



TECHNICAL MEMORANDUM

TO: Jay Gewin
Key West Utilities Director

FROM: Robin Mitchell
Project Manager

DATE: December 3, 2010

SUBJ: **Comparative Analysis of Transport and Disposal Fee**

PROJ #: 120-00.00

Per Task 3 of Task Order 1, Kessler Consulting, Inc. (KCI) reviewed the proposed Service Fee for transport and disposal of the City's solid waste and compared this fee with other appropriate jurisdictions and industry standards.

Background

Waste Management (WM), the City's transport and disposal contractor, requested a Service Fee increase, in addition to the annual Consumer Price Index (CPI) adjustment provided for in the Transportation and Disposal (T&D) Agreement, to account for fuel cost increases. Based on the CPI adjustment in the T&D Agreement, the FY 2010/11 fee would be \$66.63 per ton. WM requested an additional \$2.15 for a total fee of \$68.78 per ton; however, City staff negotiated a reduced adjustment of \$67.70 per ton. WM indicated that it pays its transport subcontractor \$32.76 per ton, leaving \$34.94 per ton for disposal.

KCI conducted a comparative analysis of the \$67.70 per ton fee. We first compiled transport and disposal information for municipalities in the same South Florida watershed as the City. Because comparable transport information was not available, KCI ran a standard analysis using industry knowledge to determine a fair price for transport of solid waste from the City's Transfer Station on Rockland Key to WM's Wheelabrator South Waste-to-Energy (WTE) Facility in Broward County, a one-way distance of 183 miles.

Disposal Fee Analysis

Table 1 provides the fees for transfer station operation, transport and disposal in various South Florida jurisdictions. As mentioned above, jurisdictions were selected that are in the same watershed as the City. In addition to Monroe County and Miami-Dade County, the table includes Broward County, which operates a Resource Recovery System (RRS) in which most municipalities in the county participate. A

Resource Recovery Board contracts for disposal services for all members of the RRS. Both the current RRS fee and a negotiated fee, which goes into effect in August 2011, are provided in the table. The table also includes several cities that do not participate in the RRS, but instead contract independently for disposal services.

When reviewing this information, it is important to bear in mind that direct comparison of fees between jurisdictions is difficult because of various factors that make each location unique, such as differences in services and competition in the local marketplace. For example, the existence of the RRS makes the marketplace in Broward County somewhat atypical.

Table 1: Transport and Disposal Fees in South Florida Jurisdictions

Jurisdiction	Current Broward County RRS	Renegotiated Broward County RRS	Hallandale Beach (new contract)	Pompano Beach	Miami-Dade County	Monroe County
Contract Transfer Station Operation Fee (\$/ton)	N/A	N/A	\$62.50	N/A	N/A	\$80.09
Contract Transport Fee (\$/ton)	N/A	N/A		N/A	N/A	
Contract Disposal Fee (\$/ton)	\$65.93	\$47.75 ⁽¹⁾		\$74.76	\$60.30 ⁽²⁾	
One-way Distance from Transfer Station to Disposal (miles)	N/A	N/A	180	N/A	N/A	140 ⁽³⁾
Transfer Station Owner/Operator	N/A	N/A	Choice Environ.	N/A	County	County/WM
Transport Contractor	N/A	N/A	Choice Environ.	N/A	County	WM
Disposal Facility and Owner	WM WTE/LF	WM WTE/LF	WSI JED LF	WM Central LF	County WTE (Covanta operates)	WM WTE

⁽¹⁾ There will be a one-time adjustment on 8/4/11 by (1) 100% of the Adjustment Factor from 10/2009 through 4/2011 plus (2) 33.3% of the Adjustment Factor from 4/2010 through 4/2011.

⁽²⁾ Rate available only to permitted haulers and municipalities with long-term disposal contracts. Non-contract disposal rate per ton is \$79.50.

⁽³⁾ This is average distance from the three transfer stations (Cudjoe Key - 180, Long Key - 140 and Key Largo - 100).

N/A = Not Applicable WTE = Waste-to-Energy LF = Landfill

WM = Waste Management WSI = Waste Services, Inc.

The average solid waste tipping fee in Florida is approximately \$40 per ton, and disposal fees in South Florida are typically higher as evidenced in Table 1. Therefore, a disposal fee of \$34.94 per ton is reasonable in the current marketplace.

Transport Fee Analysis

Those jurisdictions listed in Table 1 that contract for transport and disposal were unable to break out the fees for each service; therefore, KCI utilized industry knowledge to develop a reasonable cost estimate for transporting solid waste from the City's Transfer Station to WM's Wheelabrator South WTE Facility.

Including the cost of labor; fuel; equipment amortization; equipment maintenance and repair; insurance, license and taxes; and reasonable contractor overhead and profit, KCI believes that \$92 per hour is a reasonable rate assumption for over-the-road trucking of solid waste in transfer trailers.

Additional assumptions used in this analysis are as follows:

- Roundtrip travel distance of 366 miles
- Average speed of 45 miles per hour
- 22 tons of solid waste transported per load

Based on the above assumptions, a reasonable fee to transport solid waste from Rockland Key to the Wheelabrator South Facility is approximately \$34 per ton. Therefore, a transport fee of \$32.76 per ton seems reasonable, especially since the contractor achieves some level of operational efficiencies by backhauling materials down to the Lower Keys.

Conclusion

The analysis provided herein indicates that a transport and disposal fee of \$67.70 per ton seems reasonable in today's marketplace based on the City's location, travel distance to disposal, and regional tipping fees.

KCI offers the following recommendations related to this analysis:

- KCI has provided the City with a suggested methodology for adjusting the Service Fee quarterly to account for fluctuations in fuel prices in lieu of allowing WM to request extraordinary rate increases in the future for this reason. These fee adjustments would be based on the price for No. 2 diesel fuel in the Lower Atlantic area published by the U.S. Energy Information Administration.
- Should the contractor achieve cost reductions as a result of backhauling materials, the City should be able to benefit from this as well. Language to that effect should also be incorporated into the T&D Agreement.