

**METRO**  
**Solid Waste and Recycling Department**

***Eliminate or Revise the  
Regional System Fee Credit Program***

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**August 2005**

A Report by the Office of the Auditor



**METRO**

PEOPLE PLACES  
OPEN SPACES

**Alexis Dow, CPA**  
**Metro Auditor**

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**METRO**

OFFICE OF THE AUDITOR

August 3, 2005

To the Metro Council and Metro-area citizens:

As part of the Metro Auditor's risk assessment, we undertook an audit of the Regional System Fee Credit Program. This program encourages recovery efforts by privately owned waste recovery facilities to improve recovery and boost the region's recovery rate. Metro spent approximately \$617,500 in 2005 and \$1 million in each of the preceding four years.

While recovery facilities do contribute to solid waste recovery, they do not always boost the region's recovery rate. Recovery rates of facilities we examined dropped over the last 5 years. This trend will likely continue as education programs motivate more people and businesses to recycle. Also, facilities participating in the program would likely continue to recover these materials for purely economic reasons without the program. Accordingly, focusing on recycling or conservation programs may be more effective at boosting recovery, particularly in the long run.

We recommend that Metro eliminate the Regional System Fee Credit Program or revise it substantially to better align its goal with what facilities can be expected to accomplish and then establish performance measures and monitor progress. In addition, eligibility criteria should be simplified and administrative procedures strengthened, including automating application and reporting requirements. Such automation is expected to save approximately \$21,000 annually.

The following report provides further detail for improving the program and Metro's management of it. The last section of the report presents the written response of Metro Chief Operating Officer Michael Jordan to each recommendation.

We appreciate the assistance provided us as we gathered the information necessary to prepare this report and recognize the many people at Metro actively committed to improving the efficiency and effectiveness of Metro and its programs.

Yours very truly,

A handwritten signature in black ink, appearing to read 'Alexis Dow'.

Alexis Dow, CPA  
Metro Auditor

Auditor: Debbie DeShais, CPA

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## Executive Summary

**Purpose of audit** The tri-county region served by Metro generates an estimated 2.4 million tons of solid waste a year. Metro, as the agency responsible for the region's solid waste system, has a goal of recycling or otherwise reusing 62% of this waste by the end of 2005. The region's recovery rate is currently at 57%. To help boost the recovery rate, the Metro Council authorized a program designed to encourage recovery efforts by privately owned recovery facilities that receive and process waste in the region. Called the Regional System Fee Credit Program, it allows these facilities to lower their costs by receiving a credit against fees they would normally have to pay to Metro to dispose of waste. In 2005, \$617,500 in credits were budgeted in support of the program. This audit addresses two main issues regarding this program: whether the program is meeting the goal of boosting the recovery percentage, and whether opportunities exist to make the program operate more effectively and efficiently.

**Program is not meeting its stated goal, and is probably unable to do so** The program is not always meeting the Metro Council's goal of boosting the region's waste recovery rate. Although recovery facilities do contribute to waste recovery in the region, their recovery rates are actually declining. The recovery rates for the four facilities we examined, which collectively account for more than 90 percent of the credits received in the program, have dropped between 2.6% to 15.3% over the last five years. The rates declined in part because recovery facilities are dealing with waste streams that have diminishing potential for recovery. As education and awareness programs motivate more people and businesses to recycle on their own, recovery facilities are faced with waste streams that have fewer materials to recover. Further, the economics of the recovery business suggest that, even without the program, recovery facilities would continue to recover much of what they currently recover because they can still make money or avoid costs by doing so. If the Metro Council wants to pursue the goal of boosting the recovery rate, focusing on recycling or conservation programs may yield greater returns, especially in the long run.

**If retained, program needs revision** The Metro Council may decide that even though the program cannot meet its current goal, other benefits may justify retaining it. If so, it makes sense to redefine the program's goal, so that the program's purpose is clearly understood and its success can be measured. We also identified several areas in which the program could be simplified, streamlined, or otherwise improved. For example, the current system by which recovery facilities establish their eligibility for the program is complicated and subject to manipulation; easier and simpler options exist. Other areas open to improvement include automating application and reporting requirements, investigating apparent discrepancies in reported recovery amounts, and re-examining which types of recovered waste should qualify for the fee credit.

Our specific recommendations are listed on the following pages.

## Summary of Recommendations

**1. Metro Council should eliminate the Regional System Fee Credit Program or revise it substantially.** The program's goal is to boost the region's recovery rate, but the rate generally cannot be boosted when facilities' recovery rates are dropping. If the Council decides that boosting the recovery rate should continue to be the goal, programs aimed at recycling and conservation may provide more opportunities in this regard. The program has cost approximately \$1 million per year for the last four years and the 2005 cost was budgeted at \$617,500. The current cost of this program might be better spent on these other types of programs.

*If the Metro Council decides that the program should be retained, the Council or Metro management, as appropriate, should make the following changes:*

- 2. The program's goal should be redefined, and appropriate measures developed to evaluate program accomplishments.** The program's goal should be aligned more closely to what the program can accomplish, such as helping to ensure that all recyclable materials that are economically feasible to recover are pulled from the waste stream. Redefining the goal is not sufficient by itself; Metro management should also develop specific, measurable performance measures and guidelines for reporting performance results. Without them, it is impossible for the Council and Metro management to tell, with any degree of certainty, whether the program is worth the investment. Guidelines and timelines for reporting results should also be incorporated into Metro policies and procedures.
- 3. Eligibility criteria should be simplified.** To qualify for the program, facilities must demonstrate that they are recovering at least 30 percent of the waste stream they process. Current criteria for measuring recovery rates are difficult to apply and open to manipulation—for example, in order to meet their recovery requirement, facilities might only accept highly recoverable loads, sending the rest directly to landfills or Metro transfer stations. It is also possible for facilities to classify the waste they receive in ways that allow them to take credit for waste that individuals or businesses have already recycled. Metro management should investigate alternatives (two are presented in this audit report) and develop an approach that is less complex and more transparent than the current one.

- 4. Consider eliminating all inert materials from materials that can be included in recovery rate calculations.** About one-fourth of all the program credits granted in the past five years are related to one facility's processing of heavy "inert" materials, such as structural brick, glass and porcelain. The facility uses some of these materials to create paving material at its on-site rock crushing operation. In the past, stakeholders and industry experts have argued that because of their weight, these materials would probably be recovered anyway, even without the program, and should be excluded from the program.
- 5. Administrative procedures should be strengthened.** Administrative procedures should be strengthened by (1) targeting financial compliance reviews on the basis of risk, (2) fully automating the process for participating in the program and meeting reporting requirements, and (3) documenting policies and administrative procedures and updating them as needed. Three or more years have lapsed between compliance reviews at some facilities – too long a period, especially if a facility does not have good reporting systems or otherwise poses a risk. Fully automating the forms used in applying for program credit and reporting waste recovery information will make the process easier for facilities and save Metro an estimated \$21,200 annually in staff time. Although current staff are well versed in policies and procedures, the absence of documentation would make it difficult for others to step in. Documenting procedures also allows management to review existing procedures for effectiveness and potential efficiencies.
- 6. Inconsistencies and discrepancies should be reviewed.** Our comparison of various reports showed unusual patterns – for example, one facility reported receiving far less tonnage in already recycled materials than haulers reported delivering to the facility. Metro staff should regularly compare these reports and investigate discrepancies.
- 7. Policies should be changed to prevent facilities from withholding payment on amounts due.** One facility, protesting the way Metro determined the fee credits allowable under the program, withheld a substantial part of its fee payment, resulting in a sizeable receivable due to Metro. A significant portion of this amount may prove to be uncollectible. Metro needs to develop a policy that, while allowing facilities to protest the credit rate structure or any other part of the program, requires that the current rules and regulations be followed until a decision is reached with regard to the protest.

## Introduction

This audit examines one feature of Metro’s solid waste management system – a program that allows privately owned solid waste processing facilities (called “recovery facilities”) to qualify for a credit back on the fee that Metro assesses for solid waste administration in the tri-county region. Called the Regional System Fee Credit Program, the program has cost Metro an average of \$1 million (plus administrative and overhead costs) per year from 2001 through 2004, and is expected to cost \$617,500 for 2005. The audit addresses whether the program is fulfilling its goal and what improvements, if any, might make it operate more effectively. This introductory section of the report puts this program in the context of Metro’s waste management efforts and explains how we conducted our assessment.

### **What is the role of recovery in the waste management system?**

The homes, offices, retail businesses, manufacturing plants and construction sites in the tri-county region generate an estimated 2.4 million tons of solid waste<sup>1</sup> per year. This is more than 1.8 tons for every man, woman and child in the region. Oregon statutes establish a statewide policy that emphasizes conservation and other steps to reduce solid wastes. Statutes require the managing entity for each “wasteshed”<sup>2</sup> within Oregon to have comprehensive programs for solid waste management that prioritizes the methods of managing solid waste as follows: reduce, reuse, recycle, compost, recover energy and, finally, disposal. Metro, which is responsible for managing solid waste in the tri-county wasteshed, has a comprehensive waste management plan that includes material recovery. Central to Metro’s recovery effort is a program for recovering reusable or recyclable wastes that would otherwise be sent to a landfill. Recovery efforts contribute to the reuse, recycle, compost and energy recovery components of the hierarchy and decrease the amount of solid waste landfilled. They also conserve natural resources because the materials pulled from the waste stream can either be reused in their current state or recycled into other useful items.

Metro’s comprehensive plan and state law call for it to achieve a 62% recovery rate for solid waste by the end of 2005. Attaining this 62% recovery goal means that for every 1,000 pounds of solid waste that enters the waste stream, 620 pounds of it will be diverted from landfills by recycling or reuse. The tri-county area had a 57% recovery rate in 2003, the most recent year for which data is available, according to a report by Oregon’s Department of Environmental Quality.

<sup>1</sup> “Solid waste” means useless or discarded materials, including (but not limited to) garbage, rubbish, refuse, ashes, paper and cardboard, sewage sludge, septic tank and cesspool pumpings or other sludge, useless or discarded commercial, industrial, demolition and construction materials, discarded or abandoned vehicles or parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semisolid materials, dead animals and infectious waste as defined in ORS 459.386. “Solid waste” does not include hazardous waste or materials used for fertilizer.

<sup>2</sup> A “wasteshed” is an area with a common solid waste disposal system or an area designated by the Environmental Quality Commission as appropriate for development of a common recycling program. The wasteshed managed by Metro is comprised of Multnomah, Washington and Clackamas counties.

Recovering waste usually requires separating those components that can be recycled or reused from those that cannot. There are two main points at which this sorting can be done:

- The person who last uses the recyclable material can separate it from the solid waste that needs to be disposed. Recycled materials that are separated in this way are referred to as “source-separated.”
- Waste can be sent to a facility for separation. This approach is referred to as “post-collection recovery.” Post-collection recovery is a final safety net for recovering recyclable materials.

**What function do privately owned recovery facilities play in the recovery and disposal system?**

Privately owned recovery facilities are one potential conduit through which solid waste can flow in the tri-county region. As Figure 1 shows, individuals and businesses generate three main waste streams – “wet” waste, which generally includes decomposing food, “dry” waste ranging from paper to construction material, and source-separated recyclable waste. This waste eventually ends up at one of two places – a landfill (for non-recovered wastes) or some type of “clean” recovery facility or recycler (for recovered wastes). Recovery facilities, along with Metro transfer stations, are an intermediate stop. Recovery facilities engage in post-collection recovery of mixed dry wastes, such as construction material. They separate the wastes they receive into those that can be recycled or reused and those that must be sent to the landfill for disposal.



**Figure 1**  
**Solid waste process**

<b>Who generates the waste?</b>	<b>What types of waste are generated?</b>	<b>What facilities handle waste?</b>	<b>Where does waste end up?</b>
<b>Generators</b> of waste include: Individuals and families Business and industry Governments and non-profit organizations	<b>“Wet” waste</b> This is a waste that has food in it. It is generally not recoverable. The generator is throwing it away and usually pays a hauler to collect and dispose of it.	<b>Metro transfer stations</b> They accept all three types of waste. They pass recyclables to recyclers and forward wastes needing disposal to landfills.	<b>Landfills</b> They receive “wet” and “dry” waste from transfer stations and residual waste from recovery facilities.
	<b>“Dry” waste</b> This is waste such as construction and demolition debris, metal, plastic, paper and cardboard. Some of it may be recoverable. The generator pays for disposal either directly or through a hauler.	<b>Recovery facilities</b> They accept primarily mixed “dry” wastes and source-separated recyclables. From mixed wastes they recover wood, metal and other materials and pass them on to recyclers and other users. They also send source-separate materials to recyclers. Recovery facilities send residual materials needing disposal to landfills.	<b>Recyclers</b> They receive recyclables from transfer stations and recovery facilities and convert them to new uses.
	<b>Source-separated recyclables</b> These recyclables are separated by the person or business last using them. Haulers usually pick them up as part of a collection services package.		

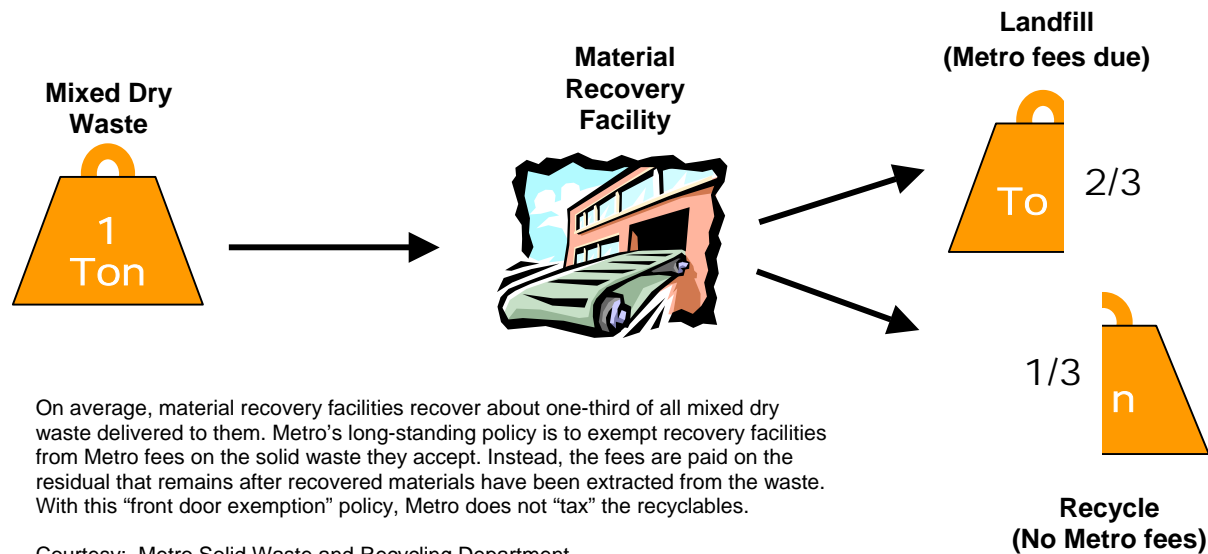
Metro regulates privately owned recovery facilities as part of its overall responsibilities for solid waste management in the tri-county region. To receive a license or franchise to operate, recovery facilities must recover from their incoming waste stream 25% of the waste materials that would otherwise go to a landfill for disposal. Source-separated materials are excluded from the facilities’ recovery rate because the person or business that generated the waste has already separated the waste and identified the portion to be recycled or reused.

**How does Metro’s solid waste management affect private recovery facilities?**

Metro’s solid waste management affects recovery facilities in two main ways. The first is the “tip fee” – that is, the fee charged by transfer or recovery stations to drop, or “tip,” a waste load for processing and/or disposal. This fee is the primary source of revenue for transfer stations and private recovery facilities. Metro does not regulate the tip fees charged by private recovery facilities in the region, but the tip fee Metro charges at its transfer stations sets the benchmark for the region. If recovery facilities charge more in tip fees than Metro’s transfer stations, they run the risk of losing business to those transfer stations.

Metro also affects waste recovery facilities through its Regional System Fee – the user fee Metro imposes on waste disposed of in the region. The Regional System Fee generates approximately \$20 million each year, which Metro uses to pay for its solid waste management efforts. As Figure 2 shows, Metro does not levy the fee on incoming waste; rather, it is assessed only on waste that is ultimately disposed of. This policy, informally called the “front door exemption,” is designed to encourage recovery facilities to recover as much as possible from their waste stream. Not only can they sell recovered waste, but they also avoid the fee associated with sending it to a landfill. Facilities must pay the fee, however, on any waste they send to a landfill. To the extent they have to pay it, the Regional System Fee thus represents a cost of business to the recovery facilities.

**Figure 2**  
**Metro fees on mixed dry waste**



**Why was the Regional System Fee Credit Program created, and how does it operate?**

Metro reduced its tip fee by a total of \$12.50 per ton and the Regional System Fee by \$3.50 per ton in 1997 and 1998. To remain competitive, private recovery facilities had to reduce their tip fees similarly. These reductions threatened their economic viability, because revenues dropped by \$12.50 per ton while costs dropped by only \$3.50 per ton. To provide economic relief and preserve recovery capacity, Metro instituted the Regional System Fee Credit Program in 1998. The program provided the facilities with cost relief on disposal in the form of a credit on the per-ton Regional System Fee, thereby restoring the same margin between revenues and costs. Each year the Metro Council establishes the amount of credit available for the program. That amount has varied over the years.

The program was originally designed to provide facilities with short-term help in adjusting to the new price structure. In 2001, the Metro Council decided that even if the facilities no longer needed the credit subsidy to make up for the drop in revenue, encouraging post-collection recovery was still important if Metro was to reach its recovery goal of 62% by 2005. The Council therefore changed the program's stated goal to "improve recovery and boost the region's recovery rate."

Not every recovery facility is eligible for this program. To qualify for program credits, facilities must currently achieve 30% recovery, 5% over and above that required by their license or franchise. Seven facilities currently meet this criterion. The program provides a credit against a portion of the fees they would otherwise pay for waste disposal. Each year, the Metro Council decides how much credit, in total, to provide for the program. The credit per ton is currently determined by dividing the total amount budgeted by tonnage projections to arrive at a flat per-ton rate<sup>3</sup>. Regional System Fee credits issued to the facilities for their recovery efforts are determined monthly by multiplying the per-ton credit by the total amount of "dry" waste the facility sends to landfills for final disposal. For fiscal year 2005, the total amount budgeted was \$600,000 (plus a \$17,500 carryover from the previous year).

Metro's Solid Waste and Recycling Department conducts several types of activities designed to ensure that facilities are claiming proper credit. These activities are summarized in Figure 3.

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<sup>3</sup> Previously, the credit rate was set at a graduated schedule (the greater the recovery, the greater the credit per ton) to encourage additional recovery. However, costs for the program were difficult to estimate under the graduated schedule and the budget was exceeded several years in a row.

**Figure 3**

**Overview of Metro’s primary controls and procedures for ensuring facilities claim proper credit**

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<b>Control</b>	<b>Description</b>
Financial compliance review	Tests controls and transactions to support conclusions about the accuracy and completeness of data submitted by the facility. Facilities are reviewed on a rotational basis. Time between reviews can be several years.
Desk audit	Each month, staff compile tonnage data, analyze waste material flow for reasonableness, and compare tonnage data to the facility’s credit application. Program reports are submitted for internal review to management and the Metro Council.
On-site inspections	Each month, staff conduct unannounced inspections to monitor each facility’s compliance with requirements in their license or franchise and with statutes and regulations.

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**Objectives, Scope and Methodology**

Our report addresses two primary topics: is the Regional System Fee Credit Program accomplishing its goals, and does Metro have an effective set of controls in place to manage the program and monitor facilities’ compliance with program regulations? Our specific work to address these questions included the following:

- Reviewing relevant Oregon Statutes, Metro Code provisions, and program policies
- Reviewing prior audits of the Metro Solid Waste and Recycling Department and various work group, committee and task force evaluations of the program
- Conducting an internet search to identify similar solid waste fee credit programs and audits of them
- Conducting interviews with managers and staff responsible for monitoring participation, regulating and administering the program
- Performing a risk analysis based on the preliminary survey information and data
- Conducting site visits of four of the seven recovery facilities that have participated in the program
- Performing tests to determine validity and reliability of data from computer-based systems
- Performing several analyses to determine the reasonableness of program data
- Identifying, evaluating and testing program controls to determine if they functioned effectively
- Testing a sample of credit applications from the source transactional data through Metro’s official granting of credit

It should be noted that the transaction data Metro uses to determine the appropriateness of fee credits is submitted by the facility requesting the credit. It was not within the scope of this audit to test the facilities' systems and records for validity and reliability. We did, however, test the raw data submitted by the facilities through Metro's system to assess the accuracy and completeness of the data and we reviewed the data for reasonableness. We also reviewed Metro's processes for testing the completeness and accuracy of the facilities' data by conducting interviews and reviewing analyses and processes currently performed by staff.

Of the seven facilities that are currently eligible for fee credits, we chose as our sample the four facilities receiving the most in credit dollars since inception of the program. As of April 2005, this sample represents 90% of the total fee credit dollars issued since inception of the program. We believe this sample provides us with adequate evidence from which to base our conclusions.

Metro staff, as well as various work groups and committees, have completed numerous reviews of the credit program. Metro Council President Bragdon, with the approval of the Metro Council, also convened a task force to evaluate the program in June 2003. The task force was comprised primarily of experts in public policy, business and the financial community. The task force reviewed background and policy data supplied by staff, conducted site visits and heard testimony from stakeholders and industry experts. In addition, staff has also studied different ways to increase recycling, improve recovery and boost the region's recovery rate. We obtained and reviewed these evaluations and analyses as part of our audit.

Our audit was conducted in accordance with generally accepted government auditing standards. These standards require that we review internal controls and report significant deficiencies that are relevant to audit objectives. Significant internal control deficiencies found during the course of the audit are described in the report.

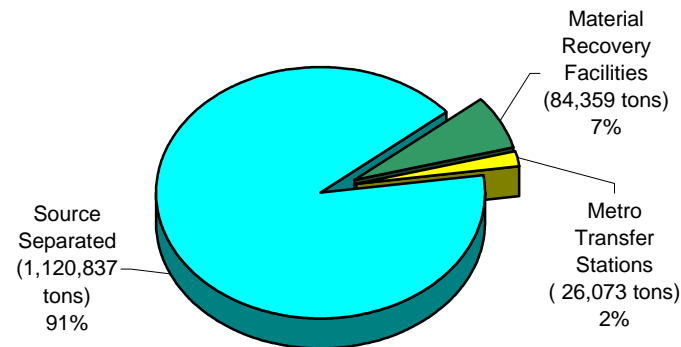
## The Regional System Fee Credit Program is not achieving its goal

The Regional System Fee Credit Program is not always meeting the Metro Council's goal of boosting the region's recovery rate, and there may be better ways to apply the money associated with this program to increase the amount of waste being recycled. While the recovery effort of these facilities is keeping part of the region's waste from being placed in landfills, the overall recovery rate at the facilities we examined has actually declined in recent years. Further, available evidence suggests that facilities will continue to recycle some of the waste even if they do not receive the credit, because it is in their economic self-interest to do so. The Metro Council should determine if the amount currently being invested in the credit program might yield greater results if spent elsewhere, such as on programs to increase the level of source-separated waste.

**Program is contributing to recovery but is not boosting the region's recovery rate**

Private recovery facilities clearly play a role in contributing to the region's recovery efforts. According to the most recent report by the Department of Environmental Quality, 51%<sup>4</sup> of total waste generated (that is, waste disposed plus waste recovered) in the region was recovered in 2003. As Figure 4 shows, recovery facilities accounted for 7% of this total – about 84,000 tons. By comparison, 91% (1.1 million tons) was separated for recycling or reuse by the generator of the waste. The other 2% of the region's recovery came from efforts at Metro's transfer stations.

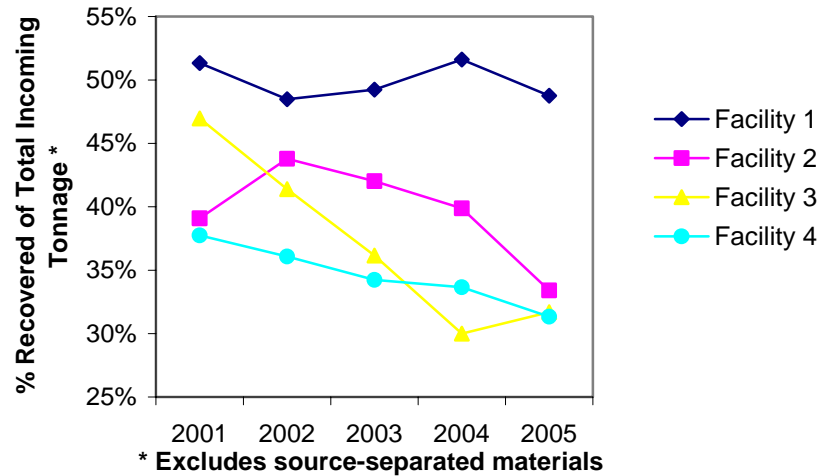
**Figure 4**  
**2003 Regional waste recovery**



<sup>4</sup> Metro also receives 6% credit (2% each) for its waste prevention, reuse and composting programs, resulting in an overall 57% recovery rate for the region.

The Metro Council extended the Regional System Fee Credit program in 2001. It did so with the stated goal of improving recovery and boosting the region’s recovery rate. Boosting the rate is necessary if the region is to close the gap between the existing 57% recovery rate and the 62% recovery goal established for 2005. In this regard, recovery facilities are doing less well than in the past. As Figure 5 shows, yearly tonnage recovered as a percentage of total incoming tonnage decreased from 2001 to 2005<sup>5</sup> for all of the facilities in our sample. Only one of the decreases was dramatic (15.3%). This decrease is an anomaly, in part because the facility lost a major customer, reducing its incoming tonnage. Nonetheless, the recovery rate trend for the three other facilities, while not as dramatic, is still negative.

**Figure 5**  
**Material recovery facility recovery rate analysis**



This trend does not appear likely to change. As education and awareness programs motivate more people and businesses to recycle their waste, the amount of recoverable materials left in the waste streams is diminished. To illustrate, assume a demolition contractor is tearing down a building and decides to separate out for recycling all materials he can without causing an excessive burden on his resources. The building contains five tons of wood, one ton of roofing materials, one ton of metal, and two tons of other miscellaneous recyclable materials mixed in with three tons of non-recyclable materials. The contractor decides he can easily pull out the wood and metal.

<sup>5</sup> Based on fiscal years, July 1-June 30. 2005 represents results through April.

However, he feels it is not economically feasible to separate the roofing material or the other miscellaneous recyclable materials from the non-recyclable items and so decides to send these items to a facility for additional recovery. In this case, all the easily recoverable items have been separated out of the waste stream, leaving only the harder to recover (and often less valuable) items for the facility.

The example above illustrates that recovery facilities are left with residual waste streams that are likely to have less and less material that can be cost effectively separated and recycled or reused. As a result, facilities may find it impossible to meet increasing expectations with diminished waste streams. The region's recovery rate generally cannot be boosted by facilities whose recovery rates are dropping.

**Recovery of some materials would likely continue without the program**

Our analysis indicates that, even without the credit program, recovery facilities would probably be economically motivated to recover much of the materials they currently recover. We analyzed the value of various types of recovered materials by looking at what Metro transfer stations either received for recyclable materials through sale in the open market or had to pay to dispose of them. These values and costs would likely hold for private recovery facilities as well as Metro's transfer stations. Figure 6 shows the average value of materials recovered by Metro transfer stations during 2003 and 2004. Aluminum, copper, brass and other metals are very lucrative, and cardboard and paper also bring a good price. Even wood and other debris used for hog fuel is marketable.

**Figure 6**  
**2003-2004 Average value/cost of recovered materials at Metro transfer stations**

<b>Materials</b>	<b>Total Tons</b>	<b>Total Amount Received (Spent) *</b>	<b>Value (Cost) ** Per Ton</b>
Alum/Copper/Brass	413.73	\$273,481.31	\$661.01
Batteries	456.60	\$18,539.80	\$40.60
Cardboard	3,945.16	\$270,879.87	\$68.66
Hog Fuel	44,185.00	\$492,527.42	\$11.15
Metal	18,091.06	\$1,259,735.81	\$69.63
Other Paper	1,176.80	\$49,964.80	\$42.46
Glass	348.63	(\$645.56)	(\$1.85)
Rubble	743.81	\$0.00	\$0.00
Tires	1,094.03	(\$68,292.70)	(\$62.42)
<b>TOTAL</b>	<b>70,454.82</b>	<b>\$2,296,190.75</b>	

NOTE: All amounts are averages.

\* Price received for sale of materials on open market or cost to dispose of items

\*\* Amount received (spent) divided by total tons



The economics associated with selling valuable materials to a recycler suggest that most would be recovered even without the credit program. For example, in fiscal year 2003, Metro's cost to transport and dispose of waste was estimated at \$33.25 per ton – \$15.25 for transportation and \$18.00 for disposal. If Metro chose to dispose of a ton of cardboard, it would cost \$33.25. By contrast, even if Metro spent \$40 per ton to separate the cardboard for recycling and \$15.25 to transport it to a recycler, it would still make \$13.41 – the difference between its costs and the selling price of \$68.66. The more valuable the material, the greater the economic benefit of recycling. Although transportation and disposal costs may be less at recovery facilities, they are also required to pay fees and taxes on waste disposed. The point is that as long as it is profitable to recover materials, facilities will do so.

It may even make sense for recovery facilities to recycle or reuse some wastes at a loss, because the cost of doing so is less than the cost of putting them in a landfill. For example, inert<sup>6</sup> materials such as brick from construction demolition, glass and porcelain may have little, if any, value but they are very heavy and therefore expensive to send to landfill. Rubble, concrete, asphalt, rock, soil, sand, and brick are often accepted (at little or no cost) at reclamation projects or ground into gravel substitutes. There may be transportation costs associated with recycling inert materials, but landfill costs can exceed these costs. A disposal cost savings of even \$1 per ton can add up fast with these heavy materials.

Recovery facilities have incentives to recover waste, e.g. they can sell recovered materials to recyclers and avoid final disposal costs, taxes and system fees on all the materials they recover from the waste stream. However, while some materials thus might still be recovered even without the credit, loss of the credit would result in some reduction from recovery levels of approximately 84,000 tons per year. A 2003 task force studying the program, consulted industry experts and determined that if the program were discontinued and no alternative put in its place, post-collection recovery could decline by as much as 30,000 tons—a drop of about one-third. We consider this to be a plausible estimate.<sup>7</sup>

**Other approaches might be a more effective use of Metro resources** Our analysis should not be taken to mean that the credit program provides no benefit—it clearly helps to recover some waste that would otherwise go to landfills. However, if the program is not capable of meeting its stated goal, it raises the question of whether some other use of these same funds would yield a greater result. In short, should Metro continue to supply support for post-collection recovery efforts through this program, or should it look to

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<sup>6</sup> “Inert” materials contain only constituents that are biologically and chemically inactive and that, when exposed to biodegradation and/or leaching, will not adversely impact the waters of the state or public health. Currently, of all inert materials, only structural brick, glass and porcelain are eligible for credit.

<sup>7</sup> Our conclusion is based on the fact that about 30% of the waste recovered in the region in 2003 was yard debris and miscellaneous materials—categories that would probably be the first to be eliminated by the facilities if they had to cut back on staff and equipment as a result of losing the credit.

another program, either for post-collection recovery or toward increasing the level of source-separation in targeted waste streams?

Post-collection recovery is an important component of Metro's solid waste management plan; however, programs supporting post-collection recovery may be less cost-effective in the long run than programs supporting source-separation efforts. Support for source-separation efforts helps change the behavior of waste generators and motivates them to reuse or recycle. Once people (or waste generators) are motivated to recycle, the amount of materials entering the waste stream from that generator is reduced now and may continue in the future. In addition, when generators recycle, they perform most of the labor to separate the materials for recycling.

Metro's Waste Reduction and Outreach Division Manager asserts that businesses in the region throw away about 40 tons of recyclable paper per hour of business. The potential for increases from source-separation programs in this sector alone then is 84,000 tons per year. There is also significant potential for increases in recovery through source-separation of construction wastes, and they have been targeted in Metro's Annual Waste Reduction Program Plan. Finally, potentially all waste currently recovered by recovery facilities participating in the credit program could be separated for recycling by the generators of that waste.

For all these reasons, the Metro Council needs to decide whether the benefit received through the credit program is sufficient to justify the program's continued existence. The program's current cost – \$617,500 – might be better spent on other recycling or conservation programs.

## If retained, the Regional System Fee Credit Program needs revision

If the Metro Council elects to keep the Regional System Fee Credit Program, a number of changes are in order to make it more effective or efficient. They include the following:

- Establishing a goal that is attainable, and establishing performance measures to monitor whether the program is achieving that goal.
- Revising and restructuring eligibility criteria. Current eligibility criteria are ambiguous and open to manipulation.
- Dropping inert materials from the types of recoverable materials that can be used to establish program eligibility.
- Strengthening administrative procedures such as automating application and reporting requirements and documenting policies and administrative procedures.
- Resolving several issues placing the program at greater risk, such as discrepancies in the amount of source-separated materials being reported and acting to address disputes, particularly ones that can result in uncollectible receivables.

### **Program's goal needs to be changed and monitored**

The Metro Council may decide that the environmental benefit of this program does justify its cost. If so, the Council should consider changing the program's goal to align more closely with what the program can be expected to accomplish. In view of current trends, the stated goal of boosting the region's recovery rate may not be an appropriate or productive approach to achieving Metro's targeted recovery rate. However, the program's goal could be tied to other purposes, such as maintaining adequate processes to ensure all recyclable materials that are economically feasible are pulled from the facilities' waste streams.

If the program is retained and realigned to more appropriate goals and objectives, Metro also needs to develop ways to measure the extent to which the program is achieving them. Specific, measurable performance measures and guidelines for reporting performance results are needed. Without measurable performance criteria, it is difficult for Metro management and Council to tell, with any degree of certainty, if the program is sufficiently successful at increasing recovery given Metro's investment. To ensure consistency, Metro's guidance should provide guidelines and timelines for reporting performance results. Reporting should occur regularly to assist Council in assessing the program's effectiveness.

**Eligibility criteria need to be simplified**

To be eligible for the credit program, facilities must demonstrate that they are recovering at least 30% of the wastes they receive. The criteria for establishing this eligibility are difficult to apply and open to interpretation, which can encourage manipulation of the system. Simpler options are available.

**Classifications are difficult to determine and encourage manipulation.** The difficulty of applying current criteria can be seen in several examples of the types of loads brought to recovery facilities. Under current procedures, a facility cannot take credit for recovering waste that was already separated for recycling or reuse by the person or business that generated the waste. However, it is often impossible to determine whether the material has been intentionally separated for recycling. Some facilities follow Metro’s suggestion and consider loads that are predominantly one material and require minimal sorting to be identified as a source-separated load. Other facilities believe that if they have to do any picking through the load at all, it is a mixed dry load.

**Figure 7**  
**Mixed waste**



Figure 7 shows a load of wood that also contains carpet, metal, and other miscellaneous materials. The facility receiving this load classified it as a source-separated load, meaning that the facility could not include any amounts recovered in this load toward the 30% recovery figure. However, the facility coded a similar load of wood with roofing materials in it as mixed dry waste. The facility was able to count the recovered portion of that load toward the 30% recovery figure. We found that interpretations often differ.

**Figure 8**  
**Inert materials**

Even if a load is not mixed, decisions about whether the material qualifies in the facility's recovery rate can vary. Figure 8 shows a load of porcelain toilets – porcelain is an inert material that can be recovered and counted in a facility's recovery rate. Whether the facility can include this load in its recovery rate, however, depends on the intent of the person who brought in the waste. If that person intended the material to be recycled, the facility cannot count it as part of the facility's own recovery stream, because it is a source-separated load. If the person simply intended to get rid of the material, the facility can count it.



**Figure 9**  
**Pre/post-consumer waste**



The electrical insulators in Figure 9 are an eligible inert material in the credit program as long as they were not separated for recycling by the power company or part of an industrial (pre-consumer) process. For instance, if these insulators are part of the electrical distribution (consumer) process they are eligible for inclusion in the facilities' recovery rate. However, if they are part of the electrical generation (industrial) process they are not eligible and should be excluded from the materials used to calculate a facility's recovery rate.

These examples illustrate the kinds of ambiguities in the criteria for determining whether the material qualified for the credit program, but they do not fully capture the complexity of the decisions that must be made. In practice, when a load is brought to a facility, proper classification rests on determining all of the following:

- Is it inert material, and if so, is it an inert material that qualifies for inclusion in the recovery rate calculation or is it expressly excluded?<sup>8</sup>
- Is it pre-consumer or post-consumer waste? Pre-consumer wastes are not eligible for inclusion in the facility's recovery rate calculation.<sup>9</sup>
- Is it source-separated material? Such material is not eligible for inclusion.

If facility operators could not answer these questions by looking at the load, they could ask the hauler, but that would mean that every hauler would have to be very familiar with the definitions and classifications of materials as described in state statute, the Regional Solid Waste Management Plan, and the credit program policy in order to answer the operator's questions correctly. In addition, if the load was from a collection route, it might be impossible for the hauler to know every waste generator's intent. The operator could also call facility management or supervisors to help in classifying the load but time is money for both the facility and the hauler and delays in order to properly classify incoming materials would probably have a negative effect on business.

Current program criteria also leave the program open to manipulation by the facilities in order to achieve desired recovery rates. A facility's recovery rate is based on weight, which could lead a facility operator to manipulate waste streams in favor of heavy materials. Other ways to manipulate include "cherry-picking," that is, accepting only highly recoverable loads and sending the rest to a Metro transfer station or directly to a landfill. Although not against the rules, cherry-picking contributes little to waste reduction/reuse/recycling goals. In order to meet recovery requirements, operators might also re-characterize loads by classifying source-separate loads as mixed dry waste, thereby taking credit for the recycling of these materials. Re-characterization of loads is a violation of the licensing or franchise agreements.

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<sup>8</sup> "Inert" materials contain only constituents that are biologically and chemically inactive and that, when exposed to biodegradation and/or leaching, will not adversely impact the waters of the state or public health. Under Metro procedures, certain inert materials, such as gravel, concrete and rubble, are specifically excluded from counting as recovered materials.

<sup>9</sup> "Post-consumer waste" is a finished material that would normally be disposed of as solid waste, having completed its life cycle as a consumer item. Post-consumer waste is defined to include construction or demolition waste but does not include wastes resulting from manufacturing or industrial processes such as making iron, steel, plastics, clay and concrete products, or timber products. Such wastes are considered pre-consumer wastes.

**Simpler options are available.** There are several ways in which management could address the issues associated with policy being tied to a recovery rate that subjects the program to problems of definition, application and manipulation. Following are two feasible options.<sup>11</sup> Both options would allow facilities to establish a basic eligibility by applying, for instance, by the end of the current calendar year, for inclusion in the following fiscal year's program. Once basic eligibility is established, each facility would be eligible for the monthly subsidy provided they met ongoing eligibility requirements. The monthly eligibility test would vary by option as follows:

- **Option 1: determine continued eligibility by ongoing review of processes at the facilities.** Under this option, Metro inspectors would observe the facilities' processes<sup>12</sup> for recovering materials from their waste streams as part of the monthly inspections currently performed. If the processes are adequate to ensure an appropriate amount of recyclable materials are pulled from the waste stream, the facility qualifies for credit that month.

This option offers several advantages. It is simpler and easier to administer than the current system, eliminates the problems associated with ambiguous definitions and potential manipulations, uses current staff and procedures (monthly inspections) to determine and monitor eligibility, and provides better control of the budgeting and cash flow associated with the program. It would, however, require some up-front time to develop policies and procedures.

- **Option 2: determine continued eligibility by conducting spot inspections of materials being disposed.** Under this option, which is currently under consideration by Metro staff, a knowledgeable Metro employee would examine waste delivered to landfills by the facilities to determine whether the facility had done an adequate job of pulling recyclable materials from their waste stream.

Like Option 1, this option would also be simpler and easier to administer and eliminate the problems of definition and manipulation. Relative to the first option, this option would probably require more up-front staff time to develop needed policies and procedures. It may also require additional inspection resources, as inspectors would have to spend additional time at the facilities or landfills examining loads destined for final disposal.

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<sup>11</sup> We do not think better administration of the current system – that is, establishing clearer definitions, better guidance, and stricter enforcement – is a viable option. It will be extremely difficult, if not impossible, to get consensus on definitions and the descriptions of how to apply them.

<sup>12</sup> Metro's inspectors are well versed in solid waste operations and capable of determining if adequate processes exist. They are also capable of examining waste sent to landfills to determine if facilities are doing an adequate job of recovering recyclable materials.

**Inert materials should be excluded from eligibility determinations**

Including heavy inert materials – such as structural brick, glass and porcelain – in a facility’s recovery rate calculation has been a matter of contention for some time. It has contributed substantially to one facility receiving by far the largest share of credits available. There are currently several facilities in the program that process mixed dry waste. However, only one facility benefits significantly from processing eligible inert materials. This facility has an onsite rock crushing operation and has developed an aggregate mix used in roadways. Inert materials are used as part of that aggregate mix. Heavy inert materials constitute about half of this facility’s total recovered materials each year. As of April 30, 2005, the facility had received 53% of the \$6.3 million in total credits issued since the inception of the program. About half of the credits the facility received relate to its recovery of heavy inert materials.

When a task force appointed by the Metro Council studied the current program in 2003, over half of the industry experts giving testimony told the them that facilities should not be able to count inert materials<sup>13</sup> in calculating their recovery rates, especially since facilities would likely recover a significant portion of these materials even if the credit program did not exist. Our review showed that the total credits earned by this facility were accurately calculated in accordance with the program’s rules; however, the perception of inequity can exist when only one facility benefits from those rules. This facility does perform real recovery and its waste stream is not as rich in recoverables as the streams of some other facilities. It should not be penalized because it processes inert materials, but neither should it inordinately benefit from that processing. We think that the Metro Council should consider the equity issues in relation to the credit program and follow industry suggestions to disallow inert materials in recovery rate calculations.

**Administrative procedures can be strengthened**

Overall, Metro has strong procedures for administering the program and monitoring recovery facility procedures for claiming proper credit. Metro staff perform unannounced inspections of facilities to monitor compliance with regulations, perform financial compliance reviews to determine the reliability of data submitted by the facility and perform a desk audit of the data by comparing the tonnage data, waste flow, and credit application submitted by the facility to tonnage data compiled independently by other Metro staff. However, there is potential for improvements to be made and efficiencies gained. We identified three main areas in which improvements could be made.

**Develop a risk-based approach to conducting financial compliance reviews.** Metro has an acceptable financial compliance review program, but considerable time elapses between reviews. The review examines a facility’s financial controls and tests transactions to ensure they can support conclusions about the accuracy and

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<sup>13</sup> The remaining testimonials did not mention inert materials.



completeness of the data submitted by the facility. Metro conducts reviews on a rotational basis; a facility that has gone the longest without a review is generally the next to receive a review. Metro staff try to complete reviews once every couple of years. However, two facilities have gone almost four years since their last review; a third has gone three years. Either more resources need to be dedicated to monitoring participant adherence to program requirements in a timelier manner or Metro needs to ensure that it is focusing available resources on conducting reviews where the risk is greatest.

Basing the timing and extent of reviews on risk rather than a strict rotational basis would allow staff to select facilities for review based on the strength of a facility's controls for accumulating and reporting transactional and financial data and any perceived risk of non-compliance. A risk-based approach would also allow review staff to focus on the facility's internal controls and areas of most risk to Metro. This approach will reduce the amount of time consuming, detailed transaction testing necessary at facilities when their controls are adequate.

**Fully automate processes for participation and for meeting reporting requirements.** The fee credit application is laborious both for facilities to complete and for Metro staff to review. Figure 10 shows the current application, with those calculations that are currently performed automatically marked in yellow and those that are performed manually marked in blue. Automating the monthly data reported in the blue cells so that each row automatically rolls up at the beginning of each new monthly application could be easily done. This would eliminate the need for the facility to re-input the monthly amounts in the 66 blue cells and it would eliminate the need for Metro to check that the data was input correctly. Facilities will be able to complete the application more quickly, and the additional automation will also reduce the probability that facilities will use incorrect credit schedules to determine the amount of their credit, because the amount will be calculated automatically. Metro staff will save time currently spent checking the data. Metro staff currently must review and recalculate each applicable item on the three-page application. Finally, if the application were web-based through a secure site, it would eliminate much of the time and resources currently consumed through use of the paper application. Fully automating the application and reporting system would require additional resources for the initial set-up but would conserve Metro staff resources in the long run. We estimate that automating this form completely would save Metro about \$21,200 in staff time annually.<sup>14</sup>

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<sup>14</sup> Management estimates that processing time in administration of this program consumes the equivalent of 40% of one person's work year. Yearly program costs (including a small amount for overhead) are calculated at \$60,200. Over half of this \$60,200, relates to processing applications and of that, 70% relates directly to reviewing and recalculating the application. Complete automation could cut most of this processing time, a potential savings of \$21,200 annually.

**Figure 10**  
**Regional Solid Waste Credit Program Application**

Page 1

Page 2

Page 3

**Document administrative procedures and update them as needed.** The Administrative Procedure document has not been formally updated since August 2000, although the program has changed since that time. Procedural changes have been communicated to the facilities participating in the program through a letter either from the Director of the Solid Waste and Recycling Department, the Budget and Finance Administrator or a Solid Waste Facility Analyst. These letters, although an effective communication method, are not an appropriate substitute for formally documenting program administrative procedures. The procedures document should be updated to reflect all changes communicated via letter and kept in a central location easily accessible by Metro staff.

A procedure should be established to ensure the procedure document is updated regularly to reflect current requirements. As part of this process, any credit application form adopted should be incorporated in the program procedure document by reference (that is, including a copy marked “sample” so the user will know to obtain the most current document). In this way, changes to the application and the fee schedule will automatically be part of administrative rules. This will assist in reducing efforts to update the formal procedure document because changes are generally associated with the application and fee schedule. Updating the document will also help ensure that all are aware of regulatory and compliance criteria associated with the program.

Procedures for monitoring and administering the program should be incorporated into this documentation. Existing monitoring and administrative procedures have not been formally documented. The current staff is well versed in the existing procedures, but should staffing changes occur, new staff do not have a ready source for how to conduct these activities. Without adequate up-to-date policy and procedure information, there is risk that errors will be made in administering the program, particularly when staffing changes occur. Formally documenting these procedures also provides management with an opportunity to review existing procedures for adequacy and appropriateness as well as for potential efficiencies.

**Other issues need to be resolved**

We identified three other issues that place the program at a degree of risk, either in the accuracy of data being used or in the ability to ensure receivables due in the program are collectible.

**Discrepancies in the amounts of source-separated materials reported.** There is a risk that facilities are counting source-separated materials as mixed dry loads in violation of program rules and license and franchise agreements. In the earlier discussion about eligibility criteria, we explained how it was possible to do this. Our comparisons of data reported separately by haulers and facilities showed substantial differences in the amounts of source-separated tonnage reported by each. Figure 11 shows the month-by-month comparison of these figures for three facilities in fiscal year 2003. The “hauler-reported tons” are the total tons reported by haulers as being delivered to the facilities; the “facility-reported tons” are the number of tons the facilities report receiving from all sources, including haulers. A positive difference means haulers reported delivering more source-separated materials than the facility reported receiving, while a negative difference means the opposite. Since loads may come in directly from individuals and businesses as well as from haulers, a negative difference is reasonable, if not expected. A positive difference, however, means that Metro may be paying more in fee credits than appropriate because, under current program rules, source-separated materials are subtracted from a facility’s total recovered materials in determining the recovery rate.

**Figure 11**  
**Comparison of source-separated tons as reported by haulers and facilities**

<b>Fiscal Year 2003</b>	<b>July</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>June</b>	<b>Total</b>
<b>Facility 1</b>													
Hauler reported tons	665	584	482	370	414	478	1285	1945	1894	1543	2649	2152	14461
Facility reported tons	36	31	21	45	30	16	15	12	15	19	17	36	293
Difference	629	553	461	325	384	462	1270	1933	1879	1524	2632	2116	14168
<b>Facility 3 *</b>													
Hauler reported tons	3993	3529	3524	4007	1023	4207	3646	3183	3131	4248	3881	4494	42866
Facility reported tons	3076	3091	3282	3566	3049	3745	3210	3308	4223	4018	3570	3934	42072
Difference	917	438	242	441	(2026)	462	436	(125)	(1092)	230	311	560	794
<b>Facility 4</b>													
Hauler reported tons	1246	1133	1020	1120	848	1016	689	998	1109	1000	915	1171	12265
Facility reported tons	2116	2060	2139	2204	1925	2431	2143	2009	2294	2181	2033	2162	25697
Difference	(870)	(927)	(1119)	(1084)	(1077)	(1415)	(1454)	(1011)	(1185)	(1181)	(1118)	(991)	(13432)

\* Facility 2 in our sample does not process source-separated loads; therefore, it is excluded from this analysis.

The situation with Facility 1 merits further investigation by Metro. There is a risk that this facility is receiving credit for source-separated materials and that it is in violation of its license agreement. Under the current flat rate credit schedule, which is the same for all facilities, the difference between the facility and hauler reported amounts did not result in higher credits for this facility. However, if the facility were hovering at the recovery rate required for participation in the program (30%) or the credit schedule were changed back to a graduated schedule (that is, the higher a facility's recovery rate, the higher the credit per ton), there would be a much greater risk that errors could occur in the amount of credits issued. We recommend that Metro investigate the issue and, if necessary, take measures to ensure the facility reports source-separate loads correctly.

**Discrepancies in reports of waste flow.** There is also a risk that facilities are not reporting other aspects of their tonnage correctly. For the four facilities in our sample, we compared the amounts they reported for incoming dry waste tonnage against the amount they reported as outgoing, either through recovery or disposal. Ideally, these numbers would balance, but they do not. Figure 12 shows the yearly results from 1999 through 2004. A positive residual balance means the facility reported receiving more tons than it sent out; a negative residual balance means the opposite. All facilities show positive residual numbers for 2004, but only Facility 4 had positive numbers of tonnage for all but one of the six years. The other three had predominately negative waste residual for four and five years of the six-year period. This negative residual data suggests the facilities recovered or disposed of more waste than they took in.<sup>15</sup>

**Figure 12**  
**Residual Tons\***

	2004	2003	2002	2001	2000	1999
Facility 1	4,876	(2,498)	(1,814)	(4,020)	(3,297)	(839)
Facility 2	3,892	1,511	(4,484)	(1,829)	(7,470)	(8,420)
Facility 3	161	(276)	(1,412)	(2,512)	(386)	1,024
Facility 4	5,241	3,299	2,338	1,471	3,537	(541)

\*Incoming less recovered tons less disposed tons

If a facility is hovering at the 30% eligibility level in its recovery rate (the recovery percentage required for participation in the program), overstating the amount of recovered tonnage can potentially result in the facility receiving credits it is not entitled to. It is unlikely that this would have had any significant impact on the credit dollars issued so far because these differences would have accumulated monthly, rather than annually. In addition, moisture can have a significant impact on the weight of materials. In other words, if materials had come into the facility dry but had gotten wet during processing there would be differences in weight. However, management should consider performing this type of high-level review periodically, perhaps as part of an annual plan for determining financial compliance reviews for the year. In-depth reviews can then be performed where warranted, as part of the financial compliance review process.

<sup>15</sup> These are the three facilities that have not received financial compliance reviews in more than three years.

**Uncollectible receivables.** There is a risk that a large receivable due from a facility protesting changes to the credit program will be uncollectible. This facility protested the change from a graduated credit schedule to a flat per ton credit, which was effective March 2004. The facility was allowed to calculate its credits based on the old graduated fee credit schedule for fee remittances due from April 2004 through January 2005, and on the basis of the credits it calculated, it paid Metro nearly \$370,000 less in fees and taxes than it would have paid under the new flat rate. On March 2, 2005, Metro's Chief Operating Officer sent the facility a letter demanding payment in full and that the facility calculate the credits based on the flat schedule in the future. Communication has gone back and forth between Metro and this facility. The facility has since remitted approximately 25% of the amount due and is seeking relief for some or all of the remainder.

Regardless of whether Metro chooses to forgive this debt, receivables in relation to a "credit" program are inappropriate, and program participation regulations should be revised to ensure they do not occur in the future. Credit program participation regulations should explicitly state that participating facilities may protest changes to the credit rate structure or any other part of the program, but they must pay the appropriate amount until a decision regarding their protest is made. At that time, if a refund is due, Metro will reimburse the facility.

## **Response to the Report**

Metro Chief Operating Officer Michael Jordan

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**Audit: Eliminate or Revise the Regional System Fee Credit Program**

**Date: August 2005**

## AUDIT RESPONSE

### Recommendation 1

**The Metro Council should eliminate the Regional System Fee Credit Program or revise it substantially.** The program's goal is to boost the region's recovery rate, but the rate cannot be boosted when facilities' recovery rates are dropping. If the Council decides that boosting the recovery rate should continue to be the goal, programs aimed at recycling and conservation may provide more opportunities in this regard.

### Agree

Yes

No  (specify reasons for disagreement)

### What action will be taken (if any)?

The Solid Waste & Recycling Department (SWR) intends to implement new waste reduction programs that will address the waste streams and materials that are currently targeted by the Regional System Fee Credit Program. (An example under study is mandating that every commercially-generated load of non-putrescible waste be processed through a Material Recovery Facility before it can be landfilled.) SWR intends to phase-out the fee credits as new programs come on line.

### Who will take action?

The Waste Reduction & Outreach division of SWR has the lead on developing new programs. SWR is working with the solid waste industry, the Metro Council and other stakeholders on design.

### When will action be accomplished?

SWR expects Council approval of new program(s) during FY 2005-06. Depending on the program, full implementation may take up to a year after Council approval. This means that a phase-down of fee credits could begin with the FY 2006-07 budget.

### Follow-up necessary to correct or prevent reoccurrence.

Once the program is phased-out, SWR will introduce an ordinance to repeal the sections of Metro Code that authorize credits (§5.02.046—047 and §7.01.020(g); also §7.01.180—190). The staff report for the ordinance will address the policy justification for repeal.



**Audit: Eliminate or Revise the Regional System Fee Credit Program**

**Date: August 2005**

## AUDIT RESPONSE

### Recommendation 2

*If the Metro Council decides that the program should be retained, the Council or Metro management, as appropriate, should revise the program as follows:*

**Redefine the program's goal and develop appropriate measures to evaluate program accomplishments.** The program's goal should be aligned more closely to what the program can accomplish, such as helping to ensure that all recyclable materials that are economically feasible to recover are pulled from the waste stream. Redefining the goal is not sufficient by itself; Metro management should also develop specific, measurable performance measures and guidelines for reporting performance results. Without them, it is impossible for the Council and Metro management to tell, with any degree of certainty, whether the program is worth the investment. Guidelines and timelines for reporting results should also be incorporated into Metro policies and procedures.

### Agree

Yes

No  (specify reasons for disagreement)

### What action will be taken (if any)?

The most readily measurable goal is to increase the number of tons that are diverted from waste that would otherwise be delivered to the landfill. Recognizing that appropriate goals and measurements are being developed with the new programs referenced in the response to Recommendation 1, the credit program will be held to the "tons diverted" standard until the credits are eliminated or replaced with another program.

### Who will take action?

The Financial Management & Analysis division of SWR (which administers the credit program), working with the Waste Reduction & Outreach division as it develops goals and objectives for new waste reduction programs (see the response to Recommendation 1).

### When will action be accomplished?

The "tons diverted" standard can be implemented in the monthly program report (memo format) by the second quarter of FY 2005-06. Any additional or alternative measures would be implemented in conjunction with Council action on the new waste reduction programs (see the response to Recommendation 1).

**Follow-up** necessary to correct or prevent reoccurrence.

Measurement and protocols, when approved, will be incorporated in the administrative procedures revised in response to Recommendation 5.

**Audit:** Eliminate or Revise the Regional System Fee Credit Program

**Date:** August 2005

## AUDIT RESPONSE

### Recommendation 3

*If the Metro Council decides that the program should be retained, the Council or Metro management, as appropriate, should revise the program as follows:*

**Simplify eligibility criteria.** To qualify for the program, facilities must demonstrate that they are recovering at least 30 percent of the waste stream they process. Current criteria for measuring recovery rates are difficult to apply and open to manipulation. Metro management should investigate alternatives (two are presented in this report) and develop an approach that is less complex and more transparent than the current one.

### Agree

Yes

No  (specify reasons for disagreement)

### What action will be taken (if any)?

SWR agrees with the Auditor's assessment of problems with the current eligibility criterion. The department has been considering alternative criteria that include options very similar to those in the Auditor's report. Accordingly, SWR will formally investigate alternatives as recommended by the Auditor's report, and convey its conclusions to Council.

### Who will take action?

The Financial Management & Analysis division of SWR, working with the Waste Reduction & Outreach division.

### When will action be accomplished?

The investigation and recommendation can be completed by December 2005.

### Follow-up necessary to correct or prevent reoccurrence.

New eligibility criteria, when developed, will be incorporated in the administrative procedures revised in response to Recommendation 5.

**Audit: Eliminate or Revise the Regional System Fee Credit Program**

**Date: August 2005**

## AUDIT RESPONSE

### Recommendation 4

*If the Metro Council decides that the program should be retained, the Council or Metro management, as appropriate, should consider revising the program as follows:*

**Consider eliminating all inert materials from materials that can be included in recovery rate calculations.** About one-fourth of all the program credits granted in the past five years are related to one facility's processing of heavy "inert" materials, such as structural brick, glass and porcelain. The facility uses some of these materials to create paving material at its on-site rock crushing operation. In the past, stakeholders and industry experts have argued that because of their weight, these materials would probably be recovered anyway, even without the program, and should be excluded from the program.

### Agree

Yes

No  (specify reasons for disagreement)

### What action will be taken (if any)?

This recommendation has been effectively implemented. At present, the credit per ton does not vary with the recovery rate ("flat-rate" credit schedule), which eliminates the advantage gained by procuring high-graded inerts to affect the recovery rate.

While we agree with the recommendation, we also note that this is an issue only if the per-ton credit varies with the facility's recovery rate. For example, at one time in the program's history, any facility that recovered at a 50% rate earned a \$14 per ton credit—over twice the amount earned by a facility recovering 30% of its incoming waste. In this situation, a facility would be motivated to procure high-graded inerts (and other waste streams such as source-separated recyclables) to boost its apparent recovery performance. Appropriately revised criteria (see discussion in responses to Recommendations 2 and 3) would address this issue if the credit program is retained.

### Who will take action?

SWR has implemented the flat-rate credit schedule.

**When** will action be accomplished?

The flat-rate credit schedule has been implemented.

**Follow-up** necessary to correct or prevent reoccurrence.

The flat-rate credit schedule is published on the credit application forms, which requires notice from the COO to change.

**Audit: Eliminate or Revise the Regional System Fee Credit Program**

**Date: August 2005**

## AUDIT RESPONSE

### Recommendation 5

*If the Metro Council decides that the program should be retained, the Council or Metro management, as appropriate, should revise the program as follows:*

**Strengthen administrative procedures by:**

1. Targeting financial compliance reviews on the basis of risk.
2. Fully automating the process for participating in the program and meeting reporting requirements.
3. Documenting policies and administrative procedures and updating them as needed.

Three or more years have lapsed between compliance reviews at some facilities – too long a period, especially if a facility does not have good reporting systems or otherwise poses a risk. Fully automating the forms used in applying for program credit and reporting waste recovery information will make the process easier for facilities and save Metro an estimated \$21,200 annually in staff time. Although current staff is well versed in policies and procedures, the absence of documentation would make it difficult for others to step in. Documenting procedures also allows management to review existing procedures for effectiveness and potential efficiencies.

### Agree

Yes

No  (specify reasons for disagreement)

### What action will be taken (if any)?

Recommendation (1) has already been implemented. Financial review frequency is now an explicit function of the facility's tonnage throughput, compliance record, and net fee and tax dollars generated. Recommendation (2) will be accomplished by a thorough revision of the Excel model in current use. Recommendation (3) will follow the model for making and managing administrative procedures established by the Regulatory Affairs division of SWR.

### Who will take action?

This work will be completed by a CPA in the Financial Management & Analysis division of SWR.

**When** will action be accomplished?

Automation and administrative procedures can be completed by December 2005.

**Follow-up** necessary to correct or prevent reoccurrence.

I will consider making the establishment and management of administrative procedures an employee performance criterion that would be addressed during performance evaluations.

**Audit: Eliminate or Revise the Regional System Fee Credit Program**

**Date: August 2005**

## AUDIT RESPONSE

### Recommendation 6

*If the Metro Council decides that the program should be retained, the Council or Metro management, as appropriate, should revise the program as follows:*

**Develop a process to review inconsistencies and discrepancies.** Our comparison of various reports showed unusual patterns – for example, one facility reported receiving far less tonnage in already recycled materials than haulers reported delivering to the facility. Metro staff should regularly compare these reports and investigate discrepancies.

### Agree

Yes

No  (specify reasons for disagreement)

### What action will be taken (if any)?

The Financial Management & Analysis (FMA) division of SWR produces a monthly Compliance Report for use by department regulators to track key regulatory and compliance requirements. The Waste Reduction & Outreach (WRO) division receives, or has access to, the reports referenced in the recommendation. FMA and WRO will cooperate to perform the recommended reviews and include them in future Compliance Reports.

### Who will take action?

The Financial Management & Analysis division of SWR, working with the Waste Reduction & Outreach and Regulatory Affairs divisions.

### When will action be accomplished?

During the second quarter of FY 2005-06.

### Follow-up necessary to correct or prevent reoccurrence.

Publication of results in the Compliance Report institutionalizes the practice.



**Audit:** Eliminate or Revise the Regional System Fee Credit Program

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## AUDIT RESPONSE

### Recommendation 7

*If the Metro Council decides that the program should be retained, the Council or Metro management, as appropriate, should revise the program as follows:*

**Program policy should be changed to prevent facilities from withholding payment on amounts due.** One facility, protesting the way Metro determined the fee credits allowable under the program, withheld a substantial part of its fee payment, resulting in a sizeable receivable due to Metro. A significant portion of this amount may prove to be uncollectible. Metro needs to develop a policy that, while allowing facilities to protest the credit rate structure or any other part of the program, requires that the current rules and regulations be followed until a decision is reached with regard to the protest.

### Agree

Yes

No  (specify reasons for disagreement)

### What action will be taken (if any)?

New Administrative Procedures (see response to Recommendation 5), together with amendments to Metro Code will address this issue, as follows: fees and taxes are presumed due, and may not be withheld during any contest of Code or administrative procedures. Penalties will accrue to late payments. Facilities would be eligible for refunds of fees and taxes paid, if they prevail in any contest of law or procedure. The current Code for dealing with these issues (section 5.02.055) is deficient, and will be amended; patterned after the procedures for excise tax collection (sections 7.01.060 to .150). The administrative procedures will clarify that responsibility for collection resides with Metro's Department of Administrative Services, to administer such processes as have been laid out in their Administrative Procedures.

### Who will take action?

Financial Management & Analysis division of SWR and Metro's CFO.

**When** will action be accomplished?

An ordinance and final draft of the amended Code will be completed by December 2005, with Council action during this fiscal year.

**Follow-up** necessary to correct or prevent reoccurrence.

Adoption in Metro Code institutionalizes the requirements and procedures described above. Implementation can be a part of employee performance and evaluation.



# Metro Auditor Report Evaluation Form

## Audit Report: Eliminate or Revise the Regional System Fee Credit Program

**Fax... Write... Call...  
Help Us Serve Metro Better**

Our mission at the Office of the Metro Auditor is to assist and advise Metro in achieving honest, efficient management and full accountability to the public. We strive to provide Metro with accurate information, unbiased analysis and objective recommendations on how best to use public resources in support of the region's well-being.

Your feedback helps us do a better job. If you would please take a few minutes to fill out the following information for us, it will help us assess and improve our work.

Please rate the following elements of this report by checking the appropriate box.

	<b>Too Little</b>	<b>Just Right</b>	<b>Too Much</b>
Background Information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Details	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Length of Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clarity of Writing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Potential Impact	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Suggestions for our report format: \_\_\_\_\_  
\_\_\_\_\_

Suggestions for future studies: \_\_\_\_\_  
\_\_\_\_\_

Other comments, ideas, thoughts: \_\_\_\_\_  
\_\_\_\_\_

Name (optional): \_\_\_\_\_

**Thanks for taking the time to help us.  
Sincerely, Alexis Dow, CPA, Metro Auditor**

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