the product price, there is an incentive to design products that are more durable, easier to repair and recycle, and less toxic; and

WHEREAS, the Onondaga County Resource Recovery Agency has enacted a greenhouse gas reduction goal and recycling and waste reduction are important strategies for achieving the goal; and

WHEREAS, the State of New York can advance EPR through a variety of mechanisms including requiring the manufacturers of many products sold to New York State departments to take financial responsibility for collecting and recycling those products at the end of their useful life; by incorporating EPR policies into New York State's product procurement practices; by favoring vendors and manufacturers that take back their product and associated packaging at end of life

WHEREAS, the Board of Directors of the Onondaga County Resource Recovery Agency supports statewide efforts to hold producers responsible for hazardous product discard management and other product waste management costs; now, therefore be it

RESOLVED by the Board of Directors of the Onondaga County Resource Recovery Agency that the Agency intends to focus community resources on the recovery and beneficial use of organic materials (food scraps, yard trimmings, etc.) and to encourage the State of New York to transfer responsibility for the costs of managing certain products at end-of-life to producers (brand owners and first importers); and be it

FURTHER RESOLVED, that the Board of Directors of the Onondaga County Resource Recovery Agency urges the New York State Legislature to enact framework EPR legislation which will give producers the incentive to design products to make them less toxic and easier to reuse and recycle; and be it

FURTHER RESOLVED, that the Executive Director of the Onondaga County Resource Recovery Agency is directed to send letters to the State legislature and State associations and to use other advocacy methods to urge support for EPR legislation; and be it

FURTHER RESOLVED, that State of New York and its member agencies are urged to include EPR language, such as specifying product and packaging collection and recycling requirements, in contracts for commodities. This Resolution shall take effect immediately.

Resolution Adopted Date: **June 10, 2009**

Vote: **Ayes** **12** **Nays** **0** **Abstentions** **0**

Signed: Catherine M. Strong

WJB/pe

Resolution No. 1693, 2010

RESOLUTION URGING ONONDAGA COUNTY AND LOCAL GOVERNMENTS IN ONONDAGA COUNTY TO SUPPORT ELECTRONICS RECYCLING AND EXTENDED PRODUCER RESPONSIBILITY FOR ELECTRONIC WASTES

WHEREAS, historically the responsibility and financial burden for managing consumer electronic wastes has fallen to local solid waste management authorities that have little ability to effect changes in the manufacturer's selection of product design, materials and packaging, and

WHEREAS, the Onondaga County Resource Recovery Agency wishes to express its support for New York State's enactment of a user friendly and convenient Extended Producer Responsibility ("EPR") based consumer electronic waste collection program through State legislation, and

WHEREAS, New York State Assembly Bill 7571 and New York State Senate Bill 5401 and Governor's Program #44 present such an approach to managing our consumer electronic waste, as recommended by the New York Product Stewardship Council, and

WHEREAS, the Onondaga County Resource Recovery Agency also strongly supports E-waste legislation, that would require manufacturers to provide premium waste collection services on a State wide basis at a reasonable fee and thereby provide residents with an alternative option to transporting their E-waste to a manufacturer's provided free collection site, now, therefore be it

RESOLVED, that the Onondaga County Resource Recovery Agency urges the New York State Legislature to adopt Extended Producer Responsibility legislation for consumer electronics waste recycling and disposal, such as Assembly Bill 7571 and Senate Bill 5401, and does further urge our County Legislators, Syracuse City Common Councilors, Town and Village officials as well as the public to support the enactment of State wide legislation requiring Extended Producer Responsibility for consumer electronics waste. The Agency's Board Secretary is directed to forward a copy of this Resolution to all Towns and Villages in the County of Onondaga, to the Syracuse Common Council, the Chair of the Onondaga County Legislature and to all local State legislative representatives as well as the Governor of New York State. This Resolution shall take effect immediately.

Resolution Adopted Date: February 10, 2010

Vote: **Ayes** 11 **Nays** 0 **Abstentions** 0

Signed: Catherine M. Strong

WJB/pe

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Resolution No. 1782, 2012

RESOLUTION URGING STATE REPRESENTATIVES TO ENACT PRODUCER RESPONSIBILITY LEGISLATION FOR MERCURY THERMOSTATS SOLD IN NEW YORK STATE

WHEREAS, nationally, as well as in Onondaga County, generators are seeking means of disposing of outdated mercury thermostats and the costs of reusing, recycling and/or disposing of such mercury thermostats can be substantial, and

WHEREAS, such mercury thermostat waste products contain potentially toxic mercury, and

WHEREAS, several states have enacted legislation to establish programs whereby manufacturers of such mercury thermostat devices would be responsible for the collection, recycling/reuse, or proper disposal of such mercury thermostat devices, which may include using existing collecting and consolidation infrastructure or creating a new jointly managed system with processors, reuse organizations, waste disposal public entities, retailers, and others, and

WHEREAS, the Onondaga County Resource Recovery Agency, through this Resolution, hereby wishes to express its strong support to its State legislators for New York State Senate Bill 5434 and New York State Assembly Bill A3485 that mandate producer responsibility for mercury thermostat devices. Such devices are creating a major problem for waste systems and serious problems for the environment. The Onondaga County Resource Recovery Agency urges the New York State Legislature to pass the above referenced legislation requiring producers of such mercury thermostat devices to set up and fund programs to deal with their collection and proper disposition, and

WHEREAS, OCRRA believes the proposed legislation could be enhanced, and the collection rate for mercury containing thermostats could be improved, by requiring the following:

- Manufacturer-funded incentive of $5 to $10 for each mercury-containing thermostat returned, if the DEC determines that minimum performance standards set forth in the legislation are not achieved;
- Any retailers selling thermostats must also participate in any collection program developed by the product manufacturers; and
- Ensure no-cost to wholesalers and retailers for collection containers.

Now, therefore be it

RESOLVED, that the Onondaga County Resource Recovery Agency does hereby urge its New York State legislative representatives to promptly enact the above-referenced producer responsibility legislation for the proper and safe collection and disposition of mercury thermostat devices. A copy of this Resolution shall be sent by the Agency Board Secretary to each of our New York State representatives. This Resolution shall take effect immediately.

Resolution Adopted Date: March 14, 2012

Vote: Ayes: 12 **Nays:** 0 **Abstentions:** 0

Signed: Catherine M. Strong

WJB/pe

RESOLUTION SUPPORTING EXTENDED PRODUCER RESPONSIBILITY

WHEREAS, manufactured goods and packaging constitute approximately 75% of the materials managed by solid waste authorities in the United States, based on figures reported by the U.S. Environmental Protection Agency, and

WHEREAS, residents, businesses, and local municipal governments in Onondaga County are required to spend large sums of money to manage discarded manufactured goods and packaging, and

WHEREAS, hazardous and hard-to-recycle product management costs are expected to increase substantially in the short term unless policy changes are made, and

WHEREAS, there are significant environmental and human health impacts associated with improper management of hazardous products, and

WHEREAS, New York State policy currently makes local governments responsible for achieving waste diversion goals, which is an unfunded mandate, and

WHEREAS, the municipal waste management system in the United States was established a century ago to manage far simpler and more homogeneous wastes like ashes, food scraps and horse manure, rather than the manufactured goods and packaging which dominate today's municipal waste, and

WHEREAS, local solid waste authorities such as OCRRA have no input into the design or marketing of products, make no profit from the products, and do not have the resources to adequately address the rising volume of discarded products and packaging, and

WHEREAS, costs paid by citizens, businesses, and local governments to manage products and packaging are, in effect, subsidies to producers that enable and encourage producers to design products and packaging for disposal and without regard to end of life management, and

WHEREAS, Extended Producer Responsibility (EPR) is an environmental policy approach in which producers (brand owners and importers) accept responsibility for the management of post-consumer products and packaging, so those who produce products help bear the costs of recycling and responsible disposal, and

WHEREAS, some corporate producers have implemented take-back efforts which have been helpful but there is a need for consistent industry-wide practices and this can only be accomplished by EPR legislation on a State or Federal level, and

WHEREAS, when producers are responsible for ensuring their products and packaging are reused or recycled responsibly, and when health and environmental costs are included in the product price, there is an incentive to design products that are more durable, easier to repair and recycle, and less toxic, and

WHEREAS, EPR is a form of industry-led recycling that creates jobs and economic development in direct proportion to the amount of material recycled while businesses that provide take-back opportunities for their customers or participate in EPR programs can gain a distinct advantage in the marketplace, create customer loyalty, and enhance the image of their brand, and

WHEREAS, the Board of Directors of the Onondaga County Resource Recovery Agency supports statewide efforts to hold product producers responsible for hazardous product discard management and other product and packaging waste management costs, and

WHEREAS, the Board of Directors of the Onondaga County Resource Recovery Agency intends to focus resources on waste reduction, such as the recovery and beneficial use of organic materials (food scraps, yard trimmings, etc.) and to encourage the State of New York to transfer responsibility for the costs of managing certain products and packaging at end-of-life to producers (brand owners and first importers), now therefore be it

RESOLVED, that the Board of Directors of the Onondaga County Resource Recovery Agency urges the New York State Legislature to enact EPR legislation which will give producers the incentive to design products that are less toxic and easier to reuse and recycle by requiring such producers to help bear the costs for the proper recycling and responsible disposal for their hazardous and hard to recycle products and packaging, and be it

FURTHER RESOLVED, that the Onondaga County Resource Recovery Agency invites and encourages the Onondaga County Legislature and the City of Syracuse Common Council to pass resolutions to urge the State Legislature and Governor to support such EPR legislation. This Resolution shall take effect immediately.

Resolution Adopted Date: February 13, 2013

Vote: **Ayes** 11 **Nays** 0 **Abstentions** 0

Signed: Catherine M. Strong

WJB/pe

Resolution No. 1838, 2012

RESOLUTION SUPPORTING PRODUCT STEWARDSHIP PROGRAM FOR PAINT

WHEREAS, it is estimated that roughly 3.1 million gallons of leftover paint are generated in New York each year, and

WHEREAS, management of leftover paint in New York results in a cost that typically represents 50% of municipal household hazardous waste budgets, and

WHEREAS, a statewide paint stewardship program would mean that the paint industry would be responsible for collecting and managing leftover paint in New York, and

WHEREAS, the American Coatings Association, a trade association representing paint manufacturers from across the United States has created PaintCare, a non-profit program to manage the reuse, recycling and disposal of leftover paint, and

WHEREAS, other states, including Rhode Island, Connecticut and Oregon have passed legislation implementing paint recovery programs managed by PaintCare, saving local municipalities tens of thousands of dollars to manage the paint as part of household hazardous waste collection programs, and

WHEREAS, in addition to reducing government costs, a paint stewardship program would create green sector jobs, reduce waste and encourage the public to purchase the right amount of paint for a job, and

WHEREAS, the Onondaga County Resource Recovery Agency therefore wishes to express its support for an industry-sponsored statewide paint collection system, now, therefore be it

RESOLVED, that the Board of Directors of the Onondaga County Resource Recovery Agency hereby urges the New York State Legislature to enact paint recycling legislation which would require the paint industry to be responsible for collecting and managing leftover paint in New York. This Resolution shall take effect immediately.

Resolution Adopted Date: April 10, 2013

Vote: **Ayes** 9 **Nays** 0 **Abstentions** 0

Signed: Catherine M. Strong

WJB/pe

APPENDIX I – Waste Quantification and Characterization Study Results Summary

Exhibit 3-4

COMPARISON OF ONONDAGA COUNTY WASTE COMPOSITION
1987 – 2005

	1987 Mean	1993 Mean		1998 Mean		2005 Mean	
Waste Component	**Compactor Truck Fraction**	**Resid.**	**Comm.**	**Resid.**	**Comm.**	**Resid.**	**Comm.**
Paper							
Newspaper	12.3%	3.6%	3.6%	4.2%	3.0%	4.1%	3.0%
Magazines	5.5%	2.2%	1.8%	2.0%	1.1%	1.9%	1.5%
Corrugated Cardboard	6.6%	4.7%	8.2%	3.3%	5.8%	2.4%	6.0%
Corrugated Waxed	-	-	-	0.3%	0.9%	0.7%	0.9%
Kraft Paper/Brown Paper	-	1.6%	1.4%	1.3%	2.7%	-	-
Coated Containers	-	1.3%	1.4%	1.3%	1.4%	-	-
Gable Top	-	-	-	-	-	0.1%	0.2%
Aseptic Containers	-	-	-	-	-	0%	0%
Paperboard	5.4%	5.1%	3.4%	3.2%	2.6%	1.8%	1.6%
Books	0.6%	0.7%	0.9%	1.1%	0.4%	0.5%	0.7%
Office Paper	4.2%	1.9%	4.2%	3.2%	7.2%	2.2%	4.7%
Other Paper	3.0%	18.4%	16.7%	9.8%	11.3%	13.5%	11.7%
Total Paper	**37.6%**	**39.4%**	**41.6%**	**29.6%**	**36.3%**	**27.2%**	**30.2%**
Plastics							
PET (#1) – Non-Bottle Bill	1.1%	0.2%	0.2%	0.4%	0.3%	0.8%	1.3%
BB PET	-	-	-	0.3%	<0.1%	0.3%	0.3%
PET Containers	-	-	-	0.1%	<0.1%	0.2%	0.1%
HDPE (#2) Combined	1.2%	1.0%	1.1%	-	-	-	-
HDPE – Natural	-	-	-	0.3%	0.1%	0.4%	0.4%
HDPE – Colored	-	-	-	0.3%	0.4%	0.5%	0.4%
HDPE – Containers	-	-	-	0.4%	0.4%	0.1%	0.3%
LHDPE (#2)	-	2.4%	2.8%	2.1%	1.6%	1.3%	0.7%
PVC #3, Poly. #5, #6, #7 (Combined)	-	-	-	-	-	2.5%	2.1%
PVC (#3)	-	0.1%	0.1%	<0.1%	0.1%	0.3%	<0.1%
LDPE/LLDPE	-	-	-	-	-	7.1%	10.0%
LDPE (#4)	-	0.1%	0.1%	<0.1%	<0.1%	-	-
LLDPE (#4)	-	2.2%	2.5%	2.5%	2.5%	-	-
Polypropylene (#5)	-	0.2%	0.5%	0.3%	0.2%	0.3%	0.1%
Polystyrene (#6)	-	1.2%	1.7%	1.5%	2.1%	2.2%	1.5%
Plastics/Other Composites (#7)	-	0.1%	0.1%	0.5%	<0.1%	0.4%	0.2%
Other Rigid	2.4%	-	-	-	-	-	-
Other Flexible	5.1%	-	-	-	-	-	-
Other/Miscellaneous Plastics	-	2.1%	2.8%	2.7%	3.1%	3.0%	6.1%
Total Plastic	**9.8%**	**9.6%**	**11.9%**	**11.7%**	**10.9%**	**16.3%**	**21.8%**
Organics							
Food Waste	16.6%	17.1%	17.2%	18.5%	20.7%	15.9%	13.6%
Textiles/Leather	4.1%	5.4%	2.9%	10.2%	3.8%	7.4%	4.4%
Rubber	1.2%	0.4%	0.4%	0.4%	0.2%	1.2%	0.7%
Diapers	1.5%	4.2%	1.0%	2.5%	0.5%	3.4%	1.3%
Fines/Dirt	3.8%	2.7%	2.4%	3.8%	3.8%	4.7%	3.6%
Other Organic	-	5.3%	4.5%	-	-	-	-
Total Organics	**27.2%**	**35.0%**	**28.6%**	**35.4%**	**29.0%**	**32.6%**	**23.6%**
Ferrous Metal							
Food Containers/Bimetal/ Aerosol Cans	3.4%	0.9%	0.8%	1.2%	0.6%	1.1%	0.8%
Aerosol Cans	-	0.3%	0.1%	0.2%	0.3%	-	-
White/Enamelled	<0.01%	0.1%	0.1%	<0.1%	<0.1%	-	-

Exhibit 3-4

COMPARISON OF ONONDAGA COUNTY WASTE COMPOSITION
1987 – 2005

(Continued)

	1987 Mean	1993 Mean		1998 Mean		2005 Mean	
Waste Component	**Compactor Truck Fraction**	**Resid.**	**Comm.**	**Resid.**	**Comm.**	**Resid.**	**Comm.**
Ferrous Metal (cont'd.)							
Auto Parts	0.1%	0.3%	0.5%	1.8%	0.6%	0.3%	1.2%
Other Ferrous	0.5%	2.3%	3.3%	3.5%	4.3%	1.5%	0.7%
Total Ferrous Metal	**4.0%**	**4.0%**	**4.8%**	**6.7%**	**5.8%**	**2.8%**	**2.7%**
Non-Ferrous Metal							
Aluminum Cans	0.7	0.1%	0.2%	0.1%	0.3%	0.1%	0.1%
BB Aluminum Cans	-	-	-	0.2%	<0.1%	0.3%	0.1%
Aluminum Foil	0.6	0.3%	0.3%	0.3%	0.4%	0.3%	0.5%
Other Aluminum	<0.1	0.2%	0.1%	-	-	-	-
Other Non-Ferrous	0.2	0.2%	0.3%	0.4%	0.5%	0.3%	0.4%
Total Non-Ferrous Metal	**1.5%**	**0.8%**	**0.9%**	**1.0%**	**1.3%**	**1.1%**	**1.1%**
Electronics	**-**	**-**	**-**	**-**	**-**	**1.9%**	**0.7%**
Glass							
BB Glass	-	-	-	-	-	0.3%	0.2%
Clear Containers	6.7	1.5%	1.5%	1.6%	1.4%	0.9%	0.5%
BB Clear	-	-	-	<0.1%	<0.1%	-	-
Green Containers	3.1	0.1%	0.1%	0.2%	0.1%	0.3%	0.1%
BB Green	-	-	-	<0.1%	<0.1%	-	-
Brown Containers	1.4	0.2%	0.1%	<0.1%	<0.1%	0.1%	<0.1%
BB Brown	-	-	-	<0.1%	<0.1%	-	-
Plate Glass	0.1	0.1%	0.1%	<0.1%	1.4%	0.3%	0.2%
Other Glass	<0.1	0.4%	0.3%	0.5%	0.1%	0.4%	0.3%
Total Glass	**11.3%**	**2.3%**	**2.1%**	**2.5%**	**3.0%**	**2.3%**	**1.2%**
Wood							
Pallets	0.5	0.3%	1.3%	<0.1%	2.9%	-	-
Lumber	1.7	1.1%	2.2%	4.6%	2.9%	-	-
Stumps/Heavy Sections	<0.1	0.0%	0.0%	0.1%	<0.1%	-	-
Other Wood	0.1	1.1%	1.8%	-	-	-	-
Total Wood	**2.3%**	**2.5%**	**5.3%**	**4.7%**	**5.8%**	**3.1%**	**3.5%**
Inert							
Asphalt	0.1	0.2%	0.1%	-	-	-	-
Concrete/Brick/Rock/Rubble	0.1	0.5%	0.6%	0.6%	0.5%	0.5%	0.8%
Dirt	-	0.5%	0.3%	4.1%	1.7%	4.7%	3.6%
Other Inert	0.9	3.1%	2.5%	1.8%	2.7%	-	-
Total Inert	**1.1%**	**4.3%**	**3.5%**	**6.5%**	**4.9%**	**5.2%**	**4.4%**
Yard Waste							
Leaves	<0.1	0.5%	0.4%	0.7%	0.6%	-	-
Grass	4.1	0.6%	0.2%	0.4%	0.2%	-	-
Other Yard Waste	0.8	0.8%	0.4%	0.1%	0.7%	-	-
Total Yard Waste	**4.9**	**1.8%**	**1.0%**	**1.2%**	**1.5%**	**1.1%**	**1.2%**
Hazardous							
Lead/Acid Batteries	-	0.0%	0.0%	<0.1%	<0.1%	<0.1%	<0.1%
Dry Cell Batteries	-	0.1%	0.0%	<0.1%	<0.1%	<0.1%	<0.1%
Other Hazardous	-	0.2%	0.4%	0.7%	1.3%	0.6%	0.1%
Total Hazardous	**<0.1%**	**0.3%**	**0.5%**	**0.7%**	**1.3%**	**0.6%**	**0.2%**
Miscellaneous	**-**	**-**	**-**	**-**	**-**	**10.5%**	**13.1%**
TOTAL		**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Note: Subtotals may not equal 100.0% due to rounding.
A dash (-) indicates that the component was not included in the sampling of the total amount for that major component.

Exhibit 3-6

COMPARISON OF ONONDAGA COUNTY RECYCLABLES

Waste Component	1998	2005
Paper		
Newspaper	38.1%	41.9%
Magazines	4.9%	8.1%
Corrugated Cardboard	3.4%	11.1%
Corrugated Waxed	0.3%	0.4%
Kraft Paper/Brown Paper	1.2%	-
Coated Containers	1.5%	-
Gable Top	-	0.5%
Aseptic Containers	-	<0.1%
Paperboard	3.2%	5.6%
Books	0.5%	0.9%
Office Paper	4.3%	4.3%
Other Paper	0.8%	1.1%
Total Paper	**58.3%**	**73.8%**
Plastics		
PET (#1)	1.8%	3.1%
BB PET	0.2%	0.2%
PET Containers	0.1%	0.3%
HDPE (#2) Combined	-	-
HDPE – Natural	2.1%	2.1%
HDPE – Colored	2.7%	2.8%
HDPE – Containers	0.5%	0.2%
LHDPE (#2)	0.1%	0.1%
PVC #3, Poly. #5, #6, #7	-	N/A
PVC (#3)	0.2%	<0.1%
LDPE/LLDPE (#4)	-	0.1%
LDPE (#4)	0.1%	-
LLDPE (#4)	0.2%	-
Polypropylene (#5)	0.3%	0.3%
Polystyrene (#6)	0.2%	0.1%
Plastics/Other Containers (#7)	0.1%	0.1%
Other/Miscellaneous Plastics	0.4%	0.7%
Total Plastic	**9.1%**	**10.1%**
Organics		
Food Waste	0.4%	0.1%
Textiles/Leather	<0.1%	0.1%
Rubber	<0.1%	<0.1%
Diapers	<0.1%	<0.1%
Fines/Dirt	-	0.8%
Fines	1.9%	-
Other Organic	-	-
Total Organics	**2.3%**	**1.0%**
Ferrous Metal		
Food Containers/Bimetal/ Aerosol Cans	8.8%	4.5%
Aerosols	0.4%	-
White/Enamelled	<0.1%	-
Auto Parts	<0.1%	0.0%
Other Ferrous	0.2%	0.1%
Total Ferrous Metal	**9.4%**	**4.6%**

Exhibit 3-6

COMPARISON OF ONONDAGA COUNTY RECYCLABLES

(Continued)

Waste Component	1998	2005
Non-Ferrous Metal		
Aluminum Cans	0.6%	0.1%
BB Aluminum Cans	0.2%	0.1%
Aluminum Foil	0.2%	<0.1%
Other Aluminum	-	-
Other Non-Ferrous	0.3%	0.1%
Total Non-Ferrous Metal	**1.3%**	**0.4%**
Electronics	**-**	**<0.1%**
Glass		
BB Glass	-	0.7%
Clear Containers	13.6%	6.2%
BB Clear	0.2%	-
Green Containers	3.2%	1.2%
BB Green	0.1%	-
Brown Containers	1.5%	0.7%
BB Brown	0.4%	-
Plate Glass	0.1%	0.3%
Other Glass	0.2%	0.6%
Total Glass	**19.3%**	**9.7%**
Wood		
Pallets	<0.1%	-
Lumber	<0.1%	-
Stumps/Heavy Sections	<0.1%	-
Other Wood	-	-
Total Wood	**<0.1%**	**<0.1%**
Inert		
Asphalt	-	-
Concrete/Brick/Rock/Rubble	<0.1%	<0.1%
Dirt	0.1%	-
Other Inert	<0.1%	-
Total Inert	**0.1%**	**<0.1%**
Yard Waste		
Leaves	<0.1%	-
Grass	<0.1%	-
Brush/Branches	<0.1%	-
Total Yard Waste	**<0.1%**	**<0.1%**
Miscellaneous		**0.3%**
Hazardous		
Lead/Acid Batteries	<0.1%	<0.1%
Dry Cell Batteries	<0.1%	<0.1%
Other Hazardous	<0.1%	<0.1%
Total Hazardous	**<0.1%**	**<0.1%**
TOTAL	**100%**	**100%**

Note: Subtotals may not sum to 100.0% due to rounding and amounts less than (<) 0.1%.

A "-" indicates the subcomponent was not included in the sampling of the total amount of that major component.

APPENDIX J – DEC's Waste Composition and Recovery Projection Tool for MSW

Onondaga County (OCRRA)

Municipal Solid Waste (MSW) Detailed Composition Analysis Year 2013

Material	MSW GENERATED									Planning Unit/ Municipality Percentages
	Rural			Suburban			Urban			
	10.80%			57.60%			31.60%			
	Residential	Comm/Inst.	Combined	Residential	Comm/Inst.	Combined	Residential	Comm/Inst.	Combined	
	58.00%	**42.00%**	**100.00%**	**55.00%**	**45.00%**	**100.00%**	**52.00%**	**48.00%**	**100.00%**	**100.00%**
Newspaper	**5.20%**	**1.90%**	**3.81%**	**5.00%**	**1.90%**	**3.61%**	**6.60%**	**2.00%**	**4.39%**	**3.88%**
Corrugated Cardboard	**6.60%**	**13.90%**	**9.67%**	**6.60%**	**13.90%**	**9.89%**	**6.90%**	**13.70%**	**10.16%**	**9.95%**
Other Recyclable Paper										
Paperboard	3.20%	1.10%	2.32%	3.30%	1.00%	2.27%	3.60%	0.90%	2.30%	2.28%
Office Paper	0.80%	3.80%	2.06%	0.90%	4.20%	2.39%	1.10%	5.80%	3.36%	2.66%
Junk Mail	3.00%	0.70%	2.03%	3.20%	0.70%	2.08%	3.50%	0.70%	2.16%	2.10%
Other Commercial Printing	1.70%	2.30%	1.95%	1.70%	2.40%	2.02%	2.30%	2.60%	2.44%	2.14%
Magazines	1.10%	0.90%	1.02%	1.00%	0.80%	0.91%	1.10%	1.00%	1.05%	0.97%
Books	0.50%	0.30%	0.42%	0.50%	0.30%	0.41%	0.60%	0.40%	0.50%	0.44%
Bags	0.50%	0.20%	0.37%	0.50%	0.20%	0.37%	0.60%	0.20%	0.41%	0.38%
Phone Books	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.20%	0.25%	0.28%
Poly-Coated	0.20%	0.30%	0.24%	0.20%	0.20%	0.20%	0.30%	0.20%	0.25%	0.22%
Other Recyclable Paper (Total)	**11.30%**	**9.90%**	**10.71%**	**11.60%**	**10.10%**	**10.93%**	**13.40%**	**12.00%**	**12.73%**	**11.47%**
Other Compostable Paper	**6.80%**	**6.80%**	**6.80%**	**6.40%**	**6.40%**	**6.40%**	**6.80%**	**6.80%**	**6.80%**	**6.57%**
Total Paper	***29.90%***	***32.50%***	***30.99%***	***29.60%***	***32.30%***	***30.82%***	***33.70%***	***34.50%***	***34.08%***	***31.87%***
Ferrous/Aluminum Containers										
Ferrous Containers	1.90%	1.00%	1.52%	1.20%	0.70%	0.98%	1.40%	0.70%	1.06%	1.06%
Aluminum Containers	0.70%	0.40%	0.57%	0.60%	0.30%	0.47%	0.50%	0.40%	0.45%	0.47%
Ferrous/Aluminum Containers (Total)	**2.60%**	**1.40%**	**2.10%**	**1.80%**	**1.00%**	**1.44%**	**1.90%**	**1.10%**	**1.52%**	**1.53%**
Other Ferrous Metals / Appliances	**5.20%**	**5.40%**	**5.28%**	**5.00%**	**5.80%**	**5.36%**	**3.30%**	**3.70%**	**3.49%**	**4.76%**
Other Non-Ferrous Metals										
Other aluminum	0.20%	0.30%	0.24%	0.20%	0.30%	0.25%	0.20%	0.30%	0.25%	0.25%
Automotive batteries	0.80%	0.50%	0.67%	0.70%	0.40%	0.57%	0.20%	0.20%	0.20%	0.46%
Other non-aluminum	0.50%	0.30%	0.42%	0.30%	0.40%	0.35%	0.40%	0.20%	0.30%	0.34%
Other Non-Ferrous Metals (Total)	**1.50%**	**1.10%**	**1.33%**	**1.20%**	**1.10%**	**1.16%**	**0.80%**	**0.70%**	**0.75%**	**1.05%**
Total Metals	***9.30%***	***7.90%***	***8.71%***	***8.00%***	***7.90%***	***7.96%***	***6.00%***	***5.50%***	***5.76%***	***7.34%***
PET Containers	**1.10%**	**0.80%**	**0.97%**	**0.90%**	**0.80%**	**0.86%**	**1.20%**	**1.00%**	**1.10%**	**0.95%**
HDPE Containers	**1.10%**	**0.60%**	**0.89%**	**0.90%**	**0.70%**	**0.81%**	**1.00%**	**0.70%**	**0.86%**	**0.83%**
Other Plastic (3-7) Containers	**0.20%**	**0.10%**	**0.16%**	**0.20%**	**0.20%**	**0.20%**	**0.20%**	**0.20%**	**0.20%**	**0.20%**
Film Plastic	**5.70%**	**5.90%**	**5.78%**	**5.50%**	**5.80%**	**5.64%**	**5.80%**	**5.80%**	**5.80%**	**5.70%**
Other Plastic										
Durables	3.10%	3.20%	3.14%	3.00%	3.20%	3.09%	3.20%	3.30%	3.25%	3.15%
Non-Durables	1.60%	1.80%	1.68%	1.60%	1.80%	1.69%	1.80%	1.90%	1.85%	1.74%
Packaging	1.40%	1.10%	1.27%	1.40%	1.10%	1.27%	1.50%	1.10%	1.31%	1.28%
Other Plastic (Total)	**6.10%**	**6.10%**	**6.10%**	**6.00%**	**6.10%**	**6.05%**	**6.50%**	**6.30%**	**6.40%**	**6.16%**
Total Plastics	***14.20%***	***13.50%***	***13.91%***	***13.50%***	***13.60%***	***13.55%***	***14.70%***	***14.00%***	***14.36%***	***13.84%***
Glass Containers	**4.10%**	**3.80%**	**3.97%**	**3.90%**	**3.80%**	**3.86%**	**4.30%**	**3.80%**	**4.06%**	**3.93%**
Other Glass	**0.50%**	**0.40%**	**0.46%**	**0.30%**	**0.40%**	**0.35%**	**0.40%**	**0.40%**	**0.40%**	**0.37%**
Total Glass	***4.60%***	***4.20%***	***4.43%***	***4.20%***	***4.20%***	***4.20%***	***4.70%***	***4.20%***	***4.46%***	***4.31%***
Food Scraps	**12.70%**	**13.30%**	**12.95%**	**12.90%**	**15.50%**	**14.07%**	**17.20%**	**25.20%**	**21.04%**	**16.15%**
Yard Trimmings	**3.10%**	**1.10%**	**2.26%**	**11.30%**	**9.10%**	**10.31%**	**4.20%**	**1.50%**	**2.90%**	**7.10%**
Total Organics	***15.80%***	***14.40%***	***15.21%***	***24.20%***	***24.60%***	***24.38%***	***21.40%***	***26.70%***	***23.94%***	***23.25%***
Clothing Footwear, Towels, Sheets	4.60%	3.00%	3.93%	4.40%	3.20%	3.86%	4.80%	2.50%	3.70%	3.82%
Carpet	1.40%	1.30%	1.36%	1.70%	1.40%	1.57%	1.70%	0.90%	1.32%	1.46%
Total Textiles	***6.00%***	***4.30%***	***5.29%***	***6.10%***	***4.60%***	***5.43%***	***6.50%***	***3.40%***	***5.01%***	***5.28%***
Total Wood	***4.10%***	***9.00%***	***6.16%***	***2.90%***	***4.10%***	***3.44%***	***2.00%***	***3.50%***	***2.72%***	***3.51%***
DIY Construction & Renovation Materials	8.00%	7.60%	7.83%	3.80%	2.70%	3.31%	4.40%	3.80%	4.11%	4.05%
Other Durables	1.90%	1.70%	1.82%	1.60%	1.50%	1.56%	1.90%	1.50%	1.71%	1.63%
Diapers	1.90%	1.10%	1.56%	2.10%	1.20%	1.70%	2.30%	1.10%	1.72%	1.69%
Electronics	1.30%	1.40%	1.34%	1.60%	1.70%	1.65%	1.30%	1.30%	1.30%	1.50%
Tires	1.80%	1.80%	1.80%	1.70%	1.40%	1.57%	0.50%	0.40%	0.45%	1.24%
HHW	0.60%	0.00%	0.35%	0.60%	0.00%	0.33%	0.50%	0.00%	0.26%	0.31%
Fines	0.60%	0.60%	0.60%	0.10%	0.20%	0.15%	0.10%	0.10%	0.10%	0.18%
Total Miscellaneous	***16.10%***	***14.20%***	***15.30%***	***11.50%***	***8.70%***	***10.24%***	***11.00%***	***8.20%***	***9.66%***	***10.60%***
Total	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**

Onondaga County (OCRRA)

Municipal Solid Waste (MSW) Combined Composition Analysis and Projections

Material	Tons Generated	% of Total	2013 (estimate)		2015		2016		2017		2018		2019		2020		2021		2022		2023		2024	
			Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted
Newspaper	21,436	3.88%	16,000	74.64%	16,077	75.00%	16,184	75.50%	16,291	76.00%	16,398	76.50%	16,506	77.00%	16,613	77.50%	16,720	78.00%	16,827	78.50%	16,934	79.00%	17,041	79.50%
Corrugated Cardboard	55,021	9.95%	48,000	87.24%	48,418	88.00%	48,418	88.00%	48,693	88.50%	48,693	88.50%	48,969	89.00%	48,969	89.00%	49,244	89.50%	49,244	89.50%	49,519	90.00%	49,519	90.00%
Other Recyclable Paper																								
Paperboard	12,625	2.28%	11,000	87.13%	11,047	87.50%	11,047	87.50%	11,110	88.00%	11,110	88.00%	11,173	88.50%	11,173	88.50%	11,236	89.00%	11,236	89.00%	11,300	89.50%	11,300	89.50%
Office Paper	14,692	2.66%	11,500	78.28%	11,533	78.50%	11,533	78.50%	11,606	79.00%	11,606	79.00%	11,680	79.50%	11,680	79.50%	11,753	80.00%	11,753	80.00%	11,827	80.50%	11,827	80.50%
Junk Mail	11,592	2.10%	7,000	60.39%	7,071	61.00%	7,187	62.00%	7,303	63.00%	7,419	64.00%	7,535	65.00%	7,651	66.00%	7,767	67.00%	7,882	68.00%	7,998	69.00%	8,114	70.00%
Other Commercial Printing	11,855	2.14%	7,000	59.05%	7,232	61.00%	7,350	62.00%	7,469	63.00%	7,587	64.00%	7,706	65.00%	7,824	66.00%	7,943	67.00%	8,061	68.00%	8,180	69.00%	8,298	70.00%
Magazines	5,344	0.97%	4,500	84.21%	4,542	85.00%	4,542	85.00%	4,596	86.00%	4,596	86.00%	4,649	87.00%	4,649	87.00%	4,702	88.00%	4,702	88.00%	4,756	89.00%	4,756	89.00%
Books	2,435	0.44%	500	20.53%	560	23.00%	633	26.00%	706	29.00%	779	32.00%	852	35.00%	925	38.00%	998	41.00%	1,071	44.00%	1,145	47.00%	1,218	50.00%
Bags	2,099	0.38%	1,000	47.64%	1,049	50.00%	1,091	52.00%	1,133	54.00%	1,175	56.00%	1,217	58.00%	1,259	60.00%	1,301	62.00%	1,343	64.00%	1,385	66.00%	1,427	68.00%
Phone Books	1,575	0.28%	1,000	63.49%	1,008	64.00%	1,024	65.00%	1,040	66.00%	1,055	67.00%	1,071	68.00%	1,087	69.00%	1,103	70.00%	1,118	71.00%	1,134	72.00%	1,150	73.00%
Poly-Coated	1,222	0.22%	200	16.37%	244	20.00%	269	22.00%	293	24.00%	318	26.00%	342	28.00%	367	30.00%	391	32.00%	415	34.00%	440	36.00%	464	38.00%
Other Recyclable Paper (Total)	63,439	11.47%	43,700	68.89%	44,287	69.81%	44,677	70.42%	45,256	71.34%	45,646	71.95%	46,226	72.87%	46,615	73.48%	47,195	74.39%	47,585	75.01%	48,165	75.92%	48,554	76.54%
Other Compostable Paper	36,330	6.57%	0	0.00%	363	1.00%	727	2.00%	1,090	3.00%	1,453	4.00%	1,816	5.00%	2,180	6.00%	2,543	7.00%	2,906	8.00%	3,270	9.00%	3,633	10.00%
Total Paper	176,225	*31.87%*	107,700	61.11%	109,145	61.94%	110,005	62.42%	111,331	63.18%	112,191	63.66%	113,516	64.42%	114,376	64.90%	115,702	65.66%	116,562	66.14%	117,887	66.90%	118,747	67.38%
Ferrous/Aluminum Containers																								
Ferrous Containers	5,874	1.06%	5,500	93.63%	5,522	94.00%	5,522	94.00%	5,580	95.00%	5,580	95.00%	5,580	95.00%	5,580	95.00%	5,580	95.00%	5,580	95.00%	5,580	95.00%	5,580	95.00%
Aluminum Containers	2,614	0.47%	2,500	95.65%	2,509	96.00%	2,509	96.00%	2,509	96.00%	2,509	96.00%	2,509	96.00%	2,509	96.00%	2,509	96.00%	2,509	96.00%	2,509	96.00%	2,509	96.00%
Ferrous/Aluminum Containers (Total)	8,488	1.53%	8,000	94.25%	8,031	94.62%	8,031	94.62%	8,090	95.31%	8,090	95.31%	8,090	95.31%	8,090	95.31%	8,090	95.31%	8,090	95.31%	8,090	95.31%	8,090	95.31%
Other Ferrous Metals / Appliances	26,331	4.76%	24,000	91.15%	24,225	92.00%	24,356	92.50%	24,488	93.00%	24,620	93.50%	24,751	94.00%	24,883	94.50%	25,015	95.00%	25,015	95.00%	25,015	95.00%	25,015	95.00%
Other Non-Ferrous Metals																								
Other aluminum	1,358	0.25%	700	51.53%	747	55.00%	747	55.00%	747	55.00%	747	55.00%	815	60.00%	815	60.00%	815	60.00%	815	60.00%	815	60.00%	815	60.00%
Automotive batteries	2,552	0.46%	2,500	97.97%	2,552	100.00%	2,552	100.00%	2,552	100.00%	2,552	100.00%	2,552	100.00%	2,552	100.00%	2,552	100.00%	2,552	100.00%	2,552	100.00%	2,552	100.00%
Other non-aluminum	1,879	0.34%	1,000	53.23%	1,033	55.00%	1,033	55.00%	1,033	55.00%	1,033	55.00%	1,127	60.00%	1,127	60.00%	1,127	60.00%	1,127	60.00%	1,127	60.00%	1,127	60.00%
Other Non-Ferrous Metals (Total)	5,789	1.05%	4,200	72.56%	4,332	74.84%	4,332	74.84%	4,332	74.84%	4,332	74.84%	4,494	77.63%	4,494	77.63%	4,494	77.63%	4,494	77.63%	4,494	77.63%	4,494	77.63%
Total Metals	40,608	*7.34%*	36,200	89.15%	36,587	90.10%	36,719	90.42%	36,910	90.89%	37,041	91.22%	37,335	91.94%	37,466	92.26%	37,598	92.59%	37,598	92.59%	37,598	92.59%	37,598	92.59%
PET Containers	5,234	0.95%	3,000	57.31%	3,088	59.00%	3,193	61.00%	3,298	63.00%	3,402	65.00%	3,507	67.00%	3,612	69.00%	3,716	71.00%	3,821	73.00%	3,926	75.00%	3,926	75.00%
HDPE Containers	4,607	0.83%	2,500	54.26%	2,534	55.00%	2,626	57.00%	2,718	59.00%	2,811	61.00%	2,903	63.00%	2,995	65.00%	3,087	67.00%	3,179	69.00%	3,271	71.00%	3,363	73.00%
Other Plastic (3-7) Containers	1,081	0.20%	200	18.50%	216	20.00%	238	22.00%	259	24.00%	281	26.00%	303	28.00%	324	30.00%	346	32.00%	368	34.00%	389	36.00%	411	38.00%
Film Plastic	31,539	5.70%	6,000	19.02%	6,308	20.00%	6,939	22.00%	7,569	24.00%	8,200	26.00%	8,831	28.00%	9,462	30.00%	10,092	32.00%	10,723	34.00%	11,354	36.00%	11,985	38.00%
Other Plastic																								
Durables	17,395	3.15%	3,000	17.25%	3,131	18.00%	3,479	20.00%	3,827	22.00%	4,175	24.00%	4,523	26.00%	4,871	28.00%	5,218	30.00%	5,566	32.00%	5,914	34.00%	6,262	36.00%
Non-Durables	9,618	1.74%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Packaging	7,076	1.28%	0	0.00%	71	1.00%	142	2.00%	212	3.00%	283	4.00%	354	5.00%	425	6.00%	495	7.00%	566	8.00%	637	9.00%	708	10.00%
Other Plastic (Total)	34,089	6.16%	3,000	8.80%	3,202	9.39%	3,620	10.62%	4,039	11.85%	4,458	13.08%	4,876	14.31%	5,295	15.53%	5,714	16.76%	6,132	17.99%	6,551	19.22%	6,970	20.45%
Total Plastics	76,551	*13.84%*	14,700	19.20%	15,348	20.05%	16,616	21.71%	17,884	23.36%	19,152	25.02%	20,420	26.67%	21,688	28.33%	22,955	29.99%	24,223	31.64%	25,491	33.30%	26,654	34.82%
Glass Containers	21,747	3.93%	14,000	64.38%	14,136	65.00%	14,353	66.00%	14,571	67.00%	14,788	68.00%	15,006	69.00%	15,223	70.00%	15,441	71.00%	15,658	72.00%	15,876	73.00%	16,093	74.00%
Other Glass	2,071	0.37%	0	0.00%	21	1.00%	41	2.00%	62	3.00%	83	4.00%	104	5.00%	124	6.00%	145	7.00%	166	8.00%	186	9.00%	207	10.00%
Total Glass	23,819	*4.31%*	14,000	58.78%	14,157	59.43%	14,395	60.43%	14,633	61.43%	14,871	62.43%	15,109	63.43%	15,348	64.43%	15,586	65.43%	15,824	66.43%	16,062	67.43%	16,300	68.43%
Food Scraps	89,319	16.15%	3,000	3.36%	3,573	4.00%	4,466	5.00%	5,359	6.00%	6,252	7.00%	7,146	8.00%	8,039	9.00%	8,932	10.00%	9,825	11.00%	10,718	12.00%	11,612	13.00%
Yard Trimmings	39,265	7.10%	36,000	91.69%	37,301	95.00%	37,301	95.00%	37,301	95.00%	37,301	95.00%	37,301	95.00%	37,301	95.00%	37,301	95.00%	37,301	95.00%	37,301	95.00%	37,301	95.00%
Total Organics	128,584	*23.25%*	39,000	30.33%	40,874	31.79%	41,767	32.48%	42,661	33.18%	43,554	33.87%	44,447	34.57%	45,340	35.26%	46,233	35.96%	47,127	36.65%	48,020	37.35%	48,913	38.04%
Clothing Footwear, Towels, Sheets	21,100	3.82%	5,000	23.70%	5,908	28.00%	6,330	30.00%	6,752	32.00%	7,174	34.00%	7,596	36.00%	8,018	38.00%	8,440	40.00%	8,862	42.00%	9,284	44.00%	9,706	46.00%
Carpet	8,096	1.46%	0	0.00%	81	1.00%	162	2.00%	243	3.00%	324	4.00%	405	5.00%	486	6.00%	567	7.00%	648	8.00%	729	9.00%	810	10.00%
Total Textiles	29,196	*5.28%*	5,000	17.13%	5,989	20.51%	6,492	22.24%	6,995	23.96%	7,498	25.68%	8,001	27.40%	8,504	29.13%	9,007	30.85%	9,510	32.57%	10,013	34.29%	10,515	36.02%
Total Wood	19,388	*3.51%*	5,000	25.79%	5,235	*27.00%*	5,623	*29.00%*	6,010	*31.00%*	6,398	*33.00%*	6,786	*35.00%*	7,174	*37.00%*	7,561	*39.00%*	7,949	*41.00%*	8,337	*43.00%*	8,725	*45.00%*
DIY Construction & Renovation Materials	22,391	4.05%	2,000	8.93%	2,239	10.00%	2,687	12.00%	3,135	14.00%	3,582	16.00%	4,030	18.00%	4,478	20.00%	4,926	22.00%	5,374	24.00%	5,822	26.00%	6,269	28.00%
Other Durables	9,022	1.63%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Diapers	9,346	1.69%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Electronics	8,313	1.50%	4,500	54.13%	4,572	55.00%	4,738	57.00%	4,905	59.00%	5,071	61.00%	5,237	63.00%	5,403	65.00%	5,570	67.00%	5,736	69.00%	5,902	71.00%	6,068	73.00%
Tires	6,850	1.24%	3,000	43.80%	3,082	45.00%	3,425	50.00%	3,767	55.00%	4,110	60.00%	4,452	65.00%	4,795	70.00%	4,795	70.00%	4,795	70.00%	4,795	70.00%	4,795	70.00%
HHW	1,713	0.31%	100	5.84%	120	7.00%	154	9.00%	188	11.00%	223	13.00%	257	15.00%	291	17.00%	326	19.00%	360	21.00%	394	23.00%	428	25.00%
Fines	995	0.18%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total Miscellaneous	58,630	*10.60%*	9,600	16.37%	10,014	17.08%	11,004	18.77%	11,995	20.46%	12,986	22.15%	13,977	23.84%	14,968	25.53%	15,616	26.63%	16,264	27.74%	16,913	28.85%	17,561	29.95%
Total	553,000	100.00%	231,200	41.81%	237,349	42.92%	242,622	43.87%	248,418	44.92%	253,691	45.88%	259,590	46.94%	264,863	47.90%	270,258	48.87%	275,057	49.74%	280,321	50.69%	285,014	51.54%

Population (Actual & Projected)	460,000			460,000		461,000		462,000		463,000		464,000		465,000		465,500		466,000		466,500		467,000		467,500	
MSW Generated (tons)	553,150			553,150		554,353		555,555		556,758		557,960		559,163		559,764		560,365		560,966		561,568		562,169	
MSW Diverted (tons)				231,200		237,349		242,622		248,418		253,691		259,590		264,863		270,258		275,057		280,321		285,014	
MSW Disposed (tons)				321,950		317,003		312,933		308,339		304,269		299,572		294,901		290,107		285,909		281,247		277,154	
Per Capita MSW Generated (lbs)	2,405			2,405		2,405		2,405		2,405		2,405		2,405		2,405		2,405		2,405		2,405		2,405	
Per Capita MSW Diverted (lbs)				1,005		1,030		1,050		1,073		1,093		1,117		1,138		1,160		1,179		1,201		1,219	
Per Capita/year MSW Disposed (lbs)				1,400		1,375		1,355		1,332		1,312		1,288		1,267		1,245		1,226		1,204		1,186	
Per Capita/day MSW Disposed (lbs)				3.8		3.8		3.7		3.6		3.6		3.5		3.5		3.4		3.4		3.3		3.2	