

# **OTSEGO COUNTY**

## **LONG TERM SOLID WASTE MANAGEMENT PLAN**

### **Final Report**

**November 2009**

**GERHARDT, LLC**

# OTSEGO COUNTY

## LONG-TERM SOLID WASTE MANAGEMENT PLAN – Final Report

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November, 2009

## EXECUTIVE SUMMARY

Otsego County has been actively engaged in providing solid waste management services over the past 25 years. Initially, it was primarily as a County function in conjunction with several towns. After the creation of MOSA in 1988, the Authority was principally responsible for solid waste management services in the County. The creation of MOSA necessitated a commitment by the Counties to insure that there would be adequate funds to cover all the Authority debt service and operating expenses. This was accomplished through the 1989 Service Agreement that requires each County to deliver a guaranteed annual tonnage (GAT) or suffer a penalty payment if the minimum tonnage is not achieved.

During the 1990's, responsibilities for coordinating all recycling services was turned back to the Counties by MOSA. Otsego County implemented a solid waste unit charge [user fee] to pay for recycling and to subsidize haulers in order to offset the higher MOSA tip fees. Also, most recently, the County has been forced to make a penalty payment to MOSA because annual waste totals have not met the guaranteed annual tonnage (GAT) requirement of the Authority.

What started as a consolidation of services through a regional public benefit corporation has devolved into a situation where the County has had to take over responsibility for all day-to-day recycling activities and the County is funding over \$1 million per year in solid waste management expenses, plus any GAT penalty payments to MOSA, (in addition to the tip fees paid by the haulers and waste generators from Otsego County on an ongoing basis). MOSA handles the transfer and disposal of non recyclable waste for the three-member Counties, manages the closure/post closure responsibilities for the three closed landfills that served the three Counties, funds a portion of the Counties household hazardous waste expenses, and establishes a guaranteed annual tonnage (GAT) requirement for each of the Counties in order to generate the revenue, either through tip fees or through penalty payments, necessary to pay debt service and all operating expenses.

The MOSA system has evolved into a situation where the individual three member Counties bear the primary financial burden of the system as well as key operational aspects such as recycling and household hazardous waste management. It is clear that the member Counties do not have confidence that MOSA could complete the siting, permitting and development of a facility or facilities. Perhaps most importantly, it is a clear that the Counties would not support a very substantial new bond issue that would extend the Counties' service fee payment obligation (and Guaranteed Annual Tonnage) for an additional 20-25 years.

A review of studies done for MOSA reflect a 20 year track record that shows that MOSA (with its current policies and operations) is not equipped to develop a primary disposal facility [such as a landfill] or series of facilities to provide the kind of integrated solid waste management system that was envisioned when the Authority was created. These reports also reflect that the Authority has not developed a plan for future services, other than the continuation of the status quo.

The evaluation of the potential for the County to secure a disposal contract with a neighboring public facility has identified that there are 11 such facilities that are potentially interested. Such an arrangement should result in a lower cost to the County, in part, by using two different disposal facilities reflecting the location of the two transfer stations.

Based on our review of solid waste management services, the obligations of the County to the MOSA, the financial condition of the Authority, and options available to the County, we make the following recommendations for the consideration of Otsego County:

1. The County should provide solid waste management services as an independent County function starting in 2011.
2. The independent operation can be accomplished by the transfer in ownership of the transfer stations in Oneonta and Cooperstown to the County, and the use by the County in 2011 of funds formerly earmarked for the hauler subsidy, to complete necessary improvements. After 2011, the funds formerly earmarked for the hauler subsidy can be used to pay for the operation of the transfer stations. This will keep the cost of transfer station operation out of

the tip fee resulting in a lower fee and the elimination of a risk tied to the volume of waste delivered by haulers.

3. The County should secure a transfer and disposal agreement to start on 1/1/2011 and for a 5 year term.
4. The County should continue the process started to defease the MOSA bonds using existing MOSA reserves. [In May 2009, the Otsego County Board of Representatives passed a resolution for MOSA to complete this action and Gerhardt is working with the Counties and MOSA to defease the MOSA bonds on or about 1/1/2010].
5. The County should continue the process started with Montgomery and Schoharie Counties to execute a post closure agreement to satisfy the Counties' responsibilities for the closed landfills.[ The post closure agreement is currently being prepared by Gerhardt].
6. The County should continue to work with MOSA and Montgomery and Schoharie Counties to replace the 1989 Service Agreement with a new service agreement that defines how Otsego County will provide services in the future.[The three member Counties have retained Gerhardt to prepare a new service agreement].
7. The County should continue the solid waste unit charge but redefine the use of those revenues to cover the transfer station operations as well as the coordination of recycling and the recycling contract.
8. The County should continue recycling services, but we do not recommend that the County construct a materials recovery facility.
9. The County should make a concerted effort to inform haulers of future changes to the solid waste system and services.
10. The County should survey large, institutional generators of food waste to evaluate the potential for an organics recovery program.
11. The County should carefully consider a commitment to the development of a local disposal facility to provide an environmentally sound, economically stable means of disposal for the long term.
12. The County should monitor conditions as they implement changes to their solid waste system and, if necessary, implement flow control in the future.

## 1. EXISTING SYSTEM

### 1. A. Evolution of the Otsego County Solid Waste System

Otsego County has been directly and indirectly involved in several aspects of solid waste management during the past two and one half decades. In the early 1980s, the decision was made not to upgrade the existing operational town landfills to meet New York State Department of Environmental Conservation [DEC] regulatory standards. At that time the towns petitioned County representatives to get involved in waste management and to develop a countywide solution to the problem. All of the old town landfills began to close with the last town operated landfill closing in 1988. At the request of the towns, Otsego County took the lead in solid waste management planning.

By mid-1985, engineering reports commissioned by the County identified several potential landfill sites for a new Otsego County Landfill. After careful review, the County concluded at that time that it could not afford the expenses associated with development of a new landfill. During January of 1988, Otsego County agreed to join the proposed Montgomery-Otsego-Schoharie Solid Waste Authority (MOSA). At that time it was felt that by joining MOSA, a long-term, comprehensive solid waste management system would be developed for the MOSA partners. This regional approach appeared to be the best way to advance recycling, develop a regional landfill for the three MOSA Counties, and to pursue waste to energy and other solid waste management alternatives in a cost effective manner.

The City of Oneonta and Otsego County, through an inter-municipal agreement, developed the southern transfer station and recycling center. The facility, situated in Oneonta, became operational in 1989. By early 1990, ownership and operation of both the Southern and Northern transfer stations were taken over by MOSA.

Over the next 15 years, Otsego County developed twelve additional drop-off locations for recyclables and refuse in strategic locations throughout the entire county.

In 1995, MOSA passed a resolution placing the responsibility for recycling back to the three member counties. The Authority determined it was necessary to reduce the tipping fee from \$88 to \$60/ton through the discontinuation of recycling. In 1996, Otsego County assumed total responsibility for the handling of recyclables since the County determined it would be able to continue providing recycling service Countywide in a more cost effective manner than MOSA. Since 1996 the County has continuously operated the drop off recycling system. During that same time period, MOSA has operated the refuse transfer system and contracted for the transportation and disposal of waste at landfills located in western New York.

#### 1. B. Solid Waste Unit Charge

Otsego County utilizes a solid waste user fee system (Solid Waste Unit Charge) that was established by Local Law in 1996. Administered by the County Planning Department, the system currently charges \$28 per solid waste unit throughout the County. A “unit” is described as a single-family home; therefore a typical County residence is charged \$28 per year for a solid waste user fee, or \$56 per year if they own a two family structure. It is estimated that between 39,000 and 40,000 units exist in the County. By charging the \$28 fee, approximately \$1.1 million is generated per year to finance the solid waste management system in the County. Approximately 94% of the revenue generated by the solid waste fee system is utilized for tipping fee subsidization and recycling contracts.

In 2008 the County utilized a portion of the user fee funds collected to pay for the \$265,000 recycling contract cost with Waste Recovery Enterprises (WRE). In addition, the County subsidized tipping fees charged at the two MOSA transfer stations by \$14 a ton. This resulted in an approximately \$700,000 subsidy that has been implemented to help make the transfer station tipping fees more affordable. The more competitive rates help to ensure that all (or most) waste generated within Otsego’s borders is delivered to the MOSA system. With the MOSA guaranteed annual tonnage (GAT) system, it is imperative that all waste generated within Otsego’s borders be disposed at MOSA facilities to reduce potential shortfalls. The subsidizing of MOSA tipping fees by Otsego County has generally increased refuse capture for disposal at MOSA facilities since it was implemented in 1997. While the \$14 per ton

subsidy is significant, it is far less than the amount the County would have to pay under the GAT shortfall penalty provision for waste not delivered to the MOSA system.

### 1. C. Recycling

Otsego County has developed a two-category system of recycling; Fiber and Mixed Containers.

The Fiber category includes newspapers, magazines, junk mail, white and colored paper, wrapping paper, phone books, soft and hard cover books, corrugated cardboard, and single layer cardboard.

The Mixed Container category includes rinsed plastic, tin, aluminum, and glass containers. Plastics must be identified with a #1 or #2.

Recyclables are accepted at the 12 drop off facilities and the two transfer stations by residents and accepted at no cost. In addition, some limited curbside collection of recyclables occurs by subscription with private haulers.

Currently, Otsego County has a 3-year agreement with Waste Recovery Enterprises (WRE) to operate the recycling system. WRE is responsible for providing A-Frame containers for recyclable materials at all locations, and for transporting containers when full (varies from weekly to every 3 weeks depending upon location). WRE transports all recyclable materials to the Oneonta Station for consolidation. At Oneonta, private haulers also transport recyclables that are generated in the County and are accepted at no cost. The fiber recycling stream is placed in open top containers by a skid steer loader operated by WRE personnel. Mixed containers are loaded by the skid steer into a stationary compactor attached to an ejection container. After consolidation, WRE transports to a Material Recovery Facility (MRF) where sorting and processing of the materials occurs prior to transport to market. Over the course of the agreement, which expires at the end of 2009, WRE has utilized several different facilities. Currently, recyclables are taken to the Oneida – Herkimer Solid Waste Authority MRF in Utica.

The amount of Fiber and Mixed Container recyclable materials diverted from landfill disposal by the County of Otsego during the past five years has been very consistent and is shown below:

<b>Year</b>	<b>Recycle Tons</b>
2008	3,539
2007	3,736
2006	3,476
2005	3,199
2004	3,290

#### 1. D. Drop Off Facilities

Otsego County coordinates solid waste management activities at the existing twelve-drop off locations. All of the sites are owned and operated by the Towns at their expense. All locations accept recyclables at no cost. The list of recyclable materials accepted at these drop-off locations is established by Otsego County, with public education materials and services provided by the County Planning Department. At most stations, private haulers provide a means of accepting refuse for a fee from Town residents for eventual transport to a MOSA transfer station. Small refuse compactors or ejection type containers are located at the Pittsfield, Morris, Schenevus and Decatur stations. The remaining eight drop-off sites have no stationary refuse compaction equipment.

A summary of the twelve-drop off facilities is as follows (source: Otsego County Planning Department):

<b>Name</b>	<b>Location</b>	<b>Accepted Materials</b>
Richfield Springs	Elm Street Ext.	Recyclables, Trash, Metal, Brush
Schuyler Lake	Route 28	Recyclables, Trash
Hartwick	Route 11	Recyclables, Metal
Pittsfield/Burlington	Mumbalo Road	Recyclables, Trash, Metal
Morris	Card Road	Recyclables, Trash, Metal, Brush
Unadilla	Route 7	Recyclables and Metal
Springfield	Route 80	Recyclables, Trash, Metal, Brush
Cherry Valley	Route 166	Recyclables, Trash
Westford	Strong Hill Road	Recyclables, Trash, Metal, Lumber
Decatur	Ivan Mereness Road	Recyclables, Trash, Metal
Worcester	Katie Lane	Recyclables, Trash
Schenevus	Tannery Road	Recyclables, Trash, Metal, Brush

In addition to these twelve drop off facilities, recyclables and trash are accepted at the MOSA Southern (Oneonta) and Northern (Cooperstown) Transfer Stations. Otsego County employees perform recycling operations at both of these MOSA transfer stations, in space that the County leases from MOSA. Recyclables are accepted six days per week for no fee at Oneonta from 7:00 AM until 3:00 PM from any County resident. The Northern Transfer Station in Cooperstown is open Wednesday and Saturday from 8am until 2:30pm.

#### 1. E. Household Hazardous Waste

Otsego County has provided a household hazardous waste collection program annually each September since 1998. This annual two-day event is coordinated by County Planning Department staff and is specifically designed for small businesses and about 500 pre-registered homeowners. The program is conducted in a convenient area, with the location of the event rotated between three areas within the County. The program is conducted in conjunction with several other counties to streamline contractor selection and to reduce costs. Approximately 50% of the program cost is funded by the New York State Department of Environmental Conservation (NYS DEC), while the balance is paid for by MOSA.

The program currently accepts the following materials from County residents at no charge:

Paints, solvents, driveway sealers, old gas, antifreeze, auto batteries, pesticides, electronics, aerosol cans, household batteries, fertilizers, fluorescent bulbs, pesticides, pool chemicals, pharmaceuticals, and propane tanks.

#### 1. F. Non-Recyclable Waste

Refuse and garbage are accepted for disposal at several of the twelve drop off stations located throughout the County as listed in Section 1.D. Waste from these sites is conveyed by private hauler to MOSA operated transfer stations. [At this time, waste collected by WRE is not being delivered to the MOSA system]. Generally, most of the waste is brought to the Southern Transfer Station at Oneonta, while some refuse generated in the northern fringes of the County is transported to MOSA's Randall Transfer Station located in Montgomery County. Waste collected at roadside through much of the County is brought to either the Southern Transfer Station or the MOSA Randall Transfer Station. Waste received at the Northern Transfer Station in Cooperstown is only accepted from homeowners, not commercial waste haulers. Haulers are responsible for identifying the origination of the waste when they deliver it to a MOSA facility.

Waste from the MOSA transfer stations, including a small amount from the Northern Transfer Station west of Cooperstown, is transported by private haulers contracted by MOSA for ultimate disposal at western New York State private landfills. Information was obtained from MOSA showing the amount of nonrecyclable waste received by both transfer stations over the past 12 years as indicated below:

<b>Year</b>	<b>C&amp;D Tons</b>	<b>Refuse Tons</b>	<b>Total Tons</b>
2008	7,722	32,975	40,697
2007	8,370	33,679	42,049
2006	10,005	35,862	45,867
2005	9,007	33,792	42,799
2004	8,988	33,518	42,506
2003	10,854	34,086	44,940
2002	na	na	41,946
2001	na	na	40,677
2000	na	na	39,717
1999	na	na	27,744
1998	na	na	30,480
1997	na	na	26,426

#### 1. G. Previous Landfill Siting Studies

In the 1980's, Otsego County conducted a significant study of the option to site and develop a countywide landfill facility. As the multiple town landfills started to close in the early 1980s by New York State Department of Environmental Conservation (DEC) regulations, the County took the lead in evaluating its options for the development of a single countywide disposal facility. It was recognized that the individual towns would not be able to upgrade existing facilities to meet the new stringent regulations developed by DEC and that at least a County wide solution to the pending solid waste disposal crisis was needed.

In 1984 the consulting firm Resource Engineering was hired by Otsego County to conduct a site evaluation report for the potential development of a countywide landfill. A detailed investigation commenced at that time to assess the entire County for numerous potential areas where landfill development could occur. In September 1985, the Resource Engineering report was completed. The report provided a detailed analysis of the six primary sites for further consideration by the County as a

landfill disposal facility. The detailed review included geologic, developmental, and operational criteria, and many other factors to prepare the preliminary site evaluation. The report concluded that options should be obtained on at least three of the final six sites and further investigation of these top three sites should occur.

North Star Drilling Company conducted a subsurface geologic exploration on the option landfill sites in May of 1986. Several soil borings, permeability tests, and other soils field and laboratory test work were performed by the drilling company.

In 1987, the firm of Barton and Loguidice of Syracuse, New York was commissioned to prepare a solid waste management program report. This document included landfill site verification of site selection work previously done by Resource Engineering. In addition, the geologic information obtained from the North Star Drilling Company was utilized during this site selection verification step. The engineering firm excluded one of the sites due to its proximity to a municipal water supply, but concluded that the other sites had potential for landfill development. A site-specific cost estimate was generated for one of the sites for consideration by the County to develop as a countywide facility.

After careful review, the County concluded at that time that it could not afford the expenses associated with development of a new landfill. In January 1988 the County committed to joining MOSA and abandoned plans for development of a County landfill.

## 2. POTENTIAL INTERMUNICIPAL AGREEMENT FOR DISPOSAL

One element of the overall evaluation of future options for Otsego County is to check with neighboring and nearby public solid waste disposal facilities to determine whether or not they are willing or able to accept waste from Otsego County under an inter-municipal agreement. The idea would be that Otsego would operate the two existing transfer stations and bid out the handling of waste from those stations to a contract disposal facility or facilities. Although it is not possible to know at this time if a favorable disposal price could be negotiated, an initial estimation of any potential interest can be made and later an estimate of the price can be compared to the current price

through the MOSA. (The current MOSA contract for transfer and disposal of waste is higher than the current market average but there is an expectation by the Authority that they will rectify that in the next bid/RFP cycle.)

In the preparation of this report, we have contacted a total of 17 neighboring and nearby systems to discuss their potential ability and interest in accepting waste generation from Otsego County. (It should be noted that the original agreement with Gerhardt was to contact 7 neighboring systems. The expansion to 17 brings in facilities that are in a significant distance from Otsego County which would represent a considerable transportation expense.) The facilities contacted are listed below. The information obtained from each is being kept confidential at their request. Should Otsego County elect to go forward on an inter-municipal agreement, the information will be provided for use by the county. It should be noted that the negotiation of an intermunicipal agreement may require new authorization by the appropriate legislative body.

- |   |   |
|---|---|
| 1. Albany City                                | 10. Delaware County                       |
| 2. Auburn City                                | 11. Franklin County Solid Waste Authority |
| 3. Broome County                              | 12. Fulton County                         |
| 4. Chemung County                             | 13. Madison County                        |
| 5. Chenango County                            | 14. Oneida-Herkimer Solid Waste Authority |
| 6. Clinton County                             | 15. Ontario County                        |
| 7. Colonie Town                               | 16. Steuben County                        |
| 8. Cortland County                            | 17. Sullivan County                       |
| 9. Development Authority of the North Country |   |

From the contacts completed to date, there are 11 facilities that are possibly interested in an arrangement with Otsego County and 6 facilities that are either definitely not interested or are unlikely to be interested. At this stage, we can see that there are options available, there is a reasonable chance to get a deal at a lower cost than the current MOSA – Riccelli contract, and it appears that Otsego could move to more than one disposal location to better serve the geography and waste generation characteristics of the County. These contacts are preliminary and will only become reliable when the start date for a contract is closer, and when the actual approach is defined.

### 3. THE MONTGOMERY-OTSEGO-SCHOHARIE SOLID WASTE MANAGEMENT AUTHORITY (MOSA)

As noted in Section 1A, Otsego County has been actively engaged in providing solid waste management services over the past 25 years. Initially, it was primarily as a County function in conjunction with several towns. After the creation of MOSA in 1988 and the transfer of responsibility to MOSA for the Southern (Oneonta) and Northern (Cooperstown) Transfer Stations, MOSA was principally responsible for solid waste management services in the County.

During the 1990's the cost of recycling services increased and Otsego County elected to provide the recycling directly in an effort to stabilize costs. Also, Otsego County implemented a hauler subsidy to offset the higher MOSA tip fees. The County developed and imposed a solid waste unit charge (see Section 1B) on all improved properties in the County to cover the cost of recycling and the hauler subsidy. Also, most recently, the County has been forced to make a penalty payment to MOSA because annual waste totals have not met the guaranteed annual tonnage (GAT) requirement of the Authority.

What started as a consolidation of services through a regional public benefit corporation has devolved into a situation where the County has had to take over responsibility for all day-to-day recycling activities and the County is funding over \$1 million per year in solid waste management expenses, plus any GAT penalty payments to MOSA, in addition to the tip fees paid by the haulers and waste generators from Otsego County on an ongoing basis.

In short, MOSA has evolved into an organization that handles the transfer and disposal of non recyclable waste for the three-member Counties; that manages the closure/post closure responsibilities for the two closed landfills that served the three counties; that funds a portion of the Counties household hazardous waste expenses; and that establishes a guaranteed annual tonnage

(GAT) requirement for each of the Counties in order to generate the revenue, either through tip fees or through penalty payments, necessary to pay debt service and all operating expenses.

### 3A. County Obligations

The principal document that defines the obligations of Otsego County to MOSA is the May 1, 1989 Service Agreement (referred to as the Agreement) among Otsego County, Montgomery County, Schoharie County, and MOSA.

The Agreement states that in the 1980's each of the Counties were facing a crisis in how to manage waste generated in their counties, that the state had established a solid waste management hierarchy, that actions to address the crisis and meet the state's policies would involve programs of "great complexity and the expenditure of large sums of money," that the viability of the counties depended on the implementation of long term solid waste management plans, and finally that each of the counties would join the "cooperative, coordinated regional solid waste management program" represented by the creation of MOSA. The term of the Agreement is 25 years, (expiring on April 30, 2014).

While the goal of creating the Authority is characterized in terms of responding to very real problems and the need for action to resolve those problems, the Service Agreement is essentially the legal instrument that commits the Counties to be responsible for the payment of expenses incurred by the Authority should the Authority's ability to raise funds fall short. This applies to both debt service and operating costs. Because the Authority has no independent taxing authorization under New York law, it relies on a tipping fee for waste delivered to its facilities.

The principal obligation of the counties is stated in Section 4.1 of the Service Agreement as follows:

"4.1 Delivery Obligation. From and after the Commencement date and until this Agreement is terminated or expires, each county shall deliver, or cause delivered to one or more Designated Facilities, all Solid Waste

generated or originated within its boundaries...”

Note: The Agreement defines “Designated Facility or Designated Facilities shall mean the facility or facilities designated by the Authority from time to time pursuant to Section 4.5 for the delivery by or on behalf of the Counties of Solid Waste generated in or originating from within the Counties.”

This Agreement further states that the Counties acknowledge that they have adequate powers under law to compel the delivery of waste to the MOSA facilities and that the Counties assume financial responsibilities for any delivery short falls. However, if, for whatever reason, the deliveries of waste are less than needed to cover the Authority expenses, the counties must pay under the terms of the Service Agreement.

This delivery obligation is further enforced in the Agreement by a provision requiring the delivery by the Counties of a specified tonnage to the Authority Designated Facilities [Section 10, Guaranteed Annual Tonnage (GAT)]. The Agreement specifies that the GAT for a County “shall be an amount equal to ninety five percent (95%) of the total number of tons of GAT Solid Waste (exclusive of materials held for recycling and sewage sludge) generated within the County which the Authority estimates that such County will deliver or cause to be delivered to Designated Facilities during such calendar year”.

Section 10.2 of the Agreement specifies that if there are any shortfalls in GAT deliveries the Counties “shall pay to the Authority from its or their own funds a shortfall subsidy in an amount equivalent to its share (as determined under Section 10.2.2) of the shortfall in the Aggregate Guaranteed Annual Tonnage multiplied by the maximum fee during which the shortfall occurred for acceptance of GAT solid waste.”

The GAT mechanism has been subject to questions on the technical basis for the annual tonnage levels. When the tonnages have fallen short, it has put significant budgetary and public pressure on the Counties. As originally conceived, the GAT provision contemplated steady, if not ever increasing, volume of waste to cover the debt service expenses (fixed) and operating expenses

(variable) of the Authority. In the stagnant New York State economy, the concept of increasing waste volumes does not hold up. Worse yet, in a severe economic downturn such as the current condition, significantly less waste will be produced, because people are consuming fewer products and the likelihood of the Counties facing GAT penalty payments is therefore increasing. One particular problem for the Counties is that the Service Agreement requires GAT penalty payment to be imposed at the highest tip fee in the MOSA system even though the penalty is for waste not delivered (and, therefore, having no associated expense for transfer and disposal). The GAT provision is also problematic because it is inconsistent with recycling. In general, the public strongly supports recycling and wants to see increased opportunities, convenience and recovery of materials. The State Department of Environmental Conservation promotes recycling as part of local solid waste management plans and requirements of the State Solid Waste Management Act of 1988. The ongoing program to prepare a new State Solid Waste Management Plan, which will set at least a pattern, if not a standard for local plans, will include a continuing emphasis on recycling and new policies on waste prevention, product stewardship, and organics recovery. These policies are aimed at significantly reducing the volume of non-recyclable waste and if the GAT provision is applied in the future as it has been in the past, it could very well bring the Counties into direct conflict with State requirements.

In addition to assuring the repayment of the MOSA bonds, there is a second significant obligation of Otsego County (and Montgomery and Schoharie Counties). Upon creation of MOSA responsibility for two (2) municipal solid waste landfills in Montgomery County (Eastern and Central) and one (1) construction and demolition debris disposal site in Otsego County was passed to the Authority. These landfills closed in 1999, 1994, and 1997 respectively.

MOSA owns the three landfills and since closure the Authority has provided post-closure monitoring and maintenance. This has consisted mainly of leachate collection, transport and disposal at a wastewater treatment facility. Routine maintenance of surface drainage and methane gas vents has also been conducted and groundwater sampling and analysis has occurred on an ongoing basis. Post-closure monitoring and maintenance costs approximately \$250,000 annually with funding coming from the MOSA tip fees.

Available information indicates that Otsego County utilized at least one of the landfills in question and therefore, under State and Federal Law, the County has a responsibility to insure that post closure monitoring and maintenance continues in compliance with the applicable state regulation (NYS 6NYCRR Part 360-2).

The planning process engaged by Otsego County has led to a consensus that all three (3) MOSA member Counties will enter an agreement to insure post closure monitoring and maintenance and to specify a method funding this responsibility.

### 3. B. MOSA Future Service Plans

MOSA was created to provide a regional framework to identify current and prospective solid waste management problems, evaluate alternative solutions, develop plans for a comprehensive service system, and then implement the plans for integrated programs and facilities. In the current planning process with Otsego County, it has become apparent that the original goals and concept for MOSA have not been met. After reviewing reports prepared for the MOSA it is apparent that there has been recognition of the need for significant change. For example, a 1997 study prepared by Cashin/Cahill stated:

“We have concluded that without reengineering itself, MOSA’s continuing to operate under its present structure will result in accelerating deterioration in its operations and finances.”

Among other recommendations, the Cashin/Cahill study found that an overhauled MOSA should have much more direct County control:

“Because the counties will have a direct role in implementing a user fee system, and in order to restore public confidence in MOSA as a public institution, the Service Agreement should be amended to provide to the counties the power to veto any future capital borrowing, or any annual budget increase of 5% or more by MOSA, without prior approval of the legislature of all three counties.”

Neither this recommendation, nor one calling for the replacement of tip fees and the GAT with a uniform user fee were implemented.

A 2007 study by Gershman, Brickner, and Bratton (GBB) found numerous systematic problems with MOSA, particularly in the areas of communication, governance and planning. The GBB study identified the need for:

- Communication with the County legislatures and consideration of their input and feedback.
- Communication with haulers and consideration of their concerns.
- Internal planning.
- Financial projections.
- Improvements in Board governance.

Most recently (3/26/09) MOSA received a report from GBB titled “A Summary Report on the Estimated Costs to Develop and Operate Certain New Regional Solid Waste Disposal and Processing Facilities and a review of Gasification Technology for MSW.” The report states that the MOSA’s current transfer and disposal at distant landfills is not the disposal arrangement intended when MOSA was created and it has become increasingly costly over time. GBB also notes that a new landfill within the three counties was planned but the siting effort was unsuccessful. GBB was therefore commissioned by MOSA to explore the costs to develop and operate a new, state-of-the-art regional landfill or alternatively a regional waste-to-energy facility. The evaluation was based on the three MOSA Counties plus waste from outside the region to achieve economies of scale. The report also evaluated the potential for gasification based on current initiatives at SUNY Cobleskill. Finally, the report analyzed the potential of rail haul.

For the two (2) primary options, development of a new landfill or a new waste-to-energy facility, GBB selected a 250,000 ton per year processing/disposal capacity – over twice the approximate annual generation of the three (3) MOSA counties of 100,000 tons. Although we believe that the upfront landfill development costs have been underestimated by half and the annual operating costs have also

been underestimated, even the siting and construction of a landfill is estimated by GBB to require the issuance of \$32,785,410 in bonds. If a waste-to-energy facility were pursued GBB estimates it would require the issuance of \$234,929,975 in bonds. While the resultant landfill charge per ton (\$36.32 per ton in the first year) would be competitive if the GBB projections hold, the \$119 per ton fee for the waste-to-energy facility would be so far over market that facility would be virtually empty. Both would depend on receiving 100% of the waste from the three member Counties (100,000 tpy) plus 150,000 tpy of outside waste.

We believe that GBB accurately characterizes gasification technology as in the development phase, that there are very few commercial scale facilities with a proven track record, that many of the claimed merits are not yet confirmed, and that the cost of gasification is likely comparable with the cost of conventional combustion technologies. The environmental impacts are simply not known at this time. Similarly, the gasification project at SUNY Cobleskill is a small scale, limited input (livestock manure and cafeteria waste), research and development project that is in the early stages and does not yet have a track record in the United States. GBB identified significant unknowns and limitations in the scale-up of such a facility, the commercial viability of the facility, and perhaps most important the transition to a more complex municipal solid waste feedstock.

GBB also reviewed the potential for rail haul to a landfill disposal facility in Ohio, Virginia or Kentucky. They estimated a cost of \$3-\$4 million per rail siding (spur) assuming a distance of less than one mile to an existing rail line, a grade differential within allowable tolerances, and no other special construction. They indicate that only the transfer stations in Oneonta and Cobleskill would be suitable and that the waste would have to be baled or containerized. This would necessitate additional capital cost and the transfer of waste from other transfer stations to the two that could be equipped with a railroad siding. Although the GBB report contains valuable information on rail haul, a more specific evaluation would be required to get a clear indication of the feasibility.

Gerhardt was not retained to evaluate the GBB report but rather to evaluate MOSA's future service plans. Although commissioning the 2009 GBB report is an effort by MOSA to consider long term alternatives, it must be viewed both in context of the 2007 GBB study and the 1997 Cashion/Cahill study and the current responsibilities and policies of the three counties.

The most recent Compliance Report submitted by the MOSA to the DEC as part of the responsibilities for maintenance of a local solid waste management plan (LSWMP) also reflects the absence of any long range vision for the organization. It notes that the Authority is not responsible for recycling, describes the operations of the transfer stations, characterizes overall operations as stable, but notes that the Authority will need to continue its efforts to develop a consensus as to the best course of action for future waste handling for the MOSA region. The Compliance Report states:

“The member counties have not been able to join the Authority in embracing the regional planning concept.”

While this criticism may be accurate, it is also true that MOSA has not prepared a regional solid waste plan that could be supported by the Counties.

These studies reflect a 20 year track record that clearly shows that MOSA with its current policies and configurations is not equipped to develop a facility or series of facilities to provide the kind of integrated solid waste management system that was envisioned when the Authority was created. The MOSA system has evolved into a situation where the individual three member counties bear the primary financial burden of the system as well as key operational aspects such as recycling and household hazardous waste management. It is clear that the member counties do not have confidence that MOSA could complete the siting, permitting and development of a facility or facilities. Perhaps most importantly, it is a clear that the Counties would not support a very substantial new bond issue that would extend the Counties' service fee payment obligation (and Guaranteed Annual Tonnage) for an additional 20-25 years. The concept of bonding even \$32 million for a new landfill is suspect when it would be a commitment for a facility that would have to attract 150,000 tons per year of out-of-region waste to remain financially viable. The notion of a relatively small public benefit corporation issuing over \$234 million in bonds for a new waste-to-energy facility (that would similarly require 150,000 tons per year of out-of-region waste at \$119 per ton) cannot qualify as a legitimate long range option.

With regard to disposal of non-recyclable waste, MOSA has indicated that they believe they will be able to secure a new transfer and disposal agreement at the expiration of the current Riccelli Contract,

but no specific estimate has been provided. MOSA has made no proposal to resume recycling responsibilities for Otsego County. No information has been forthcoming from MOSA on their plan for an allocation of assets should the Authority discontinue operations. Similarly, MOSA has not identified a possible new structure if one or more of the member Counties withdrew. With regard to post closure responsibilities, in early 2009 MOSA apparently moved away from the multi year practice of funding post closure as an annual operating expense and toward the creation of a post closure trust fund controlled by the State and in the amount of \$9,668,811. This policy change would have conflicted with bond defeasance and was determined to be unnecessary and not fiscally prudent. Post closure will continue to be handled by a municipal guarantee and such an agreement is being prepared. In summary, MOSA has not demonstrated that it has developed a plan for the future services, other than a continuation of the status quo.

### 3. C. MOSA Reserves

MOSA has established a series of seven (7) financial reserves to insure the repayment of funds borrowed by the Authority to construct facilities and to provide funds for replacing equipment, for completing improvements with a useful life of more than one year and for providing rate (tip fee) stability. MOSA reports on the reserves as part of the annual independent audit and also periodically publishes a “Plain Language Explanation Reserve Funds.” The 2008 explanation is attached as Appendix A. The following reserves were listed in MOSA 12/08 Explanation:

1. Debt Service and Sinking Fund	\$0	-	\$1,872,000
2. Debt Service Reserve			\$1,973,568
3. Bond Redemption & Improvement Fund			\$1,267,000
4. Operating Reserve Fund			\$2,632,797
5. Equipment Replacement Fund			\$ 899,909
6. Buildings and Grounds Fund			\$ 536,905
7. Rate Stabilization Fund			<u>\$3,086,800</u>
Total:			\$12,268,979

### 3. D. MOSA Bonds Defeasance

As indicated by MOSA, the priority purpose of the reserves is to provide “bond holder confidence in future payments.” We have analyzed the remaining amounts owed on the outstanding bonds to determine the feasibility of using the reserves to satisfy the remaining bonds obligation. Environmental Capital, a subconsultant of Gerhardt on this project, has determined that the total outstanding bond obligation of MOSA can be satisfied through a process called defeasance which requires the creation of a restricted fund in an amount that guarantees full bond payments. Attached as Appendix B is the analysis done by Environmental Capital showing that the dedication of approximately \$8.4 million to a defeasance fund will fully satisfy all MOSA bonds.

By defeasing the MOSA bonds the annual debt service costs will be eliminated and a corresponding reduction in tip fees can be made. More importantly, defeasance will effectively eliminate the primary reason for the GAT requirement, that is ensuring the repayment of the bonds. Although the actual reallocation of reserves can only be accomplished by the MOSA Board, it is apparent that adequate reserve funds are available to complete a defeasance fund, and this is an area where it is imperative for the Counties to assert their policy determinations on the Authority. Otsego County requested that the MOSA Board take this action, as did Montgomery and Schoharie Counties. The MOSA Board subsequently passed a resolution directing their executive director to prepare a plan to use the MOSA reserves to defease the MOSA Bonds. One potential reallocation of the MOSA reserves is shown below. This approach would accomplish the primary objective of defeasing the existing bonds as well as keeping operating reserves for MOSA and identifying a net amount that should be distributed to the Counties as part of an allocation of MOSA assets. Shown below is a recommendation for the reallocation of the MOSA reserves.

**REALLOCATION OF MOSA RESERVES**

<b>RESERVES</b>	<b>Balance as of 12/31/08</b>	<b>1/01/10 NEW DEFEASANCE RESERVE FUND</b>	<b>1/01/10 NEW RESERVES</b>	<b>DISTRIBUTION TO COUNTIES</b>
Rate Stabilization	\$3,086,800	\$2,522,000		\$564,000
Equipment Replacement	\$899,909	\$499,909	\$300,000	\$100,000
Buildings and Grounds	\$536,905		\$150,000	\$386,905
Operating	\$2,632,797	\$2,137,523	\$200,000	\$295,274
BR & IF	\$1,267,000	\$1,267,000		
Debt Service	\$150,068	\$150,068		
	\$1,823,500	\$1,823,500		
Debt & Sinking	\$1,872,000			
<b>Total</b>	<b>\$12,268,979</b>	<b>\$8,400,000</b>	<b>\$650,000</b>	<b>\$1,346,179</b>

**Note: 1. The GAT windfall payments from 2008 should be added to the distribution to the Counties.**

**2. The Debt Service and Sinking Fund is used to pay current debt service and is not available for reallocation.**

**3. The distribution of funds to the Counties requires further evaluation as part of preparing a new service agreement, currently underway.**

**4. COORDINATION WITH MONTGOMERY & SCHOHARIE COUNTIES**

As described in Section 3, one of the first parts of this planning effort was generally to evaluate the MOSA system and more specifically to evaluate Otsego County’s obligations to MOSA as well as the

status of the MOSA financial reserves. Because Otsego County is one of three members of MOSA, this effort necessarily required contact and communication with representatives of Montgomery County and Schoharie County.

The potential to defease the MOSA's outstanding bonds was identified in the Gerhardt proposal to Otsego County. The analysis by Environmental Capital, a subconsultant of Gerhardt on this work, determined that defeasance is feasible. The MOSA reserves are adequate to defease the bonds and eliminate the amount of debt service expense. This finding was presented first to the Solid Waste and Environmental Concerns Committee of the Otsego County Board of Representatives and then with elected officials of Montgomery and Schoharie Counties.

All three counties passed resolutions for the MOSA to defease the outstanding bonds using existing MOSA reserves. MOSA passed a resolution directing their executive director to develop a plan to defease the bonds and the process is under way.

The consensus on defeasing the bonds is a significant step forward. Defeasing the bonds will eliminate the annual debt service expense and more importantly it will relieve the GAT requirement put in place to guarantee the repayment of the MOSA bonds. The Service Agreement, which established the GAT and defined the functions and responsibilities of the Counties and MOSA, must be replaced by a new Agreement. In fact, the Counties have also reached a consensus to prepare such a new Service Agreement. While each County may decide to follow a different path for providing solid waste management services in the future including a different reliance on MOSA, the concerns reached on defeasance and the preparation of a new Service Agreement reflect a recognition by the Counties that they need to establish policies for the future and they need to resolve the relationship among the Counties and MOSA.

Communication and coordination with Montgomery and Schoharie Counties has also produced a consensus on the need for an agreement to spell out the post closure responsibilities for the two landfills and the C & D debris disposal site previously taken over by MOSA.

There seems to be recognition by each of the Counties that although there have been common experiences through the shared MOSA experience, each has unique financial and community conditions that must be respected through the autonomy of each County.

## 5. OTSEGO COUNTY OPTIONS

### 5. A. Short Term

At the start of the contract with Gerhardt in November 2008 we began the evaluation of options for Otsego County to provide solid waste management services. The initial focus was the short term 2009 and 2010.

The first factor that limits the County's short term options is the existing Service Agreement which obligates Otsego County (along with Montgomery and Schoharie Counties) to the repayment of the bonds issued by MOSA. This means that so long as there are outstanding bonds the Service Agreement contract cannot be modified or eliminated and the Counties must comply with the Guaranteed Annual Tonnage (GAT) requirement and the associated GAT penalty payment if a shortfall occurs.

We addressed this situation and on March 13, 2009 presented a status report to the Solid Waste and Environmental Concerns Committee of the Otsego County Board of Representatives along with a specific recommendation that MOSA defease its outstanding bonds using existing MOSA reserves. Following this, the recommendation was made to the other two member counties and MOSA. All three counties adopted resolutions supporting the defeasance of MOSA bonds. The MOSA Board directed the executive director to prepare a plan to defease the bonds.

Defeasance can be completed by January 2010. This will allow for a substantial reduction in the 2010 MOSA tip fee and it will effectively eliminate the primary purpose of the GAT requirement.

The second factor that limits the County's short term options is the existing contract MOSA has with Riccelli for transfer and disposal of non-recyclable waste. This contract runs through the end of 2010.

Therefore, during the remainder of 2009 and 2010 the County has little opportunity to change its system for providing solid waste management services, although the reduction in the MOSA tip fee accomplished by defeasing the MOSA bonds is significant. Depending on the County's decision for the long term, in 2010 the County may need to take action to resolve the ownership of the Oneonta and Cooperstown transfer stations and to begin the process of renovating the two stations. If defeasance is accomplished on schedule, and if Otsego County elects to move to provide solid waste services on an independent basis apart from MOSA, then it is recommended that in 2010 [ as soon as defeasance is completed] the hauler subsidy be discontinued (because defeasance will accomplish a substantial and equivalent tip fee reduction) and those funds be directed to the renovation of the two transfer stations.

The following shows the estimated impact of bond defeasance and a lower GAT on the 2010 MOSA budget and corresponding tip fee. It should be noted that the table reflects a more conservative estimate of total system tonnage, and certain expenses have been reduced to reflect the lower tonnage and improvements in operating efficiency.

## MOSA BUDGET IMPACT

EXPENSES	2009 BUDGET	2010 BUDGET
Debt Service	\$2,118,092	
Transportation & Disposal	\$6,389,619	\$6,132,208
Environmental Protection	\$242,670	\$242,670
Landfill	\$249,019	0
Maintenance	\$590,759	\$531,683
Finance & Administration	\$855,157	\$769,641
Transfer Stations	\$1,170,054	\$1,053,049
<b>TOTAL</b>	<b>\$11,615,370</b>	<b>\$8,760,243</b>
“Revenue & Contributions (aka all non-tip fee revenue)	\$773,373	\$586,145
Expenditures Less Revenue	\$10,841,997	\$8,174,098
GAT	102,283	96,000
MOSA Rate	\$106	\$85.15

### 5.B. Long Term

#### *Continuation With MOSA*

Over the long term it is logical for the County to first consider continuation with the MOSA. The original concept of the MOSA was valid; to create a regional entity that could accomplish consolidated services, operate to capture economies of scale, spread costs over a wider base, and operate in a

business-like fashion to address difficult public policy issues (like new facility siting) one step removed from the political firestorms that accompany nearly every solid waste facility siting process. However, as discussed in Sections 1 and 3, the evolution of MOSA has been different than the original concept. Foremost has been that the Counties remained the principal means of financing the Authority through tip fee subsidies and through the GAT and GAT shortfall penalty payments. Also from both a fiscal and operational stand point, Otsego County resumed the recycling program funding and operations. Even with tip fee subsidies and the county take back of programs like recycling, the MOSA costs and tip fees have soared to a level that is significantly higher than the prevailing solid waste market in New York State.

These conditions make it very difficult to contemplate continuation with MOSA. The satisfaction of the MOSA bonds through defeasance is a significant and positive step that will reduce costs. Even after the elimination of the debt service obligation there will still be a cost of overhead for the MOSA system of approximately \$2.8 million per year or \$28 per ton as is shown in the following table of expenses from the 2009 approved MOSA budget.

The following represents overhead expenses but does not include the costs of debt service, transfer and disposal and post-closure.\*

	<u>2009</u> <u>Budget</u>	<u>Cost</u> <u>Per Ton</u>
<b>Environmental Protection</b>	<b>\$ 242,670</b>	<b>\$ 2.37</b>
<b>Maintenance</b>	<b>\$ 590,759</b>	<b>\$ 5.78</b>
<b>Finance &amp; Administration</b>	<b>\$ 855,157</b>	<b>\$ 8.36</b>
<b>Transfers Stations</b>	<b><u>\$1,170,054</u></b>	<b><u>\$11.44</u></b>
<b>Total Overhead</b>	<b>\$2,858,640</b>	<b>\$27.95</b>

**\*Post closure expenses are approximately \$250,000 per year or \$2.50 per ton.**

This illustrates a key point. If the County were to consider continuation with MOSA, the County would have to decide if they were willing to live with a GAT or comparable requirement. That is because the MOSA tip fee would have to cover all the expenses listed above plus the expense for a new transfer and disposal contract. That means that the fee would be approximately \$28 per ton higher than the market for transfer and disposal (or approximately \$30.50 per ton higher if you include post closure). At this rate the Authority could not depend on receiving adequate volumes and either a subsidy or a County GAT commitment would be needed. While we believe that the expenses listed above could be reduced, the result may still be higher than the market would bear. Other public systems also charge tip fees that are higher than the market for transfer and disposal and they have not been subject to the same levels of waste loss. However, these other systems offer a wider array of services and expenses which are included in the system tip fee and waste generators and haulers have seen value in those services and continue to use those public facilities.

Of course, there must also be consideration of new debt service expenses. If the current MOSA structure were continued, new bonds for new programs or facilities could be issued by the Authority. This would extend into the future high debt service expenses and the need for continuation of the GAT.

The critical question is what control will Otsego County have over the cost of MOSA services in the future?

One potential action the County could take under this option would be to keep the solid waste unit charge and the hauler subsidy in place. Although this would bring the MOSA tip fee closer to market, unless this was combined with substantial cuts to the MOSA overhead it may not achieve a low enough tip fee to attract adequate waste. However, this would not address the concerns the County has had with the cost of MOSA services and the risk of a GAT penalty caused by tip fees that are higher than the market. These concerns might be addressed if a new service agreement were to require prior approval of both MOSA's annual operating budget and any future issuance of new bonds. Still, Otsego County would presumably be a 40% partner and could not control any final decision on their own, unless other provisions were added.

We have tried to identify how the County might utilize MOSA on a non-mandatory basis in the future. This is difficult if at all possible to envision because MOSA has no place to turn except the counties if revenues fall short or expenses run high. It is also difficult to envision an approach where, as has been done in other areas, the County would enact flow control thereby guaranteeing the necessary tonnage and associated revenue, and MOSA would correspondingly agree and guarantee to set their rates at the level necessary to cover all expenses (operating and debt service). This approach would only work if there was in place an integrated public system implementing well documented public policies – conditions that do not exist within the MOSA region.

### ***Independent County Operation***

A second long term option for Otsego County would be to establish an independent county operation. In fact, the County already does this with regard to recycling and household hazardous waste. Under this option, the County would take back from MOSA responsibility for the transfer stations in Oneonta and Cooperstown. In addition to providing for this transfer in a new service agreement among the three Counties and MOSA, the County would need to resolve reversion issues with the City of Oneonta[Southern Transfer Station] and the Clark Estate [ Northern Transfer Station].

Under this option the County would keep in place the solid waste unit charge. In 2010 the unit charge revenue would continue to be used for recycling but the hauler subsidy would be discontinued (because the MOSA rates would be lowered by defeasing two bonds and eliminating the debt service expense). Once the County establishes its legal interest in the facilities, those funds could be used to renovate the two transfer stations in 2010. Also, the funds could be used to cover the Counties post closure obligations. Starting in 2011, and in the years following, the unit charge revenue would be used for recycling, transfer station overhead, and post closure responsibilities.

By covering the transfer station overhead (fixed costs) and post closure costs from the unit charge these costs can be eliminated from the tip fee charged to haulers. Then, the fee charged by the County at the transfer station could be set by contract with the successful bidder for transfer and disposal. This bid process would be done in 2010 to start January 1, 2011. This approach would mean that Otsego County could offer a market rate for disposal and more importantly the County would not have to make up a

shortfall in tonnage because no minimum will be specified in the bid or contract. The County will only pay the contractor for waste actually received. The disposal location and fee could be determined by County negotiation with publicly owned landfills identified in Section 2 of this study, with transportation costs determined by receiving bids from private trucking companies. The following is an estimate of expenses that would be covered by the unit charge under this option.

### Allocation of Solid Waste Unit Charge

	<b>2009</b>	<b>2010</b>	<b>2011</b>
Recycling (WRE)	\$265,000	\$275,000	\$285,000
Tip Fee Subsidy \$14x40,000 tpy	\$560,000	0	0
Oneonta TS Rent	\$11,000	0	0
County Coordination	\$164,000	\$169,000	\$173,000
Operate 2 Transfer Stations	In MOSA Tip Fee	In MOSA Tip Fee	\$450,000
Renovate 2 Transfer Stations	0	\$500,000	0
Post Closure	In MOSA Tip Fee	\$100,000	\$100,000
Total Expenses	\$1,000,000	\$1,044,000	\$1,008,000
Unit Charge Revenue	\$1,100,000	\$1,100,000	\$1,100,000
Contingency/Surplus	\$100,000	\$56,000	\$92,000

The following is an estimate of the annual cost of operating the Oneonta (South) and Cooperstown (North) transfer stations once renovated by the County.

### Transfer Stations Annual Operating Cost Estimate

	Quantity	Cost	Total Cost
Working Supervisor (entire System)	1	\$41,600	\$41,600
Transfer Station Workers (south)	2	\$37,440	\$74,880
Scale House Attendant/Billing (south)	1	\$31,200	\$31,200
Transfer Station Workers (north)	2	\$37,440	\$74,880
Laborer (floater)	1	\$31,200	\$31,200
Fringes @ 40%	LS	\$101,504	\$101,504
Diesel (Loader, skid Steer, etc.)	LS	\$15,000	\$15,000
Utilities (gas, electric, heating)	LS	\$20,000	\$20,000
Repairs/supplies	LS	\$25,000	\$25,000
Miscellaneous	LS	\$12,152	\$12,152
Contingency	LS	\$22,584	\$22,584
<b>Total Operating Cost</b>	<b>LS</b>		<b>\$450,000</b>

The option of an independent Otsego County operation should include a commitment by the County to evaluate the development of a local processing/disposal facility to serve the long term needs of the County. The information contained in Section 6 can serve as a start and a foundation for this long range process.

#### *Discontinuation of Solid Waste Management Services By The County*

Finally, Otsego County can consider the option of discontinuing the provision of any and all solid waste management services.

Like the other options, this approval would still require the completion of defeasance to satisfy the County's obligation to repay their share of the outstanding MOSA bonds. The County would still be obligated through 2010 for the delivery of waste to satisfy the MOSA-Riccelli transfer and disposal

agreement. And, the post closure agreement now being drafted would still require completion to insure the County's contribution to the annual post closure expenses. A new service agreement would be required to provide for the allocation of the County's share of the MOSA assets to the County, and to terminate any and all responsibility of Otsego County for future MOSA activities except for post closure.

However, after 2010 the County could conceivably stop the recycling, public information, household hazardous waste, and waste transfer and disposal services it now provides. That would allow for the reduction of the solid waste unit charge to the level needed for closure, a reduction of approximately 75%.

This virtually complete discontinuation of solid waste services by the County would require every homeowner, business, industry and institution within the County to make their own arrangements for services. Although there are a number of private haulers serving Otsego County, municipalities (cities, towns, villages) may still elect to provide some service, the lack of a County solid waste system will create confusion, inefficiencies, and potentially duplication that will ultimately increase costs and very likely decrease the level of recycling and toxics (household hazardous waste) reduction. Without a County system, private companies will offer services representing the lowest cost and since recycling is a cost over and above the minimum necessary to dispose of waste it will be dropped in many cases.

Under this option, there will be no check on the cost of waste disposal and the residents, businesses, and industries of the County will face significant risks from future price increases and environmental liability.

#### 5. C. Flow Control

Flow control is an informal term referring to laws that direct the delivery of waste generated in a given area to specific disposal facilities that are designated by the government. Flow control laws are typically applied to generators and haulers of solid waste. The law can direct part or all of the waste stream. Flow control is a management tool for local government that can provide several benefits. For a municipality that has elected to provide disposal or recycling service to its residents and businesses, and

has invested capital in the construction and operation of solid waste facilities, flow control laws can insure that the proper material goes to each facility, that environmental risks are minimized, that recycling laws are enforced, and that the costs of the facilities can be recovered through fees charged according to the amount of waste delivered.

Such laws were common and their use was frequently relied upon by purchasers of municipal bonds for solid waste facilities, particularly where the primary source of repayment was the anticipated revenue from tipping fees. Local legislatures, in determining to build a new disposal facility with taxpayers' funds for taxpayers' waste, adopted laws directing local waste to the facility so that sufficient revenues could be derived to operate the facility and repay the bonds.

Later, some, flow control laws were challenged by private landfill owners and haulers who said they suffered financial damage from the laws. In 1994, the United States Supreme Court, in *C & A Carbone v. Town of Clarkstown*, found that a flow control law adopted by the Town of Clarkstown, New York, violated the commerce clause of the constitution in that it favored the local private facility designated to receive the town's waste, and discriminated against facilities located in other states that were prohibited from competing with that facility. The *Carbone* decision prompted many similar challenges to flow control laws in other jurisdictions and many municipalities suspended their laws to avoid challenges.

One result of the loss of the ability to enforce flow control by municipalities was a loss of waste at municipal facilities. Private haulers and disposal companies developed the ability to haul waste long distances to landfills with low tip fees. Because most municipal waste systems provided recycling and other programs that did not necessarily generate revenue, municipal fees for the disposal of non-recyclable waste were frequently higher than fees charged for simple transport and disposal of waste to distant landfills. Local waste haulers, looking for the lowest price available, began diverting waste away from municipal facilities, in favor of other options. This occurred in many New York municipalities.

In 2007, the Supreme Court returned to the subject, upholding the flow control laws of Oneida and Herkimer Counties in *United Haulers Association v. Oneida-Herkimer Solid Waste Management Authority*. In *United Haulers*, the Court distinguished the laws and waste system presented to Oneida and Herkimer Counties from the situation presented in *Carbone*. The court ruled that flow control laws

that benefit publicly-owned facilities, and bar all private facilities, regardless of their location, from access to local waste, do not discriminate against interstate commerce. The Court distinguished *Carbone* because Clarkstown's law favored a local private facility over other private competitors. Under *United Haulers*, flow control laws favoring public facilities are to be evaluated under a more lenient standard, balancing the public benefits of the laws against the incidental burdens they may impose on interstate commerce. Significantly, the Court found that revenue generated by the laws, with or without additional environmental and public health benefits, is a legitimate public benefit to weigh in the balance against burdens on interstate commerce.

A key part of the *United Haulers* Decision is the Court's recognition of the integrated system which implements well founded public policies. Although flow control is a convenient and effective financing mechanism, in the case of the Oneida-Herkimer it was found to be rooted in much broader public objectives validated by the Court. The following are excerpts from the Supreme Court Decision:

*"The ordinances give the Counties a convenient and effective way to finance their integrated package of waste disposal services. While "revenue generation is not a local interest that can justify discrimination against interstate commerce," Carbone, 511 U.S. at 393 (emphasis added), we think it is cognizable benefit for purposes of the Pike test. At the same time, the ordinances are more than financing tools. They increase recycling in at least two ways, conferring significant health and environmental benefits upon the citizens of the Counties. First, they create enhanced incentives for recycling and proper disposal of other kinds of waste. Solid waste disposal is expensive in Oneida-Herkimer, but the Counties accept recyclables and many forms of hazardous waste for free, effectively encouraging their citizens to sort their own trash. Second, by requiring all waste to be deposited at Authority facilities, the Counties have markedly increased their ability to enforce recycling laws. If the haulers could take waste to any disposal site, achieving an equal level of enforcement would be much more costly, if not impossible. For these reasons, any arguable burden the ordinances impose on interstate commerce does not exceed their public benefits."*

An integrated system is an essential precedent for the consideration of flow control and such a law should be considered only when it is based on a plan adopted by the County. At this time, the County

has not yet made decisions on the elements of a County solid waste plan or the configuration of a system which they may develop in the future. (Some have expressed that the revenue going to MOSA now is not implementing a plan supported by Otsego County individually or by the three counties collectively.) Care should be taken so that flow control is not misinterpreted as having the single purpose of trying to meet the minimum waste GAT established by MOSA. Although the United States Supreme Court established in *United Haulers* that *Oneida-Herkimer* legitimately used flow control as a finance mechanism, *Oneida-Herkimer* was financing a system which was built based on a comprehensive evaluation of all reasonable options and based on public input and specific public policy decisions by elected officials.

Attempting to enforce flow control into facilities that charge \$106 per ton would be very difficult. There is no guarantee that flow control would eliminate the possibility of a GAT shortfall at year end.

In summary, it would be best to implement flow control to a system that is supported by elected officials, that is consistent with public policy, and that provides a valuable set of needed public services.

Although the County is not yet at the point where we would recommend the enactment of flow control, we have reviewed the County's 1989 Solid Waste Law. We believe that the County would want to consider a number of changes or perhaps even a new law at the appropriate time. (The 1989 law did not include a permitting system for haulers, it was written at a time when it was believed that the County could not flow control recyclables, it contained a substantial delegation of responsibility to the towns, villages and cities which may or may not still be the preferred approach, and most importantly the actual flow control language is somewhat confusing as it deals with collection but not the disposition of waste material after it's collected).

## 6. MAJOR TECHNOLOGY OPTIONS

### 6. A. Single Stream Recycling

Single stream, or commingled recycling, is a system in which all recycled materials, such as paper, cardboard, plastic, glass, etc. are collected as a single stream, rather than as separate material streams.

Single stream recycling has some benefits over traditional dual-stream recycling, while also presenting some negative effects. The two major benefits of single stream recycling are the increased quantity of recyclables collected, and the more cost effective collection of materials. Since the County is not responsible for providing curbside pickup of recyclables and a majority of residents do not contract with a private hauler to have these materials collected, the benefits associated with single stream collection are less pronounced. When single stream collection is implemented curbside, larger bins are also typically used, which encourage users to provide more materials for recycling. The recycling rate can be as much as 75% higher as compared to source separated recycling. This applies to the curbside recycling rates only, however, and a similar increase may not apply to the drop off collection model.

The benefit on the collection side for the drop off collection model will be that there would no longer be a need to utilize separate transfer trailers for the separate material streams. This will allow transfer trailers to be filled to capacity more efficiently, and could ultimately lead to fewer transfer trips and monetary savings over the course of a year.

The conversion from a dual or multi stream recycling program to a single stream system does present some challenges, as well as inherent costs. Probably the most important aspect is the availability of an end market for the single stream recyclables. Either a private Material Recovery Facility (MRF) accepting single stream recyclables would need to be identified and contracted with, or the County would need to construct their own MRF equipped to handle the sorting of a single stream. The construction of a single stream MRF is typically in the range of 30-40% more costly than a dual stream MRF due to the additional automated equipment utilized to perform the additional sorting required. Other potential down sides to a single stream system include increased residuals from the sorting process that must be landfilled and an increased level of contaminants leading to lower revenue per ton from material sales.

#### 6. B. Material Recovery Facility Feasibility

A Materials Recovery Facility (MRF) would receive recyclable materials where they would be temporarily stored, sorted, baled (where applicable), and consolidated loads would be transported to various end use markets. This would be beneficial to the County by eliminating the need to pay a third

party to process the recyclable materials and providing the potential for the County to realize the full value of these materials when sold to the market. To operate the MRF, the County could continue to utilize their current transfer stations for the collection of recyclable materials. The County could either continue to contract with a private hauler to transport the materials to the MRF, or they could purchase equipment to transfer the material themselves. Once the material has arrived at the MRF it would be unloaded inside a building, temporarily stored, sorted to satisfy market requirements, and consolidated for shipping. Again, the County could choose to contract with a private hauler to then transport the materials to an end user, contract with the end use market to provide such transportation services, or purchase equipment to transfer the materials themselves.

A preliminary cost estimate for an Otsego County MRF has been prepared based on the construction of a 10,000 square foot pre-engineered metal building equipped with a locker room facility and the installation of material separation and consolidation equipment. In 2009 dollars, with engineering and contingency costs included, the estimated construction cost for the facility is \$1.9 million. It was assumed a debt repayment period of 15 years would be applied to this project at an interest rate of 5%. Operating and maintenance costs were estimated on a per ton basis and derived from actual data from a similar facility currently in operation in a nearby county. A rate of \$135/ton of material was applied. Revenue from sales of recyclable material were also calculated based on data from the same facility and estimated to be \$64/ton. Once annual revenue was subtracted from the annual debt service payment and O&M costs, the average annual net cost over the 15 year payment period was \$500,000, which equates to approximately \$140 per ton of recyclable material.

After analyzing the annual net cost of a dual stream facility, and taking into account that single stream facilities typically cost up to 40% more than dual stream facilities, coupled with potentially lower sales revenue associated with these facilities, development of a single stream MRF for Otsego County appears to be cost prohibitive. Cost savings from single stream programs are typically more significant from the collection side of the system, and since Otsego County does not take responsibility for curbside collection of recyclable materials, the single stream option does not offer a cost savings to the County.

## 6. C. New DEC Initiatives

The New York State Department of Environmental Conservation (DEC) is nearing the completion of a one and one half year process to prepare a new State Solid Waste Management Plan. The State Plan will serve as an overarching policy guide for solid waste management at the local level. Although the State Plan does not carry the weight of a law or regulation, it will clearly serve as the template the DEC will use to measure local plans, permit applications, and actions.

The New York State Plan will signal a significant change in policy to emphasize solid waste reduction through a variety of measures to actually create less waste. Product stewardship, an approach that makes the manufacturer of products responsible for end of life management, is being promoted as a paradigm shift. Experience has shown that this shift to a source based approach will spur the development of products and packaging that create less waste and a higher percentage of recoverable (recyclable) by products. The new title for the State Plan has been preliminarily identified as “Beyond Waste: A New Vision for Sustainable Materials Management in New York.”

The DEC has noted that recycling across the state has plateaued and a major new policy on organics recover (principally food waste composting) will be in the new State Plan. As the County considers future long-range plans for solid waste the new push for organics recovery will need to be considered. Attached as Appendix C are comments by the New York State Association for Solid Waste Management (NYSASWM) on the new State Plan. The NYSASWM represents local public solid waste managers across the state.

## 6. D. New Landfill Development

It was difficult and costly for Otsego County to conduct a site selection study for a countywide landfill in the mid-1980s. Due to the complexity of the site selection process, it certainly will be more difficult for the County to conduct a site selection process and to eventually develop a countywide landfill facility 20 years later. However, if the County decides that it should pursue the long-term development of disposal capacity for non-recyclable waste generated within the borders of Otsego, it is possible that successful development of a County facility could occur.

As indicated in the now 20 year old Barton and Loguidice study, a 45,000 tons per year disposal facility appears to be adequate for the County of Otsego. For the purpose of this study, it is assumed that if landfill development is pursued, it would be only for waste generated within the borders of the County of Otsego to dispose of approximately 45,000 tons of mixed solid waste annually.

Certainly, DEC rules and regulations for the development of landfills have become stricter during the past two decades. While this is the case, the extensive work conducted on the evaluation of multiple sites within the borders of Otsego County will become critical information if site selection analysis commences once again. In order to progress in the site selection phase, an engineering firm would need to be hired by the County to conduct the necessary site selection criteria. It is expected that the initial cost of this phase would be lower since reuse of parts of previous studies conducted on this issue would occur. Previous study information will be very useful for the selected consultant as an updated site selection study is underway.

### Countywide Landfill

If the County chooses to pursue the development of a landfill within the borders of the County, that decision will impact the solid waste management plan for other aspects of the system. For example, if the landfill is located in a central area of the County, the location might impact future construction improvements needed at the transfer stations. Possibly, depending on location, waste might be directly hauled to the County landfill instead of being routed through the Northern or Southern transfer stations. If the throughput of processed waste at the transfer station is significantly altered, it is possible that the need for substantial improvements at transfer station would be eliminated or greatly reduced since some waste could be directly hauled to the landfill property.

While the direct haul of some refuse to the County landfill might occur, the existing system of rural drop-off centers could certainly continue. It is still envisioned that most refuse will be processed at these drop-off station centers or at the two larger transfer stations. If a 45,000 tons per year landfill facility

was developed, most waste would be processed at either a drop-off center or transfer station, and the remaining number of trucks going directly to the landfill would create minimal traffic impacts in and around the proposed landfill site.

Many issues would be considered as the countywide landfill concept is evaluated. One issue would be the treatment of landfill leachate at a wastewater treatment facility. A preliminary analysis is that the Oneonta wastewater treatment facility would be large enough to treat all leachate generated at a County landfill facility. Regardless of the location of the selected site, the distance to haul landfill leachate to the Oneonta wastewater treatment facility would appear to be manageable.

### Private C&D Landfill

During January 2009, Gerhardt representatives met with Waste Recovery Enterprises (WRE) to discuss their plans to operate a private Construction and Demolition (C&D) landfill in the Town of Unadilla. WRE developed a 3-acre C&D landfill that is currently not operational since the Town of Unadilla adopted a law preventing operation of the facility. The facility was issued a DEC permit (currently expired), but the owner states that if the local law issues were resolved, the permit could be reinstated. WRE states that the site has capacity to accept up to 100,000 tons of C&D waste.

If Otsego County chooses not to implement their own landfill disposal facility, it will result in all solid waste collected at the drop-off centers and transfer stations being exported to disposal facilities outside the area. If the export option were chosen as the preferred method for long-term solid waste management, the development of a private C&D disposal facility would complement the Otsego system. Less export of C&D waste would result in less transfer and disposal fees for the County and their system users. In the export scenario, a complimentary privately operated C&D disposal facility could benefit Otsego County.

However, if Otsego County developed their own 45,000 tons per year solid waste landfill facility, a private C&D facility processing upwards to 25% of the waste would not be beneficial to the County. It is expected that the County landfill facility would need tipping fee revenue to operate and the cost per ton to process waste would certainly increase if the C&D waste component was not processed at the new

County landfill. Staffing at the County landfill and required equipment would be the same if 30,000 or 45,000 tons per year were processed. Therefore, the competition from a private C&D facility would undoubtedly drive up tipping fees for users of the new landfill. If the County develops a landfill site, a private C&D facility should be discouraged.

#### Landfill Development: Next Steps

It would be ideal for the County to have its own landfill disposal facility. It would stabilize costs over the long term, eliminate the impact of fuel price hikes, eliminate the risk of constricting disposal capacity, and virtually eliminate long term environmental risks for Otsego County waste generators. However, the County must be very clear in their understanding that the identification and evaluation of potential sites, the completion of the SEQRA and permitting processes, the adjudicatory hearing process, and the ultimate development of a new landfill represents an enormous undertaking that must be backed by an unwavering policy commitment and a willingness to spend funds for many years before the facility can open. It may be possible that the process could be somewhat streamlined because of previous studies, but undoubtedly complications in the permitting of new landfill facilities Statewide have repeatedly proven that obtaining a permit to construct any solid waste disposal facility is a multiyear effort. As a point of reference, the Oneida –Herkimer Solid Waste Authority spent over 12 years and \$13 million to complete the SEQRA and permitting process and another three (3) years and \$31 million to build the newest landfill in New York State [it is a 1000 ton per day, 250,000 ton per year facility].

If the County decides that it is in their best interest to pursue the development of a landfill within the County borders, a Request for Proposals would need to be prepared to revisit the site selection process. It is conceivable that this process could commence in 2010 in order for the County to have updated information on the feasibility of developing a countywide landfill. During the site selection phase, preliminary cost estimates for the construction and operational cost of a countywide landfill would need to be developed. It is outside of the scope of this Gerhardt analysis to provide cost estimates for landfill development.

As the site selection process unfolds, the County will have detailed information available in order to make a decision on whether the site selection process should continue for eventual development of a countywide landfill facility. The exportation of waste to landfills outside of the County has both a transportation and disposal fee. The exporting total cost or disposing within County borders would need to be evaluated during the site selection process.

Exportation contracts for transport and disposal of Otsego solid waste will continue for the foreseeable future even if site selection is aggressively pursued.

#### 6. E. New Waste to Energy

A waste to energy facility produces steam and, typically, electricity from combustion of municipal solid waste. The major benefit of a waste to energy facility, beyond any revenue through the sale of the steam and/or electricity, is the reduction in waste volume to be disposed of in a landfill facility. Potential drawbacks include the negative public perception of these types of facilities, stringent air emissions regulations, and the relatively large expense associated with the construction of these facilities. While the construction of a waste to energy facility may be comparable to constructing a landfill facility for a similar waste stream, the costs are compounded by the fact that a landfill facility is still required for ultimate disposal of the ash that is a byproduct of the incineration process. Waste to energy facilities also present a fairly large operating cost as they typically are in operation 24 hours a day, 7 days a week. These drawbacks have led to a decline in the number of new waste to energy facilities built in the U.S. According to the Environmental and Energy Study Institute, a waste to energy facility has not been constructed in the U.S. since 1996.

Nonetheless, a preliminary cost estimate has been prepared for the hypothetical construction of an Otsego County waste to energy facility sized at a nominal installed capacity of 110 tons per day. These preliminary cost estimates were based on a cost of \$152,800 per installed ton of capacity. This is a number derived from the average cost of a number of similar facilities inflated to 2009 dollars. Other costs include \$3 million for siting, permitting, and engineering costs, which are extremely difficult to predict and could easily double or triple in costs if the project were to encounter substantial legal

challenges. Due to the unpredictable nature of siting and permitting for this type of facility, a contingency of 30% was added to the total capital costs for the cost estimate. It was assumed a debt repayment period of 20 years would be applied to this magnitude of a project at an interest rate of 5%. Operations and maintenance cost per ton data from a 200 TPD facility were used to estimate the annual O&M costs at \$1.65 million. Other costs included were transportation and landfill disposal costs for the ash at \$65 per ton. Electricity generation revenues were calculated based on a generation rate of 400 kilowatt-hours per ton and a power sales price of \$0.05 per kilowatt-hour. Once the revenue from electricity sales is subtracted from the annual debt service and O&M costs, the average annual net cost over the 20 year period is approximately \$4.8 million which equates to approximately \$146 per ton of MSW in 2009 dollars, based on processing 33,000 tons per year of municipal solid waste.

#### 6. F. Other Feasible Technologies

Due to the County's relatively small waste stream, many of the emerging waste management technologies are simply not feasible at the required scale. This small waste stream does, however, lend itself to certain waste management technologies which are more scalable, require a smaller investment in technology, and have fewer permitting obligations. A good example of these technologies is composting. Composting is a waste management technique which can be performed at many different levels and varying degrees of complexity. Three examples of composting facilities are presented below.

##### Yard Waste Composting

Yard waste composting facilities are typically operated in a windrow arrangement, in which yard waste is arranged in long, narrow piles, and periodically turned or mechanically aerated to introduce air and water to the mix to encourage breakdown of the material. These types of systems require minimal infrastructure investment and can be operated under a registration rather than a permit if limited to 10,000 cubic yards of yard waste per year. Based on a typical percentage of MSW as yard waste of 4.5%, the needs of Otsego County could easily be met with this size of a facility.

Collection of the yard waste would most likely consist of a central drop off location for residents, preferably at the composting facility itself. Some municipalities have had great success in collection of

the materials by providing residents who bring yard waste with coupons for compost mulch at the end of the cycle. In more urban areas, residents could also be given the option of simply leaving their yard waste in a pile at the curb, where it could be loaded into a municipally owned vehicle for transport to the facility. For the purpose of the cost estimate outlined below, it was assumed that the material would be transported to the facility by the residents.

Costs associated with construction of such a facility include the clearing and leveling of an area of approximately 4 acres, placement of an operations pad constructed of crushed stone or pavement millings, and construction of a stormwater pond equipped with a pump for application of stormwater to the piles. Equipment must also be purchased for operation of the facility. This typically includes a windrow turner, a wheeled loader, a mulch screen, and a dump truck. This allows for the rows of material to be turned, maintained, screened for size and impurities, and hauled to a distribution point or final destination. Once the compost has been finished, it can be used as a landscaping mulch or soil amendment. Typically, the material is given away to residents for free or for a small fee if they provide their own transportation, or used within the County on municipal projects. If the quality of the finished product can be ensured, it could also be sold as commercial compost.

The total cost of the facility, including construction, permitting, engineering and contingencies was estimated to be approximately \$875,000, with new equipment purchases comprising approximately 80% of this cost. It was assumed that this cost would be financed over a 10 year period at an interest rate of 5%. O&M costs were estimated to be approximately \$79,000/year, based on the equipment operating costs and one full time and one half time employee. No revenue was applied from the end use of the material. The average annual cost for the facility over the 10 year period was estimated at \$204,000 which equates to a cost of \$138 per ton of yard waste in 2009 dollars, based on handling 1,485 tons per year of yard waste. If used highway department equipment can be utilized to avoid the expense of purchasing new equipment for this compost operation, then over the 10 year period the average cost per ton of yard waste could change from \$138 to as low as \$73.

## Organic Waste Composting Facility

Another option for waste composting within the County would involve composting of the entire organic waste stream. This would include yard waste, as well as food scraps and paper waste. While these systems are effective for removal of up to 20% of the total waste stream prior to landfilling, they do present challenges beyond that of a yard waste composting facility. The first challenge is collection of the material. While yard wastes are typically collected and bagged separately by residents as a matter of habit, it is generally more difficult to rely on the public for source separation of all organic materials. As the range of materials collected is broadened, so is the probability of the collected material being contaminated with a non-compostable or hazardous substance, rendering it useless as marketable compost, and in worst cases, a composted material that must be disposed in a landfill.

Mixed organic wastes have also proven difficult to collect at a central location. The food waste is the most difficult waste stream to collect, store and transport due to the water weight contained within the waste and the odors. Once collected and transported to the composting facility, the organic waste presents yet another challenge due to odors produced during the composting process. The moisture content, material balance, and aeration must be monitored very closely in order to avoid odor issues. For this reason, mechanized aeration systems are typically employed at facilities accepting mixed organic waste. Depending on the balance of nitrogen-rich and carbon-rich materials received at the facility, bulking agents such as wood chips may need to be procured and mixed into the piles in order to maintain the correct balance for timely breakdown of the materials.

Although different enclosed and automated systems are available for this type of composting, the most cost effective method at this scale is the windrow composting method. The costs associated with this type of facility are similar to the yard waste facility costs. Additional costs associated with this facility include an upgrade from a gravel surface to a paved surface in order to contain runoff, the use of a tub grinder to prepare the material for composting, the use of a mechanized aerating system, and the procurement of wood chips as a bulking agent as discussed above. A larger facility was also assumed, due to the increase in accepted material, the need for an organic waste mixing pad, and additional curing area.

The total cost of the facility, including construction, permitting, engineering and contingencies was estimated to be approximately \$3.2 million, with new equipment purchases comprising approximately 30% of this cost. It was assumed that this cost would be financed over a 10 year period at an interest rate of 5%. O&M costs were estimated to be approximately \$103,000/year in 2009 dollars, based on the equipment operating costs, one full time and one half time employee, and the purchase of bulking material. No revenue was applied from the end use of the material. The average annual cost for the facility over the 10 year period was estimated at \$538,000 which equates to approximately \$81 per ton of compostable organic waste, based on handling 6,600 tons per year of organic waste. If used highway department equipment can be utilized to avoid the expense of purchasing new equipment for this compost operation, then over the 10 year period the average cost per ton of compostable organic waste could change from \$81 to as low as \$62.

### Small Scale In-Vessel Composting

Another composting option would be the development of a small scale in-vessel composting project. This system would likely work best as a pilot-project type system in cooperation with a local university, school, or hospital. The program would include composting of the entire organic waste stream, with a focus on food waste from the dining facilities. This could be done using a pre-packaged in-vessel composting system that automatically aerates the waste and requires minimal upkeep by personnel. Since compost streams heavy with food waste tend to create odor issues, the in-vessel systems work well for these types of applications by minimizing odor migration.

Construction costs associated with this type of system are relatively low, although the amount of organic material they can process is significantly less than the windrow composting method. A two-vessel system, complete with aeration system and bio-filter can handle up to 300 pounds per vessel per day. Typically only 300 pounds is input per day so that the vessels can be used on an alternating basis to let one batch of compost “finish” while the second vessel is being filled. A typical two-vessel system costs just under \$18,500. Other costs associated with installation include the construction of a concrete pad

and installation of electrical service. Operational and maintenance costs include the cost of electricity, the services of one employee for approximately 5 hours per week to load organic waste into the vessel, and the minimal use of bulking agents to speed the composting process.

The total cost of the facility, including construction, permitting, engineering and contingencies was estimated to be approximately \$30,000 in 2009 dollars. It was assumed that this cost would be financed over a 5 year period at an interest rate of 5%. O&M costs were estimated to be approximately \$4,000/year, based on the equipment operating costs, one part time employee, and the purchase of bulking material. No revenue was applied from the end use of the material. The average annual cost for the facility over the 5 year period was estimated at \$11,300 which equates to approximately \$206 per ton of compostable organic waste, based on handling 55 tons per year of organic waste.

## 7. FINAL RECOMMENDATIONS

We have completed a review and evaluation of the past and current solid waste management services being provided to Otsego County including the function of the Montgomery-Otsego-Schoharie Solid Waste Management Authority. We have reviewed the MOSA's finances and future service plans as well as the County's obligations to the MOSA, including responsibility for post closure monitoring and maintenance of closed landfills currently owned by the MOSA. We have evaluated future options for the County to dispose of waste including the possibility of an intermunicipal agreement with a neighboring public system. During this evaluation process we have consulted with representatives of Montgomery County, Schoharie County and the MOSA. Based on this review and evaluation process, we believe that the following recommendations chart the best course of action for Otsego County.

1. Provide solid waste management services as an independent County function starting in 2011.
2. Complete the legal work necessary to satisfy the reversion provisions for the Northern and Southern transfer stations. Ideally the Northern transfer station should be configured to accept haulers in addition to individual generators. A design program can be developed to serve as a

basis to retain a professional engineer to prepare any plans and specifications necessary for the transfer station upgrades. A capital cost cap should be established by the County equivalent to the amount previously used as the hauler subsidy (approximately \$500,000).

3. Secure a five (5) year disposal contract to commence 1/1/2011. [A 5 year agreement will allow for a regular reevaluation of options]. Once the County has approved a new service agreement that confirms their withdrawal from the MOSA for ongoing solid waste management services and that confirms the County's commitment to provide these services on an independent basis, the County should meet with representatives of neighboring public systems to determine the price and any volume limits for an intermunicipal disposal agreement. This can be compared to the market price for disposal at a private facility to determine which is the best deal for Otsego County. If a private deal is better, a competitive bid will be necessary. Then, the County will need to prepare a request for proposals/bid to start in 2011. [A bid for transportation services from the Northern and Southern Transfer Stations will be required in any case]. Either as part of the first 5 year disposal contract (2011-2015) or in the contract which would start in 2016, the County can consider a proposal from prospective disposal facilities that may provide a service for MSW or construction and demolition debris (C&D), such as the potential C&D disposal site in the Town of Unadilla. For C&D the County will have to determine the feasibility of separating C&D from the rest of the waste stream and the associated cost of transport.
4. Continue the process of working with the MOSA to defease the MOSA bonds using MOSA reserves by a target date of January 2010.
5. Continue the process of working with Montgomery and Schoharie Counties to execute a post closure agreement to satisfy the Counties' long term responsibilities at the closed landfills.
6. Continue the process of working with Montgomery and Schoharie Counties and the MOSA to replace the 1989 service agreement with a new service agreement that defines how Otsego County will provide solid waste management services in the future as well as the County's relationship to Montgomery and Schoharie Counties and the MOSA. A critical component of the

new service agreement will be the method of valuing and then allocating the MOSA assets. Otsego County should receive at no charge the transfer stations, all transfer station operating equipment, the County's share of the MOSA's net reserves, and all other funds, property, materials and supplies currently utilized by the MOSA in providing services to Otsego County.

7. Continue the solid waste unit charge and consider periodic increases to reflect increased costs for recycling and transfer station overhead.
8. Continue recycling as that service is currently provided. Do not build a materials recovery facility.
9. Prepare a newsletter to all haulers and hold a meeting for all haulers to explain upcoming changes, the discontinuation of the subsidy payments, the planned upgrades to the transfer stations, how services will be handled in 2010, and the fact that starting in 2011 the charge to haulers at the transfer stations will be a pass through of the cost of transfer and disposal.
10. Complete a survey of large institutional/commercial generators of food waste [i.e., colleges, hospitals, public schools, prisons] to determine the volume of food waste being generated and to evaluate the potential for separation from nonrecyclable waste and recovery through composting or some other means. This could explore the potential for processing at the site of generation, grouping generators geographically, or transporting food waste to a single central processing facility.
11. There would be a significant advantage for the County to have its own public disposal facility. Very few communities are willing or able to confront the time, cost and opposition involved in developing a new disposal facility. However, if the County can establish a strong commitment to pursue the development of a new disposal facility [which would need to include the allocation, over the course of several budget years, of all the funds necessary for site selection, testing, compliance with the SEQRA, and regulatory permitting] then this would produce significant long term economic and environmental benefits for the County.

12. These recommendations, apart from the development of a new disposal facility, do not rely on the enactment of flow control. However, as the recommendations are implemented, conditions should be monitored and if necessary flow control can be considered at a future time.

# APPENDIX A

**Montgomery-Otsego-Schoharie  
Solid Waste Management Authority**

**Plain Language Explanation**

**of**

**Reserve Funds**

**December 2008**

## Introduction

Like any borrower, public or private, big or small, the assets and income (revenue) of a borrower, like MOSA, are legally subject to the privileged claims of the lender (bondholders). Often this is either by mortgaging the assets and/or requiring additional financial commitments from a borrower's savings to guarantee the lender the good possibility of future payback of principal and interest.

MOSA is a public authority set up by the State of New York to construct and operate waste management facilities by borrowing through bonds (binding agreements to repay). The payback of bond principal and interest is financed by the fees, charges, rentals and other payments received as the result of the operation of its facilities.

The financial commitments of MOSA and the Participating Counties to the bondholders (lenders) involves privileged claims on MOSA's physical assets, the setting aside of reserves (savings) for certain purposes along with legally binding agreements between the principal parties (Participating Counties and MOSA) to give confidence to the bond market that MOSA will and can payback interest and principal over the long term from the revenues associated with the effective use of its facilities and services.

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The establishment of reserves in several funds serves the purposes of:

- (1) providing bond holder confidence in future payments,
- (2) supporting operations of the Authority under volatile and uncertain market conditions, and
- (3) providing for maintenance, replacement, and renewal of Authority equipment and facilities.

Authorizations for funds and control of funds may vary.

Operational control of various reserve funds is with either (1) the Bond Trustee, or (2) the MOSA Board.

MOSA's reserve funds are authorized/required under two conditions:

First, under the Public Authorities Law:

§ 2041-d. paragraph 15 requires MOSA payment of "the principal and interest on the bonds of the authority, together with the maintenance of proper reserves therefore"; "paying ... the expenses of operating and maintaining the properties of the authority, together with proper reserves for debt service, depreciation, maintenance and contingencies and all other obligations and indebtedness of the authority".

Second, under a *Trust Indenture* (a formal agreement between an issuer of bonds and the bondholders/purchaser of the bonds) containing provisions for the protection of bondholders.

Requirements for MOSA reserves under the Trust Indenture are of two kinds:

- a. Specific requirements for defining the purposes, operations and calculations of the amounts of reserve funds MOSA must maintain.
- b. General requirements allowing some MOSA Board Resolution determination, after consultation with and recommendations from Management and consultants, of the purposes, operations and amounts of some reserves.

There are links between some of the funds by rules of the *Trust Indenture* or Board Resolutions. After year-end review of fund balances, transfers are made to assure the proper funding of reserves.

Reserve funds are reviewed monthly by the Governing Board and are audited annually by independent external auditors.

The following are MOSA reserve funds and their characteristics:

### Debt Service and Sinking Fund

*Authorized and required by: the Public Authorities Law and Section 5.07 of the Trust Indenture*

**Purpose:** Payment of Principal and Interest on Bonds

**Controlling agent:** Trustee of the Bondholders

**Amount in Funds (2008):** varies between \$0 - ~\$1,872,000

**Regulated by Trust Indenture as follows:**

Monthly payments from MOSA revenues are made to the Bond Trustee to be placed into this fund so that after the fund has accumulated for six months, the required semiannual payments of principal and interest may be made to the bondholders. The fund fluctuates based upon monthly contributions and semiannual payments.

### Debt Service Reserve

*Authorized and required by: the Public Authorities Law and Section 5.08 of the Trust Indenture*

**Purpose:** Reserve funds for the payment of Principal and Interest on Bonds should a MOSA revenue shortfall compromise possible payment of operating expenses and debt obligations at the same time.

**Controlling agent:** Trustee of the Bondholders

**Amount in Fund:** For Series 1994A/ 2005D Bonds - \$150,067.50; For 2003 Series - \$1,823,500.00

**Regulated by Trust Indenture as follows:**

Amounts are to be reserved for each series of bonds. Interest from these invested reserve funds is swept into the Debt Service and Sinking Fund by the Bond Trustee to help pay current year principal and interest.

### **Bond Redemption and Improvement Fund**

*Authorized and required by: the Public Authorities Law and Section 5.10 of the Trust Indenture*

*Purpose:* (a) to pay the cost of Authority Facilities; (b) to meet unanticipated Operating Expenses or to restore an operating reserve of the Authority; (c) to pay the cost of or repay any loans for renewals / replacements / extraordinary maintenance of Authority Facilities; (e) to pay other debts of the Authority incurred in connection with the Processing of System Solid Waste; (f) to purchase, defease or otherwise redeem any Bonds of any series at a price.

*Controlling agent:* Trustee of the Bondholders

*Amount in Fund (as of 12/31/08):* 5% of operating expenses. - ~\$493,000; proceeds - ~\$1,267,000

*Regulated by Trust Indenture as follows:*

This fund includes 5% of Authority operating expenses, beyond the amounts for debt service and depreciation, along with proceeds from the sale, condemnation, insurance recovery or other reimbursement, for Authority equipment or facilities purchased or built with bond funds.

### **Operating Reserve Fund**

*Authorized by: the Public Authorities Law; the Trust Indenture; and Resolution 51 of 2002*

*Purpose:* to address the financial uncertainties from decisions on tipping fee subsidies, flow control, districting, or other alternatives, made by one or more of the Counties that would affect the flow of waste to the Authority and thus the revenues it could generate from that waste flow, in any one year.

*Controlling agent:* Authority Board

*Amount in Fund (as of 12/31/08):* ~\$2,632,797

*Regulated as follows:*

Calculated essentially according to the size of the operating budget minus debt service, variable costs (to include transportation and disposal costs) and amounts in the Bond Redemption and Improvement Fund.

### Equipment Replacement Fund

*Authorized and required by: the Public Authorities Law; the Trust Indenture Section 5.14 and Resolution 90 of 2000*

*Purpose:* the replacement of operating equipment at the end of its useful life. Equipment such as yard and road tractors, leachate and equipment transport trailers, roll-off boxes, loaders, mowers, leachate pumps and tanks, vehicles, tip floor grapples, computers and office equipment are purchased through this fund.

*Controlling agent:* Authority Board

*Amount in Fund (as of 12/31/08):* ~\$899,909

*Regulated as follows:*

Contributions are made to the fund for each piece of equipment during each year of its useful life together with earnings. Contributions are used to replace the equipment at the end of its useful period. Either IRS schedules for useful life or MOSA experience are used for calculation of replacement schedules. Actual equipment replacement sometimes takes place earlier than scheduled or later due to equipment failure or endurance.

### Buildings and Grounds Fund

*Authorized and required by: the Public Authorities Law; the Trust Indenture Section 5.14 and Resolution 91 of 2000*

*Purpose:* provide monies for major buildings and grounds projects such as road and trailer area repaving, building repairs and improvements, tip floor repairs, etc..

*Controlling agent:* Authority Board

*Amount in Fund (as of 12/31/08):* ~\$536,905

*Regulated as follows:*

Contributions are made to the fund for each project during each year of its useful life along with earnings. The funds are used for major repairs required at the end of the useful life of the identified improvements. Actual repairs sometimes take place earlier than scheduled or later due to actual need.

### **Rate Stabilization Fund**

*Authorized and/or required by: the Public Authorities Law; the Trust Indenture; and Resolution 97 of 1990*

*Purpose:* a general reserve to receive end of year transfers from revenues not spent on operations and freed from the Bond Indenture and against which deficits, unbudgeted expenses, major projects, remedial action on facilities, and future liabilities like funding mandated landfill post closure monitoring and maintenance. Current post closure obligations between 2015 and 2030 are estimated by outside engineers to total ~\$2,300,000 and are updated annually.

*Controlling agent:* Authority Board

*Amount in Fund (as of 12/31/08):* ~\$3,086,800

*Regulated as follows:*

End of the year transfers are made to and from the Rate Stabilization Fund, according to the rules of the Trust Indenture and Resolutions of the Governing Board, to make sure all other Indenture and Authority Funds are made whole. The Authority Board then has discretion over this fund.

# APPENDIX B

**MOSA Solid Waste System Revenue Refunding Bonds, Series 2003 and 1994 EFC Bonds**

Cash Defeasance

1-1-10

**Escrow Fund Cashflow**

Date	Principal	Rate	Interest	Receipts	Disbursements	Cash Balance
01/01/2010	-	-	-	0.92	-	0.92
05/15/2010	449,403.00	0.320%	527.95	449,930.95	449,931.25	0.62
07/01/2010	120,659.00	0.380%	23,941.28	144,600.28	144,600.00	0.90
01/01/2011	1,891,052.00	0.520%	33,547.39	1,924,599.39	1,924,600.00	0.29
07/01/2011	85,286.00	0.730%	23,713.92	108,999.92	109,000.00	0.21
01/01/2012	1,930,598.00	0.950%	23,402.63	1,954,000.63	1,954,000.00	0.84
07/01/2012	57,867.00	-	14,232.29	72,099.29	72,100.00	0.13
01/01/2013	1,977,868.00	-	14,232.29	1,992,100.29	1,992,100.00	0.42
07/01/2013	19,468.00	-	14,232.29	33,700.29	33,700.00	0.71
01/01/2014	1,704,467.00	1.670%	14,232.29	1,718,699.29	1,718,700.00	-
<b>Total</b>	<b>\$8,236,668.00</b>	<b>-</b>	<b>\$162,062.33</b>	<b>\$8,398,731.25</b>	<b>\$8,398,731.25</b>	<b>-</b>

**Investment Parameters**

Investment Model [PV, GIC, or Securities]

Default investment yield target	Securities Bond Yield
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Cash Deposit

Cost of Investments Purchased with Bond Proceeds	0.92
Total Cost of Investments	8,236,668.00
	\$8,236,668.92

Target Cost of Investments at bond yield

Actual positive or (negative) arbitrage	\$8,398,731.25
	162,062.33

Yield to Receipt

Yield for Arbitrage Purposes	0.8481251%
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State and Local Government Series (SLGS) rates for

2/04/2009

**MOSA Solid Waste System Revenue Refunding Bonds, Series 2003 and 1994 EFC Bonds**

Cash Defeasance

1-1-10

**Escrow Summary Cost**

Maturity	Type	Coupon	Yield	Price	Par Amount	Principal Cost	+Accrued Interest	= Total Cost
<b>Escrow</b>								
05/15/2010	SLGS-CI	0.320%	0.320%	100-.000000	449,403	449,403.00	-	449,403.00
07/01/2010	SLGS-CI	0.380%	0.380%	100-.000000	120,659	120,659.00	-	120,659.00
01/01/2011	SLGS-CI	0.520%	0.520%	100-.000000	1,891,052	1,891,052.00	-	1,891,052.00
07/01/2011	SLGS-NT	0.730%	0.730%	100-.000000	85,286	85,286.00	-	85,286.00
01/01/2012	SLGS-NT	0.950%	0.950%	100-.000000	1,930,598	1,930,598.00	-	1,930,598.00
07/01/2012	SLGS-NT	-	-	100-.000000	57,867	57,867.00	-	57,867.00
01/01/2013	SLGS-NT	-	-	100-.000000	1,977,868	1,977,868.00	-	1,977,868.00
07/01/2013	SLGS-NT	-	-	100-.000000	19,468	19,468.00	-	19,468.00
01/01/2014	SLGS-NT	1.670%	1.670%	100-.000000	1,704,467	1,704,467.00	-	1,704,467.00
<b>Subtotal</b>					-	-	-	-
<b>Total</b>					-	<b>\$8,236,668</b>	<b>\$8,236,668.00</b>	<b>\$8,236,668.00</b>

**Escrow**

Cash Deposit	
Cost of Investments Purchased with Bond Proceeds	0.92
Total Cost of Investments	8,236,668.00
	<b>\$8,236,668.92</b>

Delivery Date

1/01/2010

**NYS EFC Bonds, Series 1994A**

\$1,641,400

**Debt Service To Maturity And To Call**

Date	Refunded Bonds	Refunded Interest	D/S To Call	Principal	Coupon	Interest	Refunded D/S
05/15/2010	435,000.00	14,931.25	449,931.25	-	-	14,931.25	14,931.25
11/15/2010	-	-	-	100,000.00	6.800%	14,931.25	114,931.25
05/15/2011	-	-	-	-	-	11,531.25	11,531.25
11/15/2011	-	-	-	105,000.00	6.850%	11,531.25	116,531.25
05/15/2012	-	-	-	-	-	7,935.00	7,935.00
11/15/2012	-	-	-	110,000.00	6.900%	7,935.00	117,935.00
05/15/2013	-	-	-	-	-	4,140.00	4,140.00
11/15/2013	-	-	-	120,000.00	6.900%	4,140.00	124,140.00
<b>Total</b>	<b>\$435,000.00</b>	<b>\$14,931.25</b>	<b>\$449,931.25</b>	<b>\$435,000.00</b>	<b>-</b>	<b>\$77,075.00</b>	<b>\$512,075.00</b>

**Yield Statistics**

Base date for Avg. Life & Avg. Coupon Calculation	1/01/2010
Average Life	2.447 Years
Average Coupon	6.8825713%
Weighted Average Maturity (Par Basis)	2.447 Years

**Refunding Bond Information**

Refunding Dated Date	1/01/2010
Refunding Delivery Date	1/01/2010

**MOSA Solid Waste System Revenue Refunding Bonds, Series 2003**

Refunding of MOSA Series 1993 A&B

Final Pricing 3-25-03

\$18,235,000

**Debt Service To Maturity And To Call**

Date	Refunded Bonds	Refunded Interest	D/S To Call	Principal	Coupon	Interest	Refunded D/S
07/01/2010	-	144,600.00	144,600.00	-	-	144,600.00	144,600.00
01/01/2011	1,780,000.00	144,600.00	1,924,600.00	1,780,000.00	4.000%	144,600.00	1,924,600.00
07/01/2011	-	109,000.00	109,000.00	-	-	109,000.00	109,000.00
01/01/2012	1,845,000.00	109,000.00	1,954,000.00	1,845,000.00	4.000%	109,000.00	1,954,000.00
07/01/2012	-	72,100.00	72,100.00	-	-	72,100.00	72,100.00
01/01/2013	1,920,000.00	72,100.00	1,992,100.00	1,920,000.00	4.000%	72,100.00	1,992,100.00
07/01/2013	-	33,700.00	33,700.00	-	-	33,700.00	33,700.00
01/01/2014	1,685,000.00	33,700.00	1,718,700.00	1,685,000.00	4.000%	33,700.00	1,718,700.00
<b>Total</b>	<b>\$7,230,000.00</b>	<b>\$718,800.00</b>	<b>\$7,948,800.00</b>	<b>\$7,230,000.00</b>	<b>-</b>	<b>\$718,800.00</b>	<b>\$7,948,800.00</b>

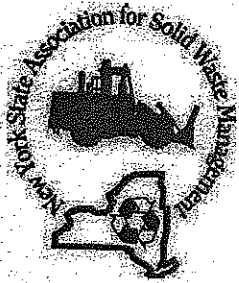
**Yield Statistics**

Base date for Avg. Life & Avg. Coupon Calculation	1/01/2010
Average Life	2.485 Years
Average Coupon	4.0000000%
Weighted Average Maturity (Par Basis)	2.485 Years

**Refunding Bond Information**

Refunding Dated Date	1/01/2010
Refunding Delivery Date	1/01/2010

# APPENDIX C



# NEW YORK STATE ASSOCIATION FOR SOLID WASTE MANAGEMENT

Established 1975

## PRESIDENT

Mike Wolak  
Oneida-Herkimer SWA

## VICE PRESIDENT

Cindy G. Livingston  
Fulton County

## TREASURER

Eric D. Swanson, Esq.  
Town of Oyster Bay

## SECRETARY

Frank Visser, P.E.  
Oswego County

## AT LARGE DIRECTOR

Paul F. Dikken, P.E.  
Barton & Loguidice, P.C.

## AT LARGE DIRECTOR

Robert Phaneuf, P.E.  
NYS DEC

## AT LARGE DIRECTOR

Deniz Lynch  
Deer Park

## AT LARGE DIRECTOR

James Hall, P.E.  
Cashin Associates

## DIRECTOR SOUTH REGION 1

Martin Bellow  
Yonkers

## DIRECTOR SOUTH REGION 2

Richard T. Ronan  
Town of Hempstead

## DIRECTOR EAST REGION 1

Mario Parise  
Westchester County

## DIRECTOR EAST REGION 2

Matthew McGarry  
Town of Colonie

## DIRECTOR NORTH REGION 1 & NEWSLETTER EDITOR

Jeff Bouchard  
Fulton County

## DIRECTOR NORTH REGION 2

William Safford  
Dev. Auth. of the North Country

## DIRECTOR CENTRAL REGION 1

James Zocco  
Madison County

## DIRECTOR CENTRAL REGION 2

Tom Rhoads  
Orangetown County RRA

## DIRECTOR WEST REGION 1

Steve Orcutt  
Stauben County

## DIRECTOR WEST REGION 2

Vacant

## LEGISLATIVE CHAIR

Kevin Voorhees  
Barton & Loguidice, P.C.

## WEBMASTER

Vincent Nykfel

## PAST PRESIDENTS

Joseph Siodoridge, P.E. 2005-2008  
Jeff Bouchard 2003-2005

James V. Blomonte 2001-2003

Sharon Lila 1997-2001

George Bevington 1995-1997

Eric D. Swanson, Esq. 1993-1995

Hans G. Arnold 1991-1993

James H. Hell, P.E. 1989-1991

Charles F. Miles, Jr. 1987-1989

Michael Geph 1985-1987

Al Albanese 1983-1985

Robert H. Rorer 1981-1983

Victor H. Buckstad 1979-1981

Donald A. Devine 1977-1979

Howard F. Christensen 1975-1977

August 3, 2009

Edwin Dassatti, P.E.  
Director  
Division of Solid & Hazardous Materials  
NYS Department of Environmental Conservation  
625 Broadway – 9<sup>th</sup> Floor  
Albany, New York 12233-7250

**Subject: New State Solid Waste Management Plan (SWMP)**

Dear Mr. Dassatti:

On behalf of the New York State Association for Solid Waste Management (NYSASWM), I want to thank you for the opportunity to have our organization represented on the solid waste advisory group for the Department's effort to prepare a new State SWMP. As you know, our organization is comprised primarily of representatives of local public solid waste management programs, together with representatives of other solid waste management stakeholders, who support the development of solid waste management practices and policies that provide for the effective management of our solid wastes and promote protection of our environment and public health.

While we understand the importance of the State SWMP, it should be recognized that our members have been the principal driving force behind the development and implementation of local solid waste management plans, facilities and programs called for by the Solid Waste Management Act of 1988 and the current State SWMP. As we have learned of the proposed elements of the new State SWMP, we believe it is clear that local public systems will continue to be the primary vehicle to implement solid waste policy in New York State.

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P.O. BOX 13461, ALBANY, NY 12212 / E-MAIL: DAVE BLACKMAN, EXECUTIVE DIRECTOR  
NYSASWMDAVE@NYCAP.RR.COM  
WWW.NEWYORKWASTE.ORG

Member of THE FEDERATION OF NEW YORK SOLID WASTE ASSOCIATIONS  
Affiliate of The New York State Association of Counties

It is from this perspective that NYSASWM wishes to provide the Department with some recommendations regarding what we consider to be key components of the new State Solid Waste Management Plan.

1. The state should lead by example. All state agencies should be clearly mandated to reduce, reuse, recycle, educate and enforce and to follow the same rules that the Department is imposing upon local planning units and municipalities. For example:
  - a. State agencies should be required by Executive Order to:
    - i. Comply with local solid waste management plans,
    - ii. Comply with local solid waste management and recycling rules,
    - iii. Comply with local flow control requirements, and
    - iv. Submit recycling data to local solid waste planning units.
  - b. The Department should assign key existing staff at the Central Office to oversee the implementation of solid waste management and recycling facilities/programs for state agencies.
  - c. State agencies in each DEC Region should take the lead in developing facilities and programs that are consistent with the new State SWMP, and should work in cooperation with the local planning unit. In particular, the Department and its sister state agencies should take the lead in developing markets, infrastructure and programs within each DEC region to compost or digest organic waste materials such as food waste.
  - d. State agencies should set up and fund programs that increase the purchase of environmentally sound equipment, supplies and products to provide stable markets for vendors that sell products that conserve energy and natural resources, that don't contain difficult to manage materials at end-of-life, that have take back programs in place or that can be easily recycled or reused. Local governments should also be allowed to make similar purchases, such as through these state agency purchasing programs or other cooperative purchasing initiatives.
2. We agree that the Department should clarify that all waste generators in New York State are required to recycle, including apartment dwellers, businesses, industries, institutions, schools, and special events.
  - a. To strengthen this existing requirement, in addition to clarifying who is required to recycle, we recommend that legislation be enacted to authorize the state to either enforce local/state recycling requirements or to provide funding assistance for local recycling enforcement programs.
3. The state should take the lead in promoting a new environmental quality bond act that, if approved by the people of the State of New York, would help fund the new programs and facilities (for example, food waste composting facilities) called

for by the new State SWMP. Funding for new waste-to-energy facilities should be included in the new bond act, to promote energy independence and self sufficiency within the state.

4. Any new goals and mandates in the State SWMP must be accompanied by state funds to help local planning units develop whatever new programs and facilities may be required to achieve those goals and mandates.
5. We would only agree with elimination of the existing economic markets test for local recycling laws and programs if the state is statutorily required to be the market of last resort for recyclables or if the state is required to provide funding necessary to supplant any revenue shortfalls for local recycling programs.
  - a. The economic markets test set forth in existing law provides a measure of flexibility that is important to local municipalities. For example, the economic markets test allows for the consideration of local collection, transportation and marketing circumstances that can be vastly different across this state -- from the Adirondacks to New York City and Long Island to Niagara Falls and the southern tier.
  - b. If the state plans to establish a state-wide list of mandatory recyclables, then it needs to be a short list of recyclables that have a proven long term track record for being recycled and marketed by all waste generators in every corner of New York State. To do otherwise would result in unfunded mandates on some local governments and planning units, which would further exacerbate the economic advantages that private disposal facilities have when they do not provide and pay for integrated solid waste and recycling programs. In addition, the effective date for any such state-wide list of mandatory recyclables should be delayed to allow for local municipalities to develop any necessary infrastructure through their routine budget preparation and approval procedures.
  - c. If the state does not provide funding when needed to continue uneconomical portions of recycling programs, then it should not be allowed to enforce those recycling requirements.
6. Recycling enforcement by the state should be aimed at the waste generator and haulers, not disposal facilities and the local planning units.
7. The state solid waste management hierarchy should be revised as follows:
  - a. Self sufficiency for solid waste management at the state level, that prioritizes the principles of product stewardship, reduction, reuse and

recovery of materials and energy, should be the new hierarchy for solid waste management in New York State.

- i. Energy recovery within this revised hierarchy would include digester facilities that generate energy, mass burning energy-from-waste facilities, and landfills that recover energy.
  - ii. This revised hierarchy is consistent with national and state energy independence goals.
  - iii. This revision to the hierarchy also recognizes that planning units that take on the responsibility to develop integrated solid waste management facilities and programs within their planning units are helping the state move toward self sufficiency.
  - iv. In accordance with the mission statement for the NY Product Stewardship Council, the state's solid waste hierarchy should promote product stewardship, also known as extended producer responsibility, as the priority policy for solid waste management, thereby shifting our waste management system from one focused on government funded and ratepayer financed waste diversion to one that relies on product stewardship in order to reduce public costs and drive improvements in product and packaging design that promote environmental sustainability.
8. The per capita metric for measuring waste reduction and recycling programs in New York State is problematic at the local level due to the impacts of the general economy (e.g., less disposable income = less disposal), differences in tourism activities among the planning units, and other unique aspects of planning units (industrial growth or decline in a community, etc.). If this per capita metric is to be applied it should only be implemented on a state wide level, to provide a gross measurement over time of state initiatives to reduce waste requiring disposal. Per capita waste generation rates should not be applied at the local planning unit level.
9. The implementation of Pay-As-You-Throw programs is currently a local decision and it should remain as such. It should not be a new unfunded state mandate.
10. If the Department's SWMP includes a recommendation for implementation of a new state-wide requirement for permitting haulers, then we offer the following recommendations:

- a. Publicly owned vehicles should be exempt from any permit or registration requirements and fees.
  - b. Small business self-haulers (small roofing companies, for example) should also be exempt from permit requirements and fees.
  - c. Any state-wide permit system for haulers should be structured to provide the state with an effective means to enforce recycling requirements on haulers without burdening the local planning units.
  - d. The coverage for any such state-wide permit system for hauling will also need to provide clear consistent state-wide definitions of the types of waste and materials that are covered by the hauling permit requirements.
  - e. Any such permit program should require haulers to provide data on solid waste and recyclables collected within a planning unit to that local planning unit.
  - f. The program should be completely administered by the state, perhaps through the state's Department of Motor Vehicles to minimize the need for new staffing and administrative duties at the Department.
  - g. Any new state-wide hauler permitting program should not pre-empt local hauler licensing and permitting laws, which may have more stringent requirements than the state program. For example, some local licensing programs require extensive background checks to ensure that only companies of good character, honesty and integrity receive licenses to haul.
11. We do not support the imposition of a tip fee surcharge. We believe that state taxpayers and businesses are already taxed too much and should not be burdened any further with additional fees. We are also concerned that monies collected from such a tip fee surcharge would not be distributed in a timely fashion and would not stay within the local communities, which is where any such funding would be most needed to enhance local recycling programs.
- a. If a state tip fee surcharge is implemented it should NOT apply to facilities that are part of an integrated solid waste management system that currently charges a system tip fee at a transfer station or disposal facility. Those planning units are already, in effect, collecting a surcharge to pay for their local recycling programs and should not be required to pay a second surcharge.

- b. If a State tip fee surcharge is implemented, then for those facilities that are not part of an integrated solid waste management system, the tip fee surcharge that is collected should be sent to the planning unit from which the waste originated.
  - c. For waste originating outside of New York State, the tip fee surcharge collected for that waste should be sent to the disposal facility's planning unit.
  - d. For waste that is exported without passing through a permitted transfer station (i.e., for direct haul waste), to avoid creating an economic incentive for direct haul export the Department should collect a tip fee surcharge on such exported direct haul waste via a hauler licensing program. The funds collected should be sent to the planning unit from which the waste originated.
  - e. If a tip fee surcharge is implemented, all monies kept by the state must stay in a dedicated fund solely used for the advancement of solid waste management programs and facilities.
12. Flow control should continue to be a local decision, as should any decisions regarding public vs private collection.
13. The State SWMP should acknowledge that existing waste to energy and landfill disposal facilities have incorporated modern technologies that satisfy some of the most stringent environmental regulations in the country, and that those facilities have a strong track record of meeting all applicable environmental requirements.
14. The State SWMP should recommend regulatory changes that will promote alternative beneficial uses for ash residue from energy from waste facilities.
15. The State needs to have a consistent energy and environmental policy with regard to biomass facilities. Currently, the State energy policy promotes the development of biomass facilities that utilize materials such as yard waste and wood waste to generate energy. Federal legislation is also currently under consideration that would provide incentives to promote the development of such biomass facilities. The State SWMP's position regarding composting of organics should ensure that it is consistent with these other public policy developments, which appear to give priority to energy related uses of waste materials when compared to composting.

16. Public solid waste management facilities should not be required to satisfy a needs test. Determinations regarding the need for long term local disposal capacity are, and should remain, local planning unit decisions.
17. Local planning units have invested hundreds of millions of dollars since 1988 in solid waste management and recycling infrastructure. We are gathering data to prepare a summary chart of these local investments, which we will forward to you as soon as it is completed.
18. The State SWMP should continue to call for funding of local household hazardous waste programs, to continue to help reduce the toxicity of the waste stream requiring disposal in Part 360 facilities, and should expand the program's funding to include household medical waste.
19. The State should take responsibility for overseeing medical waste. This is not an area that local planning units should be responsible for – it is not within the purview of local planning units to manage medical waste.
20. Similarly, local planning units should not be required to be responsible for managing or accounting for sludges and other bio-solids that are not part of the general waste stream handled by local planning units. Determinations regarding which wastes are handled by a planning unit's facilities and programs should continue to be a local decision.
21. There should be no disposal bans without a feasible plan and the infrastructure in place that is needed to properly manage the banned materials.

The NYSASWM Board would like the opportunity to discuss these comments with Department staff that are currently working on the State SWMP. I will contact you shortly to discuss this with you, but please don't hesitate to give me a call at 315-733-1224 with any questions or to discuss. Thank you.

Sincerely,



Michael V. Wolak  
President

cc: Val Washington  
Resa Dimino  
Judy Drabicki