Comments of New York City Comptroller
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To
The Mayoral and City Council Task Force On Recycling
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The Need for Transparent Accounting of Recycling And Refuse Management Costs

One of the necessary first steps the Task Force should undertake is a review of how the Department of Sanitation (DOS) determines the relative costs of the refuse and recycling programs. A clear and comprehensible accounting for the costs associated with these programs will afford elected officials and community leaders the ability to accurately evaluate how the City can reliably reduce the long and short-term costs of managing City's waste.

For fiscal year 2001, DOS developed a detailed review of the total costs associated with its operations and assigned those costs to specific programs, including recycling and refuse management. These costs are commonly called "fully loaded" costs, since the budget for these program areas includes the various administrative, support and other costs associated with DOS's fulfillment of its mission. To facilitate the Task Force's review of my comments, I have attached a copy of DOS's spreadsheet which summarizes how it allocated its fiscal year 2001 budget among its various operations.

There are a number of areas in which the basis for DOS's cost analysis requires clarification. For example, in fiscal year 2001, DOS allocated over $36 million of the Solid Waste Management Planning Unit's (SWP) $52.2 million budget to the recycling program. Since the SWP's primary function is to plan for the long-term export of the City's non-recycled waste, it is not clear why DOS has charged the majority of SWP's budget to the recycling program. Allocating $36 million in SWP costs to the recycling program increases the fully loaded cost of recycling by $46 per ton. If any portion of the SWP budget line were to be charged to the management of recycling, one would expect an allocation that reflected the recycling program's approximately 20 percent share of the fiscal 2001 budget. Under this scenario, approximately $10 million of the SWP budget would have been charged to the recycling program and the fully loaded price per ton differential between managing refuse and managing recycling would fall to $58 per ton.

Impact of Reallocation of SWP Costs to Waste Management on Per Ton Costs of Refuse and Recycling for FY01

	Total Tons Collected	Total Cost (Including Fringe and Debt Service)	Per Ton Cost Under DOS FY01 Allocation	Per Ton Cost After Shifting $26 Million of SWP Budget From Recycling to Refuse
Refuse Collection and Disposal Costs	3,051,789	$741,551,031	$243	$251
Recycling Collection and Disposal Costs	787,296	$254,562,750	$323	$310
Per Ton Cost Difference Between Refuse and Recycling			$80	$58

Another cost allocation that needs clarification is the relative cost of the recycling processing contracts as compared with waste disposal contracts. DOS may have overstated the average impact of the recycling contracts on the budget by stating that the actual cost to the Department's budget was approximately $126 per ton. Although the actual average bid price from the three lowest bidders averaged $126 per ton, the recycling bids submitted to the City included the value of the City's share of the sale of recycled material as a result of the revenue sharing agreement. The average value to the City of the recycling revenue sharing agreement over the last six years was approximately $44 per ton. A more accurate reflection of the costs to the City of the recycling processing contracts, therefore, would have subtracted the estimated value of the revenue sharing agreement. Using the six-year average value to the City of the revenue agreement, the cost of the recycling contracts falls from $126 per ton to $82, resulting in a net savings to the City of $3.4 million.

Estimated Budget Impact of Processing Glass and Plastic Under Waste Export Rather than Recycling Contracts*

Cost to Process 721Tons/Day of Glass & Plastic @$82/ton	Cost to Export 721 Tons/Day of Glass & Plastic @ $66/Ton	Net Savings to the City
$17,854,844	$14,370,972	$3,483,872

*Processing costs are calculated using DOS's standard 302 day year. Approximately 70% of the 1,030 tons per day of MGP that was collected in FY 2002 was glass and plastic. DOS's average cost per ton for waste export is $66 per ton.

The Task Force also should discuss in detail whether DOS has achieved the personnel savings it anticipated from suspending the recycling of glass and plastic. One of the major savings projected in the budget adopted in July 2002 was a reduction in the total number of collection truckshifts and the number of uniformed personnel needed due to the suspension of metal and glass recycling. However, when the average number of

truckshifts per week in fiscal year 2002 (6,978) is compared with the average number of weekly truckshifts between July and November of fiscal year 2003 (6,898), one finds that the number of weekly truckshifts was reduced by only 80. An 80 truckshift reduction represents less than a two percent decline in the total number of truckshifts. Using the cost per truckshift for refuse ($692), MGP ($704) and paper ($627) supplied by DOS to the Task Force for fiscal year 2002, the net collection cost savings to the City is approximately $2.6 million.

Of particular concern with the relatively small decline in the total number of weekly truckshifts, is that the productivity gains made by DOS were due to a reduction of 127 paper truckshifts per week. Although there was a decline of 322 metal weekly truckshifts, DOS saw an increase of 369 refuse truckshifts per week. Comparing the number of weekly metal recycling and refuse truckshifts, DOS had a net increase of 47 weekly collection truckshifts, increasing DOS's costs by approximately $1.4 million. The Task Force should investigate whether the decline in paper recycling truckshifts is due to more efficient operations or the result of a decline in the total amount of paper being recycled. If it is the latter, the net impact to the City's budget could be serious, since DOS currently receives an average payment of $7 per ton from the paper recycling vendors compared with an average export cost of $66. If the paper truckshifts have declined due to increases in efficiency, the Task Force should discuss how those efficiencies could be replicated.

Change in Weekly Collection Truckshifts Between Fiscal Year 2002 and Fiscal Year 2003 (Through November)

Material	Weekly Truckshifts Through November FY 03	Weekly Truckshifts FY 02	Increase/ Decrease in Weekly Truckshifts Btwn FY02 and FY 03	Collection Cost Per Truckshift in FY02*	Increase/ Decrease in Collection Costs Per Year
Refuse	5,250	4,881	+369.00	$692	+13,284,700
Paper	940	1,067	-127.00	$627	-4,140,058
MGP	708	1,030	-322.00	$704	-11,792,327
Total Waste Stream	6,898	6,978	-80		-2,647,685

*Collection costs per truckshift were calculated by the Comptroller's Office using the collection and disposal cost data for FY02 supplied to the Task Force by DOS.

Based on the truckshift data supplied to the Task Force, under the best case scenario there appears to have been extremely small reduction in truckshifts from suspending glass and plastic recycling. Moreover, any reduction in truckshifts may be due to lower paper recycling rates, which could very well represent lower productivity and higher costs to the City. Given the potential long-term costs associated with the suspension of a program that required millions dollars in public education and capital investments to build, the Task Force should discuss why more significant truckshift reductions were not achieved.

Reducing Recycling Collection Costs

The City's recycling rate varies significantly by community district, ranging from 9% to 31% for fiscal year 2002. Accordingly, the efficiency of DOS's recycling collection system varies widely community by community. The Task Force's report should discuss the relative efficiencies and costs of operating the recycling program for different parts of the City.

In the past, DOS tailored its collection strategies based on the specific circumstances of different communities. DOS currently operates dual bin collection trucks in 21 community districts that have low housing density and lower diversion rates. In dual bin districts, sanitation workers use one bin for paper and the other for additional recyclables. DOS has found that the use of dual bin trucks increases the efficiency of the collection system by reducing the number of truckshifts and personnel needed to collect recycling. The Task Force's report should discuss in detail the relative efficiencies of the dual bin and single bin collection truck districts, including the average tons per truckshift. Since it is unlikely that DOS will eliminate paper recycling, the Task Force should discuss the incremental costs associated with the recycling of metal, plastic and/or glass in dual bin districts.

Nearly 100 cities in the United States, including San Francisco and St. Paul, have moved their recycling collection systems from source separated recycling to single stream recycling in order to achieve higher collection efficiencies. Under a single stream collection system, all of the recycled material is collected in a single truck and delivered to a Material Recovery Facility (MRF) for post collection separation. Since the majority of DOS districts use single bin trucks, the Task Force should evaluate if a single stream collection program could improve the efficiency of the recycling program. This option may not be appropriate for all community districts and must be balanced with DOS's contractual arrangements with Visy Paper on Staten Island.

The Task Force should also review whether there are collection efficiencies that could be achieved if DOS routes its trucks to maximize the efficient use of its personnel resources. DOS's collection routes are currently restricted along Community District boundaries and this option would require a change in existing law.

Reducing Recycling Processing Costs

The most recent bids for MGP recycling had higher processing costs than DOS anticipated. However, DOS could make changes in the way it structures these prospective contracts that would significantly lower the per ton cost of the bids. DOS's most recent solicitation required vendors to reflect in their bid price revenue sharing based on the average value of the material delivered to the vendors. This created confusion as to the actual costs of these contracts to the City. To make the bidding process clearer, DOS should not have the revenue sharing agreement reflected in the MGP bid price.

DOS's most recent solicitation for bids also applied the revenue sharing agreement to 100% of the material delivered to the vendor, regardless of the amount of non-recyclable material that had been collected by DOS. A June 29, 2001 audit of the recycling program by this office found that 30% of the material delivered to recycling contractors could not be recycled and was disposed of directly in out-of-City facilities. For the vendor to recoup the cost of paying approximately $44 per ton on the 30% of the non-recyclable material delivered by DOS, therefore, the vendor would have had to increase its bid price by $13.20 per ton.

Estimated Impact of Applying Recycling Revenue Sharing Agreement to Residue on the Recycling Processing Bids

Tons Per Day Bid	Tons Per Day of Residue with a 30% Residue Rate	Cost Per Day of Revenue Sharing on Residue @ $44 Per Ton	Increase in Price Per Ton Necessary to Recoup the Residue Revenue Sharing Costs
3,000	900	$39,600	$13.20

In addition to the increased costs associated with the revenue sharing agreement on non-recyclable material delivered to vendors, a high residue rate significantly increases the vendor's recycling processing costs and raises the per ton cost of the MGP recycling contracts. Using the City's current waste export contracts as a benchmark for the costs of disposing of the non-recyclable material, a recycling vendor had a minimum cost of $66 per ton for disposing of the non-recyclable material delivered by the City. Considering that the residue had to be processed to extract the recyclable material, which is more labor intensive than simply consolidating waste for export, this is a conservative cost estimate. For the recycling vendor to recoup the costs of disposing of the 30% non-recyclable material delivered by DOS, approximately $20 per ton must be added to the bid price.

Estimated Impact of Cost of Disposing Recycling Residue on the Recycling Processing Bids

Tons Per Day Bid	Tons Per Day of Residue with a 30% Residue Rate	Cost Per Day of Disposing of Residue @ $66 Per Ton	Increase in Price Per Ton Necessary to Recoup Costs of Disposing of Residue
3,000	900	$59,400	$19.80

Combined, the disposal and revenue sharing costs associated with the non-recyclable material delivered under the MGP recycling contracts added $33 per ton to the bid price of recycling. If these costs to the vendor can be removed or dramatically reduced, the cost of processing recycling may be no greater than or even below the costs of exporting that material to out-of-City disposal sites. The Task Force should examine this matter in detail and provide results in its final report.

Finding New Revenue Sources: The Bigger Better Bottle Bill

The City also should work toward expansion of the New York State Container Act, Environmental Conservation Law Title 10 27-1001 et seq. It should do so by supporting a modified version of, the "Bigger Better Bottle Bill" (A. 11442/S. 7521). The Container Law currently imposes a five-cent deposit only on carbonated beverage containers and allows bottlers or distributors to keep all unredeemed deposits. The "Bigger Better Bottle Bill" would impose a deposit on non-carbonated, so-called "new age" beverages, which would take these containers out of the municipal waste stream. It also contains an escheat provision that would require bottlers or distributors to place unclaimed deposits into a State refund account. However, this provision must be amended to direct to New York City the share of unredeemed deposits attributable to beverages purchased in the five boroughs. Since so many non-residents work or visit the City, thus adding to total beverage sales, this share should be no less than 50% of Statewide unredeemed deposits.

Currently, unredeemed nickel deposits on carbonated beverages sold in New York City account for between $26.9 million to $55.6 million annually, all of which is kept by bottlers or distributors. Under a "Bigger Better Bottle Bill" scheme, estimates of additional unredeemed deposits based on New York City sales of non-carbonated beverages range from $7.5 million to $15.5 million each year. Escheat of unredeemed carbonated and non-carbonated deposits to the City, therefore, could generate between $34.4 million and $71.1 million annually. With the suspension of metal and glass recycling in the City, unredeemed carbonated and non-carbonated beverages containers thus represent not only a waste collection and export cost to the City but a lost revenue opportunity.

Amending the current law poses certain challenges. For example, imposing deposits on non-carbonated beverages could increase handling costs and storage demands for New York City retailers that take back deposit materials. An expanded Bottle Bill also would pose a problem to the City for meeting the 25% recycling goal imposed by Local Law 19 because it would divert materials from curbside collection to redemption centers. Therefore, the Local Law should be amended in tandem with the passage of any expanded Bottle Bill to credit progress toward meeting the City's 25% recycling goal with a percentage of the increased tonnage collected under the aegis of an expanded State law.

Moreover, the Bill seeks to forbid transfer stations and landfills from delivering or receiving solid waste that contains recyclable materials. As drafted, this language unreasonably constrains the operations of municipal waste management and recycling programs without regard to markets, budgets or operational conditions. It thereby undermines home rule in a manner that cannot be justified. The City should press for its deletion.

Conclusion

I trust that my comments have provided the Task Force with some concrete ideas as to how the City can increase the efficiency and reduce the costs of its recycling program in order to help meet its short-term and long-term financial needs. I appreciate the effort that will be required to meet the productivity goals set forth in the Mayor's November 2002 Financial Plan and I look forward to working with you ensure DOS realizes the maximum financial benefits for operating the recycling program and meeting its environmental protection goals.