ONEIDA-HERKIMER SOLID WASTE AUTHORITY

Waste to Energy Analysis Report

June 21, 2007

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I. Introduction

It is the goal of the Authority to minimize the volume of waste which must be landfilled. Accordingly, the Authority favors any proven, reliable, environmentally sound and cost-effective technology to achieve resource recovery and waste reduction.

The Authority has clearly stated its waste processing technology policy in the Oneida-Herkimer Local Solid Waste Management Plan (LSWMP) adopted in 1991; "...the Authority finds that technology should be continually evaluated as it is advanced and improved. New waste processing technologies will continue to receive consideration as part of the overall system plan."

Since 1991, the Authority has continued to evaluate waste processing technologies that include, but are not limited to, the following:

1. Technical Feasibility Report – November 1992
2. Alternative MSW Processing Technologies Report - February 1993
3. Final Report on MSW Composting Technologies – August 1993
4. ERF Draft Future Options Report - April 1994
5. Response Report – November 1994
6. ERF Decision Report – January 1995
7. WLE-5 DEIS – January 1998
8. December 2003 Report on Waste Processing Technologies and RFP
9. Disposal Policy Evaluation (RW Beck) – May 2004

The findings of the above reports and recent investigations of emerging waste processing technologies have determined that the most reliable and environmentally sound system to process waste is a traditional mass burn waste to energy facility. The cost effectiveness of such a technology, in comparison to Oneida-Herkimer's current landfilling practices, can continue to be examined on a regular basis.

II. Scope

This report will evaluate the cost effectiveness of the Authority developing a new waste to energy facility to process and reduce the quantities of non-recyclable waste that are currently sent to the Authority's Regional Landfill.

The analysis of the waste to energy facility will be based on the following assumptions:

- Facility system to use traditional mass burn technology (i.e. field-erected waterwall incinerator)
- Facility to produce electric power only
- Facility to be constructed on a hypothetical "greenfield" site with no cost included for site or buffer zone acquisition
- No costs included for host community benefits
- No change to existing Authority transfer stations operations

III. Cost Estimates

Data was gathered from the WTE industry and operating WTE facilities, which resulted in estimated cost ranges for each component of a new WTE facility.

To determine the initial feasibility of a new WTE facility as part of the Authority's system, two cost estimates were developed as listed below:

1. Low Operating & Maintenance -High Revenue (the "Best Case" Scenario)

   Lower end of estimated costs for the O&M and ash disposal from the WTE facility, and higher estimated revenues from the sale of electricity and metals.

2. High Operating and Maintenance - Low Revenue (the "Worse Case" Scenario)

   Higher end of estimated costs for O&M and ash disposal from the WTE facility, and lower estimated revenues from the sale of electricity and metals.

Both estimates above included:

- A single cost estimate for the WTE project siting, permitting, construction and development.
- An assumed fixed quantity of processible waste will be delivered to the WTE facility annually for processing, based on the Authority's recent historical waste generation records.

IV. Methodology

The analysis of the cost effectiveness of a new waste to energy facility includes the following components:

1. Determination of types and historical/projected tonnages of waste generated in the Authority's system that can be processed by a WTE facility

2. WTE sizing, based on quantities of processible waste available, and the typical on-line reliability of WTE facilities

3. Estimated capital costs to construct a new WTE facility

4. Estimated soft costs (i.e. siting, engineering, legal and bond issuance)

5. Estimated operation and maintenance costs

6. Estimated ash hauling and disposal costs

7. Estimated electrical power generation and revenues

8. Net costs for a new WTE facility

9. Net impact of a new WTE facility operation on the current landfill budget

10. Comparison of estimated net cost per ton of waste disposal in a) a new WTE facility/Regional Landfill, versus b) the current Regional Landfill

V. Processible Waste Quantities

The categories of waste as shown in the table below were evaluated for their compatibility with a WTE waste processing system, to determine WTE facility sizing.

TONS PER YEAR DISPOSED OF IN THE AUTHORITY'S SYSTEM									
Waste Category	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**Average**	
Residential, Commercial and Non-Hazardous Industrial Waste	170,961	170,582	174,967	180,241	183,519	180,177	182,586	177,576	
Construction and Demolition Debris	57,222	63,957	61,884	**105,748**	**89,277**	64,855	56,244	60,832	(see note 1)
Residue from the Authority's Recycling and Composting Facilities	4,862	5,475	5,446	5,326	4,684	3,884	4,405	4,869	
Total Tons Per Year All Waste Catagories	233,045	240,014	242,297	291,315	277,480	248,917	243,235	241,502	(see note 1)
Note: 1 : Five-year average, using years 2000-2002 & 2005-2006									

The determination of the compatibility of each of the waste categories listed in the above table for processing in a new WTE facility is discussed below.

Residential/Commercial/Industrial Waste

The first category of waste is generated by the residential, commercial, non-hazardous industrial sectors of our region (excluding the residue from the Authority's Recycling Center operations, which is discussed separately). All of this waste net of a small quantity of non-hazardous industrial waste is compatible with a WTE facility.

The annual quantity of this category of waste has averaged 177,576 ton per year over the last seven years, with only a 7.6 % variation between the high (183,519 TPY) and low (170,582 TPY)for this same period.

For planning purposes, a higher-end tonnage of 185,000 TPY will be used in the WTE facility sizing, to provide for the processing of the maximum estimated quantity of this category of waste. Prior to any final design of a WTE facility, several additional factors should be confirmed as to their impact on the processing needs of a facility (at this preliminary stage, these are not considered further): 1) the long-term growth or decline of the regional population served by the WTE facility, 2) any changes in per-capita waste generation in the region over time, and 3) seasonal fluctuations in waste stream quantities that must be either processed by or bypassed from the WTE facility.

Construction & Demolition Waste

The second category of waste is construction and demolition debris. The majority of this waste is generated from the demolition of housing structures in the urban corridor of the two counties, with the remaining amount being generated from new/remodeling construction projects.

In 2003 and 2004, there were marked increases in the tonnage of C & D generated, 105,748 and 89,277 tons respectively, which were attributable to two large demolition projects in the City of Utica that do not reflect typical C & D waste generation quantities generated in Oneida and Herkimer counties..

For the purposes of WTE facility sizing, these two atypical years were not included in the numbers used to estimate the 60,832 average tons per year of C & D generated, to prevent oversizing of the facility. Also, for sizing purposes, it is assumed that 75% of the C & D (45,624 TPY) is processible by the WTE facility, with the remaining 25% (15,208 TPY) consisting of metals, drywall, etc. that would not be processed at the WTE facility.

For planning purposes, it is estimated that the capacity needed to process C & D waste at the WTE facility is 46,000 tons per year.

Recycling/Compost Residue

The last category of waste is generated from the operation of the Authority's Recycling Center/Compost operations, and has remained relatively stable in annual tonnages generated. It has averaged 4,869 tons over the past seven years, and it is estimated that 50 % of this waste, (contaminated paper, plastics etc) are compatible with processing at a WTE facility, with the remaining 50% (2435 TPY) being sent directly to the landfill.

For planning purposes, it is estimated that the capacity needed to process recycling/ compost center residues at the WTE facility is 2,500 tons per year.

Total Processible Waste for Delivery to the WTE

Based on the above, the processible waste quantities that may be delivered from Oneida and Herkimer counties to a WTE facility are as follows:

Waste Category	Tons
Residential, Commercial, Industrial Waste	185,000 TPY
Construction and Demolition Debris	46,000 TPY
Recycling Center and Compost Facility Residue	2,500 TPY
Total Annual Processible Waste	**233,500 TPY**

This equates to **640 tons per day** (seven-day-per-week basis) of waste available for processing in a WTE facility.

VI. WTE Facility Sizing

The sizing of a WTE facility is based on the design or "name plate" capacity of the facility, the estimated on-line availability of the facility to process waste, and the amount of waste required to be processed on a daily basis. It is again noted that during final sizing of a WTE facility, changes in long-term population growth, per-capita waste generation, and seasonal wastestream quantity variations need to be further investigated. Typically, spring and fall seasonal waste fluctuations at a WTE facility can be 110-120 % of average monthly waste deliveries. Provisions for managing these fluctuations, either by diverting this excess waste to landfill or by sizing the WTE to process this waste, must be determined. These factors are beyond the scope of this conceptual analysis.

The annual on-line availability of the facility is calculated by multiplying the facility's TPD design capacity x 365 days, minus the total number of hours that the facility would be out of service for scheduled or unscheduled maintenance and/or repairs.

Based on articles from waste to energy companies, an RW Beck feasibility study for a proposed WTE project in Kauai , Hawaii and a report from the Waste To Energy Research and Technology Council (WTERT), "The ABC of Integrated Waste Management," the estimated on-line availability for a modern waste to energy facility is in the range of 90 % .

Verification that the above on-line availability is achievable was confirmed in an operating report on the Onondaga County Resource Recovery Facility, which maintains a historical on-line availability of 90 %.

Based on the above, the size of a new WTE Facility that would be needed to process Authority waste that would be diverted from the landfill is calculated as follows:

WTE Design Capacity = TPD of Processible Waste ÷ On-line availability

= 640 TPD ÷ 90 %

= 711 TPD

For planning purposes, a 750 <u>Tons per Day</u> Design Capacity is selected for this conceptual analysis.

Note: A 750 ton per day facility with a 90% on-line availability would be capable of processing 246,375 TPY of processible waste, which provides 12,875 TPY of excess capacity for potential seasonal spikes or increases in waste generation. For a variety of reasons a larger capacity facility may be chosen, however a 750 TPD facility would accommodate Oneida-Herkimer.

VII. Facility Siting and Permitting Costs

The selection of a site for a new WTE facility would require a process very similar to one followed by the Authority for the new Regional Landfill site, to address state and federal air/ solid waste regulatory requirements (i.e. permitting), SEQRA and public comments.

At a minimum, the siting process would include the following:

- Evaluation of alternative waste processing technologies
- Waste characterization and analysis
- Development of a Siting Methodology
- Identification of alternative sites, including potential energy customers (if steam sales are under consideration)
- Site screening and review
- Site-specific/Project-specific SEQR process, including evaluation of state/federal wetlands, floodplains, agricultural lands, ecological resources, surface/groundwater resources, and consideration of local zoning
- Site selection and purchase (site purchase and buffer area land costs not included here)
- Permit application preparations
- NYSDEC Legislation Hearing
- NYSDEC Adjudicatory Hearing
- Consideration of local land development requirements

Not listed are any additional studies, design changes or responses to legal challenges that may be generated from the siting and construction of a new WTE facility.

Based on the recent landfill siting process it is estimated that it would take a minimum of ten (10) years and an expenditure of at least $10 million dollars to complete the WTE site selection and permitting process described above.

In addition to siting tasks listed above, there is the cost of interconnecting the WTE electrical output to the local utility grid. This process has become more complex and costly in recent years, and depending on the final site selected, could range from $ 1 million to over $5 million.

For planning purposes, a siting/ permitting/ interconnection cost of $ 13 million will be used, ($10 million siting/ permitting plus $3 million interconnect cost). This excludes land and buffer acquisition.

VIII. Capital Costs for Construction of New WTE Facility

Research on the estimated capital cost for typical new "greenfield" WTE Facility resulted in the following ranges of cost per ton of installed capacity:

Source	Cost per Installed Ton (2007 dollars)
City of Spokane, WA 800 TPD WTE Facility	$144,925
American Ref-Fuel Statement to House Subcommittee	$155,000
Barton and Loguidice Estimate of 750 TPD WTE Cost from Escalated 1980's Historic Facility Data	$157,500
OCCRA Syracuse, NY 900 TPD WTE Facility	$153,846
Average Cost per Installed Ton	$152,817

Note: The costs for Spokane and OCCRA WTE facilities have been converted to 2007 dollars.

Staff for Barton and Loguidice previously performed a review of historic costs to construct 17 field-erected waterwall incinerators with either steam, cogeneration, or electricity generation. These facilities were constructed in the 1980's, when many large WTE facilities were built; most of these constructed facilities were in the 500-2,000 TPD range. By analyzing this data, and by escalating costs to 2007 using an Engineering News Record construction cost index, an estimated construction cost of a 750 TPD WTE facility was computed for comparison in this analysis as indicated above.

For planning purposes, an estimated cost per installed ton of $155,000 will be used in estimating the capital cost for a new WTE Facility.

Using the above the estimated capital costs for the construction of a new waste to energy facility is as follows:

Design Tons per Day	Cost per Installed Ton	Total Capital Cost
750	$155,000	**$116,250,000**
	Rounded to	**$116,000,000**

IX. Project Development Cost

In addition to the direct capital costs for the construction of a new WTE facility, there are project development costs that include the cost of bond issuance; allowances for engineering, legal, and administrative costs; a spare parts allowance; facility startup/testing allocation; and a contingency fund allowance. At this conceptual stage, it is prudent to add 30 % to the construction cost estimate to cover these project development and related costs.

For planning purposes, the development costs are calculated using a multiplier of 30 % of the capital and result in the following:

Capital Cost	Multiplier	Development Cost
$116,000,000	**30%**	**$34,800,000**

It should be noted that these costs can be significantly higher dependent on the site specific engineering, regulatory review, public opposition and response to legal challenges that may be required. Also, no allowances have been included for specialized financing-related costs, such as capitalized interest, or the establishment of debt service reserve and construction funds. These requirements will need to be established as appropriate at a more advanced stage of project development.

X. Total Estimated Project Siting, Permitting, Construction and Development Costs

Using the cost estimates developed in Sections VII, VIII and IX above, the total estimated project siting/ permitting, construction and development costs for a new 750 TPD Waste to Energy Facility are as follows:

Siting/ Permitting Costs	$ 13,000,000
Construction Costs	$116,000,000
Development Costs	$ 34,800,000
Total Project Construction/Development Cost	**$163,800,000**
SAY	**$164,000,000**

XI. Annual Debt Service

The estimated annual debt service payment to cover repayment of construction and other related capital costs for a 750 TPD WTE facility (excluding land costs, and financing-related costs other than bond issuance), using a 20-year repayment period and a 7 % interest rate, are as follows:

Project Cost	Debt Service Factor	Total Annual Debt Service
$164,000,000	0.0943929	**$15,480,436**
		SAY $15,500,000

XII. Operations and Maintenance Cost

The annual operating and maintenance, O&M, includes the necessary labor, parts, electricity, fuel, chemicals, insurance, replacements and administration required to operate the facility on a daily basis.

The costs for O&M may be incurred directly by the owner of the facility, or may be paid in the form of an operating fee if the WTE facility operation is contracted to a private entity.

The O&M cost does not include the annual cost of residue disposal, debt service, host community fees, or any applicable PILOT payments.

Review of data from two operating WTE facilities and historic information gathered and analyzed by Barton and Loguidice indicate the following O&M costs:

Source	Facility Size	O&M Cost per Received Ton
Spokane WTE	800 TPD	$46
OCCRA WTE	900 TPD	$40
Barton and Loguidice	750 TPD (from historic data)	$48
Oswego County	200 TPD	$47

The analysis of historical facility costs by Barton and Loguidice staff, noted in Section VIII, also included an analysis of 1985 operating costs for 12 of the facilities that had O&M cost data available. Analyzing this data, and escalating this data to 2007 using a 5% annual cost escalator, an estimated cost for operation and maintenance of a 750 TPD WTE facility was computed.

For planning purposes, a low side O&M cost of $40 per ton processed, and a high side O&M cost of $50 per ton, were used to help estimate operating costs for the WTE facility under consideration. To process 233,500 TPY of waste, the estimated O&M cost is projected to range from:

Annual Tons	Cost/Ton	Total O&M Annual Cost	
233,500	**$40**	**$ 9,340,000**	**Low Side**
233,500	**$50**	**$11,675,000**	**High Side**

XIII. Ash Disposal/Transportation

The weight of ash generated from a WTE facility is directly related to the composition of the incoming waste and the efficiency of the combustion process.

WTE companies and promoters cite ash generation rates of 15% to 25 % of the processed waste tonnages. In addition, data from two operating WTE facilities show an ash generation rate of 27% (OCCRA WTE) and 27.5 % (Spokane WTE).

Ash transportation and disposal costs have been recomputed, based on a reduced input of waste, due to diversion of processible wastes to the WTE facility, and disposal of only the ash residues from the WTE (along with some other non-processible waste streams).

The cost for disposal of ash at the Regional Landfill with a reduced waste throughput is estimated at approximately $61.30 per ton.

Using the low and high rates above, and the ***above*** disposal cost for ash disposal, the estimated cost for transport and disposal is:

Tons of Waste	% Ash Generation\	Tons of Ash	T & D Rate/Ton	Total Annual Ash Cost	
233,500	15.0%	35,025	**$61.30**	$2,147,033	Low Side
233,500	27.5%	64,213	**$61.30**	$3,936,257	High Side

XIV. Air Pollution Control Improvements

A new WTE facility would incorporate all of the air pollution control systems that are required by the federal and state air regulations that are in effect at the time of construction.

It is anticipated that during the 20-year life of the WTE facility, there will be changes in federal and/or state regulations that will require modifications and/or additions to the existing APC equipment.

An amount of $1,000,000 per year is included in this cost analysis to provide for a capital fund for the design and installation of future APC equipment.

XV. Electrical Generation and Revenues

Generation

The in-plant use of electrical power in a WTE facility uses between 11% - 13% of the gross power generated.

The remaining net power available for sale range from 475 to 600 Kwh per ton of waste processed (RW Beck and WTERT). The OCCRA WTE facility achieved a net production rate of 657 Kwh/ton in 2005.

Revenue

With the recent escalating cost of fuels for conventional electrical generation facilities, there has been a steady increase in the rates per Kwh paid by utilities and other electrical power buyers for power produced in a WTE facility in the U.S.

The actual power sales in 2006 from a landfill gas-to-energy facility near Albany, NY earned a sales price of 5.84 cents per Kwh. Based on energy rates paid to power generators in New York over the past couple years, and based on the 2006 actual rate reported above, it is recommended that a low side rate of 5.5 cents per Kwh, and a high side rate of 7.0 cents per Kwh, be used for this analysis.

Using the above, the estimated electrical revenues for a new WTE facility are:

Kwh/ton Processed	TPY Processed	Net Kwh Generated	Rate per Kwh	Estimated Electrical Revenue per year	
475	233,500	110,912,500	$0.055	$6,100,188	Low Side
657	233,500	153,409,500	$0.07	$10,738,665	High Side

XVI. Metal Revenue

The waste that is currently being landfilled contains a small percentage of the ferrous metals that is not recycled due to contamination and/or inability to cost-effectively remove the metals from the waste.

A WTE facility would be able to recover more of this metal from the waste stream by processing the ash generated from the combustion of the waste through a series of magnets and screens.

Industry estimates and operating WTE facility data indicate a ferrous metal recovery rate of from 2.5 % to 5.6 % of the processed waste tonnage.

For the purpose of this analysis, the lower 2.5 % recovery rate will be assumed due to the Authority already removing the majority of the ferrous from the waste streams through mandatory recycling programs, which result in an estimated 5,840 tons of recovered metals.

The revenues received by the Authority for recycling ferrous metal has fluctuated from $ 82 to $164 per ton during the few years, which yields the following:

Tons of Waste/Year	Recovery Rate	Revenue per Ton	Total Annual Revenue	
233,500	2.5%	$82	$478,675	Low Side
233,500	2.5%	$164	$957,350	High Side

XVII. Steam Revenues

As stated previously, this report is based on a new WTE facility that would produce electrical power only, and therefore no evaluation of the costs and revenues for a cogeneration facility are included.

A decision to evaluate the feasibility of construction of a cogeneration WTE facility that could provide steam to a local industry, institution, etc. would have to consider the following factors:

- Location of potential steam customers and proximity to suitable sites for a WTE facility (within 1-2 miles)
- Cost of steam production and delivery in comparison to conventional oil, natural gas and electrical fuels

- Security and longevity of steam customer(s)
- Seasonal fluctuations in space and process heating steam loads
- Potential increase in siting costs and timeline due to majority of existing potential steam customers being located in urban areas

XVIII. Impact of New WTE Facility on Current Regional Landfill Budget

Diversion of 233,500 TPY from the Regional Landfill to a new WTE facility would leave the following waste types and quantities requiring landfill disposal:

Waste Category	Average TPY
Stabilized Sludges and Sludge Incinerator Ash*	9,194
50% Residue from Authority 's Recycling Center	2,434
25 % Non Processsible C & D	15,208
WTE Facility Ash (Range)	35,025 - 64,213
Contaminated Soils (maximum 20% of waste disposed)*	12,372 - 18,210
Total Tons To Regional Landfill (based on ash generation)	**74,233 - 109,259**
Based on average of high/low ash tons, SAY	**91,500**

* Tonnages are based on Authority Operating Records

Reduction in the amount of waste currently being sent to the Regional Landfill would have the following impacts to the current landfill budget:

Cost Savings

- Reduction in O&M costs including labor, fuel and supplies due to lower quantities of waste being disposed
- Reduction in annual liner extension sinking fund requirement due to delay in construction of future cells (although total amount of fund required will not change)

No Impact

- Air and water monitoring, which is required regardless of the number of tons of waste disposed
- Leachate generation, transport and disposal
- Administrative costs

Lost Revenues

- Reduction and/or elimination of future revenues from LFG generation due to removal of methane-producing waste

Barton & Loguidice (B&L) has performed an analysis of capital and operating costs, (and the associated cost per ton), required to support the current Authority landfill system (at a current input rate of 255,000 tons per year). B&L has also estimated the revised capital and operating costs, and net cost per ton for operation of the Authority's landfill as an ash/bypass waste landfill, with an assumed input of 91,500 tons per year.

The net result of the above is that the current landfill cost, including transportation, would need to ***increase from the current net cost of $37.85 per ton to $61.30 per ton*** due to the cost of the operation of the landfill, including debt service being paid for with fewer disposal tons of incoming waste.

XIX. Net Cost for WTE Processed Waste

Using the estimated tonnages and costs developed in Sections VII through XVIII results in the following ranges of costs for waste processed in a new 750 TPD Waste To Energy Facility:

Option 1 - LOW O&M & HIGH REVENUES (Best Case)

SECTION	COST COMPONENT	ANNUAL COST/ REVENUE	COST PER TON
X	Debt Service Payment for New Waste to Energy Facility	$15,500,000	$66.38
XI	Operation and Maintenance	$9,340,000	$40.00
XII	Ash Disposal/Transportation	$2,147,033	$9.20
XVII	Air Pollution System Improvements	$1,000,000	$4.28
	SUBTOTAL ESTIMATED PROCESSING COSTS	**$27,987,033**	**$119.86**
SECTION	REVENUE COMPONENT		REVENUE PER TON
XIII	Electrical Sales Revenue (153,049,500 Kwh)	$10,738,665	$45.99
XIV	Recovered Ferrous Revenue	$957,350	$4.10
	SUBTOTAL ESTIMATED FACILITY REVENUES	**$11,696,015**	**$50.09**

TOTAL ESTIMATED WTE FACILITY NET COST	Low O&M/Hi Rev	$69.77

Option 2 - HIGH O&M & LOW REVENUES (Worse Case)

SECTION	COST COMPONENT	ANNUAL COST/ REVENUE	COST PER TON
X	Bond Payment for New Waste to Energy Facility	$15,500,000	$66.38
XI	Operation and Maintenance	$11,675,000	$50.00
XII	Ash Disposal/Transportation	$3,936,257	$16.86
XVII	Air Pollution System Improvements	$1,000,000	$4.28
	SUBTOTAL ESTIMATED PROCESSING COSTS	**$32,111,257**	**$137.52**
SECTION	REVENUE COMPONENT		REVENUE PER TON
XIII	Electrical Sales Revenue (110,912,500 Kwh)	$6,100,188	$26.13
XIV	Recovered Ferrous Revenue	$478,675	$2.05
	SUBTOTAL ESTIMATED FACILITY REVENUES	**$6,578,863**	**$28.18**

TOTAL ESTIMATED WTE FACILITY NET COST	Hi O&M/Low Rev	$109.35

As these tables show, the estimated net of the cost for disposal of on processible waste, that are required to support a 750 TPD WTE facility serving Oneida and Herkimer counties, in 2007 dollars, range from approximately $70 per ton (best case) to $109 per ton (worse case) of processible waste received. The required operating fee varies depending upon how optimistic the tonnage and cost/revenue assumptions are that enter into the calculations.

Note: The above costs per ton do not include the additional costs for operation of the Recycling Center, HHW, etc. that are included in the system fee that the Authority charges for waste disposal.

XX. Estimated Net Cost Comparison

WTE Based System vs. Regional Landfill Only System

A comparison of estimated net cost for a waste to energy-based system, versus the current landfill disposal system, is as follows:

Estimated Net Cost	
New Waste to Energy Facility with Reduction in Regional Landfill Disposal - Best Case	Annual Processing/Disposal Cost
Option 1 (Best Case) Total Annual Processing/Disposal Cost	**$18,694,468**

New Waste to Energy Facility with Reduction in Regional Landfill Disposal - Worse Case	Annual Processing/Disposal Cost
Option 2 (Worse Case) Total Annual Processing/Disposal Cost	**$28,293,714**

Regional Landfill Disposal Only - Current Condition	Annual Disposal Cost
2007 Budget - Estimated Total Annual Landfill Only Disposal Cost	**$9,650,815**