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REVIEW OF SOLID WASTE DISPOSAL CHARGES

Final Report

April 19, 2012

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April 19, 2012

Metro
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Portland, OR 97232-2736

Subject: Review of FY 2012-13 Solid Waste Disposal Charges

Dear Council President Tom Hughes, Members of the Metro Council, and Chief Operating Officer Martha Bennett:

FCS GROUP is pleased to submit the result of our Solid Waste Disposal Charges Review for FY 2012-13. This completes the third year that Metro has commissioned an independent, expert, technical review of the rate setting process. The current study involved reviewing the status of the initial recommendations of April 2010, consistency of the rate-setting methodology established during the last rate review, and confirmation that the proposed FY 2012-13 rates are calculated properly.

In general the major findings are as follows:

- More than half of the recommendations in the 2010 study have been fully or partially implemented. Most of the remaining recommendations relate to policy and are to be addressed in the "fee and tax policy" element of the Solid Waste Roadmap.
- Rate process/methodology utilized is consistent with that deemed acceptable in the initial 2010 review and generally follows industry standard approaches.
- All annual operating and capital financial obligations are being captured.
- Fund balances are meeting (or exceeding) target balances.
- The process used to calculate solid waste disposal rates and charges follows standard practices.
- The proposed rates for recoverable solid waste both increase the level of cost recovery from recoverable waste types thereby reducing pressure on the transaction fee and mixed solid waste fee.
- The proposed FY 2012-13 rates developed by Metro are technically sound and supported by the cost information provided to us for our review.

We appreciate the opportunity to work with Metro on this project. Please do not hesitate to contact me if you have any questions regarding this report or if additional information is needed.

Sincerely,
FCS GROUP

Angie Sanchez Virnoche
Project Manager/Principal

cc: Councilors Craddick, Collette, Hosticka, Harrington, Burkholder, and Roberts; Scott Robinson, Deputy Chief Operating Officer; Margo Norton, Finance and Administration Director; and Douglas Anderson, Policy and Compliance Manager

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A. INTRODUCTION

In 1991, Metro established a Rate Review Committee to advise the Metro Council on rate-setting procedures and proposed solid waste disposal rates. In November of 2009, a white paper was written titled *Setting Metro's Solid Waste Rates: An Assessment of Processes and Practices*, which provided recommendations to better meet Metro's needs in relation to the changing regional solid waste system and evolving best practices for setting municipal utility rates. One of the recommendations of the white paper is to separate the periodic review of rate policies from the annual rate-making cycle. The white paper further recommended that a truly independent review of the proposed rates be included in the annual rate cycle. This option replaces the Rate Review Committee and instead has Metro retain an independent consultant to review the proposed rates in conjunction with the budget.

The year 2010 marks the date when Metro first engaged FCS GROUP to complete a review of the solid waste disposal rate-setting process. The study was undertaken to provide an expert, independent, technical review of the framework and methodology used for setting solid waste disposal fees and charges. The 2011 report focused on the extent to which Metro had implemented the recommendations noted in the 2010 review along with reviewing the adequacy of the proposed rates for FY 2011-2012 in meeting the financial obligations of the Solid Waste Fund and the fiscal policies of the agency. This 2012 report has a similar focus.

B. SCOPE OF WORK

The comprehensive review of the solid waste disposal charges is intended to provide an objective review of the-rate setting process and offer recommendations to Metro for sustaining an open, transparent, and credible rate setting process. The 2012 study identified the following key areas for review:

- Status of Implementing the FY 2010-11 recommendations
- Review approach for establishing proposed recoverable solid waste fees
- Review of proposed FY 2012-13 solid waste charges

Each of the key review areas identified above was completed as part of the study for Metro. Each key area's findings and recommendations will be addressed in this report.

C. RATE-SETTING METHODOLOGY

A rate-setting methodology must first account for any legal or contractual constraints on the process or outcome. Then, within certain economic and policy guidelines, a rate-setting methodology can be tailored to the service being provided.

Oregon Revised Statutes (ORS) 268.317 grants Metro, as a metropolitan service district, broad authority to manage and regulate solid waste. This includes, *inter alia*, the authority to "build, construct, acquire, lease, improve, operate and maintain landfills, transfer facilities and other improvements, facilities or equipment necessary or desirable for the solid and liquid waste disposal system of the district." ORS 459.335 restricts the expenditure of user fees generated by exercise of this authority to solid waste activities and associated overhead. In addition, Chapter III, Section 15, of the Metro Charter requires that "charges for the provision of goods or services by Metro may not exceed the costs of providing the goods or services. These costs include, but are not limited to, costs of personal services, materials, capital outlays, debt service, operating expenses, overhead expenses and capital and operational reserves attributable to the good or service."

Beyond the legal context, the mission, policies, objectives and the role of the agency as a regional service provider are also important to the rate-setting process. These factors will inform the process along the way and highlight the tradeoffs that may be required.

A rate-setting process generally follows three steps:

- **Step 1: Identify revenue requirements.** This step identifies the total annual financial obligations of the system. This includes operations, debt service, capital improvements and replacements and fiscal policy achievement. Ideally, the ongoing rate revenue of the system should support the annual ongoing expenses of the solid waste system. Many agencies including Metro refer to this as a "pay-as-you-go" policy.
- **Step 2: Allocate Costs.** This step establishes rate equity through cost causation or the cause and effect relationship between different costs and the activities that cause those costs to be incurred.
- **Step 3: Establish Fees/Charges.** This step achieves required revenue levels by establishing rates and charges that accurately reflect the cost to provide a particular service.

D. INITIAL 2010 RATE REVIEW RECOMMENDATIONS – STATUS OF IMPLEMENTATION

The results of the initial methodology review in 2010 indicated that the rate process and methodology used to calculate rates are technically sound and generally follow standard industry practice. There were some areas identified as having opportunities for improvement. The review offered 16 recommendations for enhancing rate-making transparency, consistency and equity.

One year later, during our 2011 review, we found that five of these recommendations had been fully or partially implemented.

During our current review, we found that five additional recommendations have been implemented.

1. Metro has developed a long-range planning model that projects volume, costs, pricing, and revenues through FY 2018-19. We have reviewed this model and find it to be perhaps the most rigorous long-range model for solid waste that we have seen.
2. Staff has established a default practice for setting an under-spend allowance.
3. Metro has added a worksheet ("FBal") to its rate model that tracks the components of fund balance, including reserves, for the Solid Waste Fund.
4. Metro has identified and allocated the fixed costs in its contracts for station operation. Metro has also documented the method by which these costs are allocated to waste classes.
5. The position whose allocation was the subject of recommendation #15 has been eliminated.

Most of the recommendations that are still pending involve financial or budgetary policies. They are not merely technical, rate-setting issues, although their resolution will be implemented through rates. **Table 1** summarizes the implementation status of all 16 recommendations.

Table 1. Status of 2010 Recommendations

	Recommendation	2011 Completed	2011 In Process	2011 Pending	2012 Completed	2012 In Process	2012 Pending	Implementation Status
1	Incorporate a systematic practice of evaluating the sufficiency of long-term rates .			X	X			Rigorous model has been developed, but a disciplined review and update process must be maintained.
2	Develop policy regarding establishment of under-spend allowance .			X	X			Default allowance is set at half of the underspending rate during the previous five years.
3	Develop a policy regarding the revenue generated from special programs.			X			X	Will be Addressed during Policy Review
4	Reconsider and update the capital financing policy for new capital to accompany the capital plan.	X		X	X		X	Repair/Replacements funded through rates. Funding new major capital addressed during policy review.
5	Develop policy regarding prioritizing use of end of year balances.			X			X	Will be Addressed during Policy Review
6	Add a reserve fund sheet to rate model		X		X			See "FBal" worksheet in rate model.
7	Confirm policy regarding replenishment of reserves.			X			X	Will be Addressed during Policy Review
8	Separate the four major contract costs into their own cost center line item for clarity and transparency of cost allocation.			X			X	Will be Addressed during Policy Review. Rate recovery objective policy or cost based.
9	Review the station management and station operation costs to identify fixed costs.			X	X			Fixed costs are identified in rate model, and the method of their allocation is documented.
10	Review the 50% allocation of overhead costs to the regional fee approach.			X			X	Will be Addressed with Solid Waste Roadmap project. Rate Recovery objective policy or industry standard.
11	Allocate attorney cost based on actual time spent, not on prospective time.	X			X			Recommendation noted. Current Allocation meets Requirements of Federal Circular A87 related to Cost Allocation Plans.
12	Consider more appropriate allocation basis for IT cost center (workstations, IT time charges) or clarify existing basis.	X			X			Recommendation noted. Current Allocation meets Requirements of Federal Circular A87 related to Cost Allocation Plans.
13	Consider using FTE rather than payroll for overhead costs (admin/budget/finance).	X			X			Recommendation noted. Current Allocation meets Requirements of Federal Circular A87 related to Cost Allocation Plans.
14	Conduct a time estimate study for direct transfer costs (may require more than one to normalize results).			X			X	Based on effort and staff time estimates from employee and/or manager. Work survey scheduled for this year.
15	Strengthen cost allocation documentation or develop alternative basis for direct transfer of Senior Planner costs .			X	X			This limited-duration position has been eliminated.
16	Continue true-up of G&A costs at year-end.	X		X	X		X	a) Indirect costs are trued up budget to actual at year end for Circular A87. Changing to fixed carry forward method. b) Direct inter-fund transfers trued-up budget to actual. The cost allocations are not trued up. Should be updated once work survey completed.

E. RECOVERABLE SOLID WASTE FEES

This year the Chief Operating Officer is proposing changes to the recoverable solid waste fees accepted at Metro transfer stations. The intent is to begin recovering the full cost of managing these materials more completely than in previous years, thereby reducing pressure on the transaction fee and mixed solid waste fee. The proposed rates not only adjust rates for current recoverable waste types (yard debris, clean wood, residential food waste, and commercial food waste), but they also introduce rates for new recoverable waste types (roofing, clean drywall, and rubble).

Costs recovered by the proposed tonnage charges include fixed contract costs, the host fee, and an allocation for G&A and capital costs. They do not reflect direct costs incurred by Metro, because these costs have not yet been identified. Metro staff reviewed three options for allocating the fixed contract costs to recoverable solid waste; 1) based on tonnage, 2) based on variable costs, and 3) double factor considering both tonnage and variable costs. Metro staff proposed using option 3, the double factor that tends to more accurately represent that fixed costs are a function of both throughput and costs. Selection of option 3 as the most reasonable option to move forward with is confirmed by the analysis which showed high volume and costly waste having the highest allocation of fixed costs and the low volume and low cost waste having the lowest allocations.

We concur with the Metro staff proposal to select option 3 to allocate fixed contract costs. For future rate consideration we recommend including direct recoverable solid waste costs once they are identified and known. It will be important to balance the cost of service for this waste type with broader Metro policy objectives. We further recommend minimizing the portion of capital costs that are allocated as an indirect cost. Capital costs should be assigned to specific waste types whenever possible.

F. PROPOSED FY 2012-13 SOLID WASTE CHARGES

The review of FY 2012-13 solid waste disposal fees and charges is intended to verify that the proposed rates will meet the solid waste fund's annual revenue requirements (expense minus non-rate revenue) and target fiscal policies. Metro provided the rate model with the solid waste fund budget updated for the FY 2012-13 rate-setting time period. Establishing the total solid waste revenue requirements includes accounting for disposal operating costs, other program operating costs, program revenue, general income and capital.

- Disposal operations include: scalehouses, major contracts, pass-throughs, station management and facility and asset management.
- Other program operating costs include: resource conservation and recycling, system planning, private facility regulation, illegal dump site cleanup, hazardous waste reduction, latex paint recovery, landfill stewardship and general and administrative. The general and administrative costs are accounted for as direct charges and indirect and direct inter-fund transfers.
- Capital costs are from Metro's five year capital plan and include new capital, renewal and replacements, and landfill closure projects over $5,000 in value. The renewal and replacement contribution is established every three years by an independent study and are rate funded. The Renewal and Replacement Account and the St. Johns Landfill Closure Account were last updated in 2009 and 2010, respectively.
- Debt service obligations would include the annual debt service (principal and interest) associated with outstanding bond/loan obligations. There is currently no outstanding debt obligation associated with the solid waste fund.

Once revenue requirements are established, a portion of general and administrative costs are allocated to each cost center and the loaded costs of each center are assigned to the fee categories of staffed transaction fee, automated transaction fee, tonnage charge or regional system fee. The fee category assignment by cost center is summarized in **Table 2**.

Table 2. Allocation of Cost Centers to Fee Categories

Cost Center	Transaction Fee		Tonnage Charge	Regional System Fee	Basis of Assignment/Allocation
	Staffed	Automated			
Disposal Operations					
Scalehouses	87%	13%			Based on combination of FTE, Transaction usage and Accounts Receivable time split.
Major Contracts			100%		100% Tonnage
Pass-Throughs			100%		100% Tonnage
Station Management	62%	4%	34%		Based on the share of personal services and materials & services costs within each function covered by station management and split by FTEs.
Hazardous Waste Reduction				100%	100% Regional System Fee
Latex Paint Recovery				100%	100% Regional System Fee
Landfill Stewardship				100%	100% Regional System Fee
Facility & Asset Mgmt.			50%	50%	Based on the professional time spent on facilities
Sustainability Center & Planning					
Resource Cons. & Recycling				100%	100% Regional System Fee
System Planning				100%	100% Regional System Fee
Finance & Regulatory Services					
Private Facility Regulation				100%	100% Regional System Fee
Illegal Dumping				100%	100% Regional System Fee
General & Administrative					
50% of Total G&A				50%	50% based on policy to RSF. Remaining 50% loaded on to each of the cost centers using algorithms and factors developed with advice and review of the Rate Committee in 2003/04 and are consistent with cost-of-service approaches. Allocation factors based on usage or strong correlation with usage and are updated each year.

Metro departs from cost-of-service allocation/assignment only in that it loads half (vs. all in a more standard utility environment) of the G&A into each cost center; the remaining half is allocated directly to the regional system fee. This policy stems from the Metro Council's 1998 decision to allow privately-owned transfer stations to handle a significant portion of the region's wet waste—but only under a financial arrangement that minimizes the risk of stranding public investment. This policy was implemented by allocating all of Metro's major fixed costs that were undertaken on behalf of the regional disposal system (including debt service on the transfer stations, the fixed cost of the transport and disposal contracts, and general and administrative costs) to the regional system fee. This fee is paid by all regional ratepayers, not just users of the transfer stations. Public investment would not be stranded financially under this arrangement. In the years after 1998, the fixed contract costs were negotiated out of the contracts and debt service was later retired, leaving only G&A among the costs to be broadly shared. In this environment, and in recognition of the significantly reduced risk to the stranding of public investment, in 2005 Metro began loading half of the G&A onto cost centers using a standard cost-of-service approach, and left half to be paid by all ratepayers via the regional system fee.

In the next few years the Solid Waste Roadmap project will be looking broadly at the future of the disposal system, including its financing. This project will confirm, modify, or rewrite the current rate approach consistent with the relationship between public and private investment in the disposal system of the future.

As stated in the two previous annual reviews of solid waste disposal charges—and within the policy context described above—Metro's current approach to allocating costs is within industry standard approaches. The technical mechanics of the cost allocation are accurate with all costs allocated to the transaction fees, tonnage charge, regional system fee or a combination.

The final step in the rate model development is calculating the required unit cost for each of the fee categories. The revenue requirements by fee category are divided by one of the following four unit bases to calculate the fee/charge per unit: number of Metro staffed transactions, number of Metro automated transactions, Metro transfer station tonnage, or regional tonnage.

Based on the proposed unit cost results for FY 2012-13, adjustments to some of the current rates and charges appear warranted. Trends identified during the rate review include:

- While tonnage-related costs are up slightly, total revenue tonnage is expected to decrease slightly. The result of these two forces is a proposed fee per ton ($93.84) that is 4.8 percent higher than the current fee per ton ($89.53). **Table 3** summarizes forecasted transactions and tonnage for the current and previous rate models.

Table 3. Demand Forecast Comparison

Measure of Demand	2011 Forecast	2012 Forecast	Change
Tonnage	472,241	452,019	-4.3%
Transactions	308,284	311,155	0.9%
Tons per transaction	1.53	1.45	-5.2%

- Overall, costs are expected to increase by 1.3 percent. However, there is considerable variation among line items. **Table 4** shows detailed revenue requirements (costs less program revenue) for the current and previous rate model.

Table 4. Cost Forecast Comparison

Cost	2011 Forecast	2012 Forecast	Change
Parks & Environmental Services			
Disposal Operations	$ 29,315,427	$ 29,301,283	0.0%
Hazardous Waste Reduction	3,823,332	3,852,471	0.8%
Latex Paint Recovery	(127,759)	(107,146)	-16.1%
Landfill Stewardship	950,219	933,801	-1.7%
Facility & Asset Mgmt.	665,838	666,382	0.1%
Total Parks & Environmental Services	34,627,056	34,646,791	0.1%
Sustainability Center & Planning			
Resource Cons. & Recycling	6,182,121	6,674,970	8.0%
System Planning	365,722	174,945	-52.2%
Total Sustainability Center & Planning	6,547,843	6,849,914	4.6%
Finance & Regulatory Services			
Private Facility Regulation	960,843	1,048,435	9.1%
Illegal Dumping	565,876	549,420	-2.9%
Total Finance & Regulatory Services	1,526,720	1,597,854	4.7%
General & Administrative			
Parks/Enviro Svcs. Administration	487,581	361,915	-25.8%
Sustainability Center Administration	310,560	317,543	2.2%
Budget & Finance	426,706	390,198	-8.6%
Auditor, COO, CFO, Fin. Planning	867,443	797,067	-8.1%
Accounting	373,119	478,628	28.3%
Building & Office Services	506,981	358,233	-29.3%
Contract Services	219,255	130,786	-40.3%
Human Resources	326,923	315,376	-3.5%
Information Technology	858,022	889,770	3.7%
Media Relations & Creative Services	608,036	1,016,310	67.1%
Metro Attorney	432,513	453,850	4.9%
Policy & Compliance	511,356	516,839	1.1%
Risk Management & Insurance	295,693	247,061	-16.4%
Safety	190,986	171,622	-10.1%
Support Services	305,710	485,384	58.8%
Planning, GIS, Data Services	413,358	441,449	6.8%
Total General & Administrative	7,134,242	7,372,031	3.3%
Grand total	$ 49,835,860	$ 50,466,591	1.3%

- Program revenue from recoverable waste tip fees (net of recycling credits) is assigned to (and therefore reduces) the "Major Contracts" line item within disposal operations. In cost-of-service rate-setting, this technique is typically used for revenue streams whose price is not being determined by the rate model (i.e., non-rate revenue). Since recoverable waste tip fees are an output of the Metro model, we recommend expansion of the "Requirements" worksheet to include assignment and allocation of costs to all waste types being priced.

G. SUMMARY

The proposed FY 2012-13 solid waste charges and recoverable solid waste fees developed by Metro staff and reviewed by FCS GROUP are technically sound and supported by the cost information provided for review.

It should be noted that FCS GROUP was not asked to review the accuracy of the specific amounts provided in the budget for direct costs, capital requirements, and fund balances; nor review of contracts with transfer station operators, transport and fuel providers, or landfill/disposal operators. Rather the intent is to establish if all costs provided have been captured appropriately and if all cost allocations are technically sound and generally using industry standard approaches.