

Metro
**Regional Environmental
Management**
***Review of Metro's
Solid Waste Enforcement Unit***

February 1996
A Report by the Office of the Auditor



METRO

Alexis Dow, CPA
Metro Auditor



METRO
OFFICE OF THE AUDITOR

February 7, 1996

- Mike Burton, Executive Officer
- Councilor Jon Kvistad, Presiding Officer
- Councilor Patricia McCaig
- Councilor Ruth McFarland
- Councilor Susan McLain
- Councilor Rod Monroe
- Councilor Don Morissette
- Councilor Ed Washington

Re: Regional Environmental Management: Review of Metro's Solid Waste Enforcement Unit

Dear Mr. Burton and Councilors:

The accompanying report covers our review of Metro's Solid Waste Enforcement Unit. We undertook this study as part of our annual audit plan.

We reviewed a draft of the report with the Executive Officer and the director of the Regional Environmental Management Department. The last section of this report presents the written response of Executive Officer Burton.

We would appreciate receiving a written status report from the Executive Officer, or a designee, in six months indicating what further progress has been made to address the report's recommendations.

We appreciate the cooperation and assistance provided by staff from the Regional Environmental Management Department.

Very truly yours,

Alexis Dow, CPA

Auditors: Leo Kenyon
Lamar White

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Executive Officer Mike Burton	

Executive Summary

Metro set up an enforcement unit in 1993 to stanch the suspected leakage of up to \$2 million a year from its solid waste revenue stream, and to clean up illegal dump sites. At the end of two years of operation, the Solid Waste Enforcement Unit's (the Unit) actions have resulted in approximately \$145,000 in retroactive user fees and fines, plus some revenue capture. The Unit has cost Metro over \$830,000 in two years. Other measures of its enforcement effectiveness, such as reduced risk to revenues, have not been attempted. Over 1200 illegal dump sites have been cleaned up as well, but little is known about whether this is an effective program.

We believe that Metro must have better measures of the Unit's effectiveness. Improvements in measuring the Unit's activities need to begin with clearer statements of its objectives. A necessary part of this action is a clear, measurable tie-in to the overall solid waste management activities of Metro.

Flow control enforcement efforts are legitimate actions by Metro as a governmental unit that has fees and charges on Metro area solid waste. Without some compliance actions, a large part of Metro's solid waste revenue could be at risk. We believe that Metro should set objectives for flow control enforcement that directly address the risk of revenue loss, that will enable both the Unit's managers and the Council to evaluate progress toward its objectives, and that will incorporate the Unit's activities into Metro's solid waste mission.

Regarding illegal dump cleanups, Metro has a less clear mandate and is in effect offering a service to its citizens. As other governments within the Metro area also enforce their own illegal dumping rules, cooperation and integration are very important. We believe if Metro sets out clear goals for this effort, and establishes how Metro's role fits into the overall solid waste management effort, then cooperation and

coordination with the other governments can proceed on firm footing.

Beyond the general need to integrate the Unit's activities into the hierarchy of Metro's solid waste goals, we also identified two specific problems that require attention. These are the definition of "beneficial material" regarding its exclusion from Metro fees, and the continued misidentification of Metro area solid waste at several landfills. We learned that both of these issues are already receiving attention by the Unit, but believe that they may need Metro council and executive officer attention for more complete resolution.

Introduction and Background

Metro is responsible for planning solid waste management within the urban areas of Multnomah, Clackamas, and Washington counties. One of its related regulatory tasks is commonly known as flow control. To this end, Metro owns two solid waste transfer stations; contracts for related activities, such as hauling waste to a regional landfill; and collects fees for the disposal of solid waste generated within the Metro region. To better ensure compliance with its flow control ordinances and fee schedules, and to address illegal dumping, Metro created the Solid Waste Enforcement Unit in 1993.

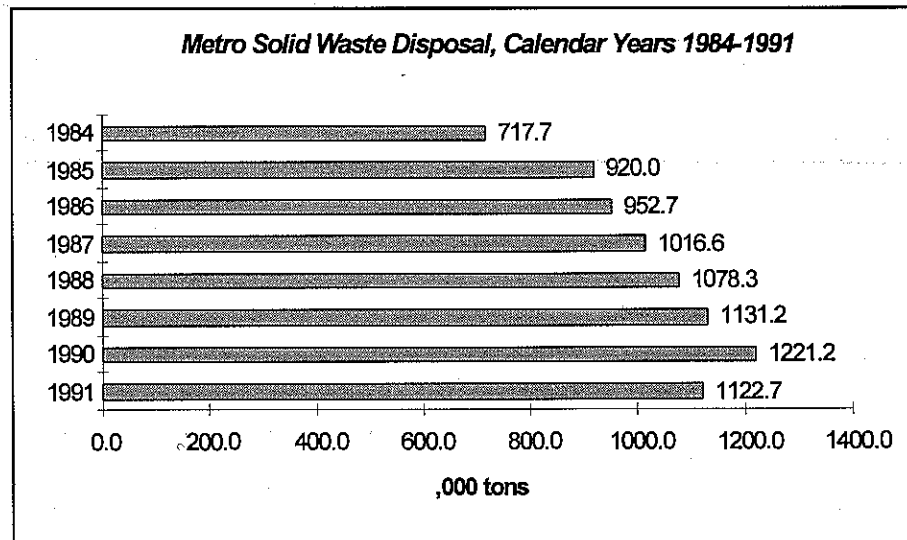
Revenue from solid waste disposal fees and charges an important part of Metro's operations

Metro's solid waste operations are paid for by the revenues related to solid waste disposal. In fiscal year 1995-1996, the solid waste revenue fund is budgeted to receive \$59 million from disposal activities. In addition to financing the actual solid waste disposal function—primarily operating transfer stations and transporting solid waste to regional landfills—this fund pays for other functions of the Regional Environmental Management Department, including promoting regional waste reduction, recycling, and reuse. In addition, an excise tax of 7.5% on disposal fees and charges goes into Metro's general fund, where it supports the Council and the Executive Officer, their related support services, and various Metro activities, chiefly the planning department. Metro-wide excise taxes are estimated at \$6.4 million in fiscal year 1995-1996, with solid waste taxes contributing about 80% of the total collected.

Solid waste volume dropped unexpectedly in 1991

Metro expected the volume of solid waste disposal to rise in 1991, as it had for several previous years. However, during 1991 it learned that year's tonnage would probably drop by 75,000 tons, or roughly 7%. This decline alarmed Metro because of the important role of solid waste revenues in financing its operations, as noted above. The chart below shows actual volumes of solid waste disposal from 1984 to 1991, with the actual decrease in 1991 of 98,500 tons somewhat greater than expected. The growth through 1990 came about because of robust economic recovery in the Metro

area, strong population growth, and a concomitant construction boom.



Source: *Solid Waste Information System Report, Direct Haul Tonnage Diagrams*, Metro, August 1995

Evaluation of reasons for decrease found a large portion unexplained

Metro contracted with the Center for Urban Studies at Portland State University to analyze the decrease in 1991 solid waste disposal levels.¹ Using a time series statistical analysis, the Center identified population change, construction activity, and tipping fees as the probable reasons for year-to-year changes. The Center found that a large portion of the change in 1991 could not be explained by these three factors, and lumped this amount under a category called "other causes."

The following table displays the decline from 1991 to 1992 and the amounts attributable to the three anticipated changes and to the "other causes."

¹*Analysis of Portland Metropolitan Solid Waste Trends, Final Report*, Center for Urban Studies, School of Urban and Public Affairs, Portland State University, February 1992.

Reasons for Decrease in 1991	
Solid Waste Disposal 1990:	1221.2 thousand tons
Changes due to:	
Population growth	+ 35.5 thousand tons
Solid waste fee increase	- 42.1 thousand tons
Construction slowdown	- 18.3 thousand tons
“Other causes”:	- 50.6 thousand tons
Solid Waste Disposal 1991 (estimated)	1145.7 thousand tons
(Note: Actual 1991 tonnage is lower by 23, 000 tons than estimated at the time of the report)	

Source: 1990 tonnage, *Solid Waste Information System Report*, op cit.; 1991 tonnage calculated by Office of the Auditor; other data from Center Report, op cit.

As shown in the table above, the Center's probable reasons had their expected effect. Population growth should increase solid waste generation if per capita rates don't change. Construction slowdowns should lower waste generation from construction and demolition businesses, a major source of solid waste. Solid waste fee increases can also decrease solid waste disposal because it changes the economics of alternatives to disposal. Recycling can become cost effective and processes can be designed that use less material. The Metro tipping fee had risen from \$19.70 a ton in 1988 to \$44.75 in 1989 to \$55.50 in 1991.

The large "other causes" category in the Center's analysis indicated, however, that something else was causing changes in solid waste disposal in the Metro area. In the Center's discussion of possible components of the "other causes," they noted that tipping fee increases can also have undesirable effects. One of these is illegal disposal and avoidance of Metro tipping fees. The Center was unable to separate illegal disposal and avoidance of fees from other "other causes," so they made no estimate of the tonnage thus diverted from Metro's revenue stream. In its recommendations the Center noted that Metro should sponsor an inter-agency task force to monitor such diversions. As a monopoly supplier of disposal

services, they stated that Metro must safeguard its revenue base against illegal competitors.

Other events indicated Metro had problems with diversions from its solid waste revenue base

At around the same time as the Center study previously noted, Metro also learned of actual diversions from its solid waste revenue base. Metro used a private investigator to identify the amount of solid waste that a garbage company was trucking to a Washington landfill without paying Metro fees. In this case, Metro collected almost \$75,600 in user fees, interest and fines covering a two-year period. In another case that pointed up the need for investigatory capability, Metro brought in the Multnomah County Sheriff's Office to investigate certain activities at the St. John's landfill, a Metro facility that is now closed. This case resulted in criminal convictions for theft of Metro property and recovery of \$1.5 million from the operating contractor. These events combined to alert the Council both to the seriousness of the diversion of solid waste from the revenue base, and the need for investigative and enforcement capability at Metro.

In 1991, Metro adopted a policy to reduce illegal disposal. The Council was receiving citizen complaints about the increase in illegal dumping with its attendant unsightliness and unsanitary conditions. Because the rising tipping fees could be one reason that people were dumping trash and debris improperly, and because illegal dumping also diverted solid waste from the revenue stream, the Council was interested in addressing the problem from a regional perspective.

Metro establishes a solid waste enforcement unit

The Council adopted a resolution on August 12, 1993, that provided for "...solid waste flow control enforcement and illegal dump site cleanup."² The enforcement unit is staffed through an Intergovernmental Agreement with the Multnomah County Sheriff's Office. The original agreement was signed in October 1993 and has been extended each year, with the current agreement valid through June 30, 1996. The current agreement calls for three officers assigned to enforcement and two corrections officers assigned to cleanup, an increase

²Resolution 93-1792A.

of one officer from the original number. Metro pays all Sheriff's Office costs related to this activity.

A Metro employee, the solid waste enforcement officer, heads the Solid Waste Enforcement Unit (the Unit) and provides direction regarding the type, scope, and nature of the investigations. The specific services contracted from the Sheriff's Office are:

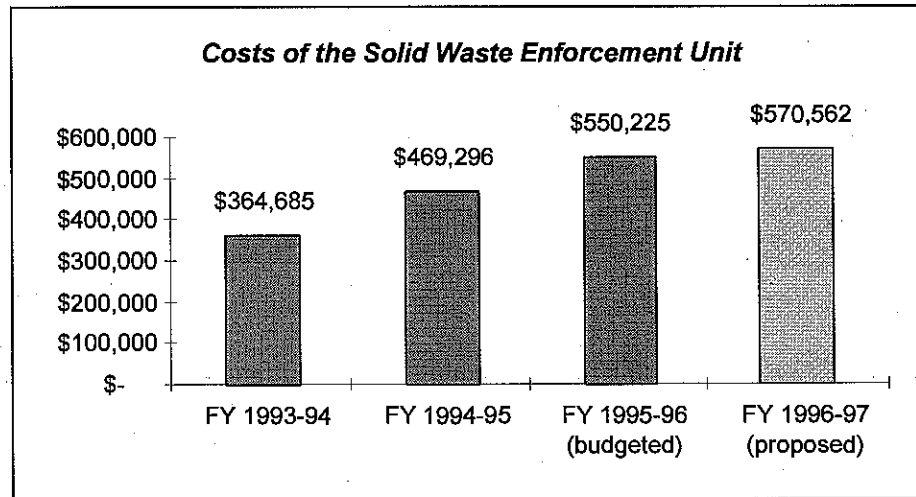
- Enforcement of all Metro ordinances related to flow control investigation and waste management,
- Compliance-related surveillance of persons involved in solid waste collection, treatment, and disposal,

Investigations of vendors and contractors, general investigations as requested, and criminal intelligence briefings are also included in the agreement. We did not include the Unit's activities in these areas in this audit.

A second element of the agreement is the cleanup of illegal dump sites within Metro boundaries. Multnomah County supervisory corrections officers and inmate work crews clean up selected illegal dump sites. The corrections officers are to identify and retain any evidence that could aid enforcement officers in prosecuting people for illegal dumping.

Cost of the Unit

According to departmental information, the Unit has cost about \$834,000 in its first two years of operation, and is expected to cost \$550,000 in fiscal year 1995-1996. The following schedule shows actual expenditures for the first two years, budgeted amounts for this year, and next year's proposed budget.



Source: Regional Environmental Management Department budget staff.

The Unit consists of two Metro employees, the solid waste enforcement officer and a clerk, and five Multnomah County Sheriff's Office employees detailed to the Unit under the Intergovernmental Agreement noted above. The Unit has purchased five vehicles for its work (one new and four used), including a van and trailer for illegal dump site cleanup. Two of the County Sheriff-supplied staff are each in charge of a volunteer inmate cleanup crew. The second staff and crew were added in 1994 because of the backlog of illegal dump sites.

The Metro solid waste disposal system

Metro is one cog in a multi-layered system that has arisen to address solid waste and related environmental issues. State ordinance gives local governments primary responsibility for solid waste management. Metro has been designated the local government to plan for solid waste disposal management, and cities and counties within the tri-county Metro region have been designated the local governments for solid waste collection and recycling programs.³

Over 100 private haulers provide residential and commercial collection and recycling services in all Metro area jurisdictions, and except for the City of Portland's commercial collection, these routes are generally franchised. Some businesses, especially in the construction industry, haul their

³Metro's authority and responsibilities are contained in Section 5.05 of the Metro Code

own waste and debris. Recycling is done primarily through weekly curbside collection. Yard debris is also collected, with less regular schedules and more variety in approaches.

Most solid waste from the Metro area is taken to one of three transfer stations within Metro boundaries. These facilities receive, process, and temporarily store solid waste prior to transportation to a final disposal site. Two stations are owned by Metro—Metro Central and Metro South—and their solid waste is taken to the Columbia Ridge Landfill in Arlington, Oregon, 130 miles east of Portland. The third transfer station is Forest Grove, which is privately owned and is franchised by Metro. Its solid waste is taken to nearby privately-owned Riverbend landfill in McMinnville, which is outside the Metro boundary.

Metro area generated waste is subject to flow control regulations and fee schedules. Within the Metro area, each facility is either owned or franchised by Metro. These facilities are required by Metro to collect a regional user fee, and at Metro-owned facilities a Metro user fee is also charged. Outside of the Metro area, a facility must be designated by Metro as eligible to regularly receive Metro area waste, and the regional user fee must be collected. If a facility is not designated, the waste generator who wishes to use that facility must purchase a non-system license and also pay the regional user fee.

Total charges on Metro area waste are \$75 a ton if a Metro-owned facility is used. If Metro area waste is taken to a franchised facility, or a designated facility is used, a regional user fee of \$17.50 must be paid in addition to the facility's own tipping fee. Regarding nondesignated facilities, the nonsystem license required of a waste generator to haul to a nondesignated facility costs \$1,000, and the \$17.50 regional user fee must be paid on each ton.

Objectives, scope, and methodology This review is included in the Office of the Auditor's annual audit schedule. Our objective was to assess the effectiveness of the solid waste enforcement program within the Regional

Environmental Management Department. Specific areas of interest included:

- The amount of revenue Metro was losing prior to establishment of its Solid Waste Enforcement Unit, and the resulting direct and indirect effect of the Unit on this revenue loss.
- The effectiveness of the Unit's actions on the rate of compliance with Metro's flow control ordinances and on the problem of illegal dumping.
- The need for additional enforcement measures.

To address these audit objectives, we reviewed documents related to the Council's enactment of the ordinance establishing the Unit, the accomplishments of the Unit to date, and Metro's solid waste planning and operations. We also examined Metro's financial and budget analyses related to the revenues and costs of the program. Our discussions within Metro were with the Unit's enforcement officer, Regional Environmental Management Department managers, the General Counsel's office, and the Council's senior analyst. Outside of Metro, we held discussions with code enforcement officials in Clackamas, Multnomah, and Washington counties, as well as with similar officials in several Metro area cities.

To obtain our background information, we reviewed several Metro documents and reports relating to solid waste systems, we reviewed other audit reports, we researched general references for information about flow control enforcement, and we analyzed a 1992 report done for Metro on causes of an unexpected decrease in solid waste from 1990 to 1991.

This audit was made in accordance with generally accepted government auditing standards. Field work took place between August 1995 and January 1996.

Enforcement of Flow Control and Waste Management Ordinances

The Solid Waste Enforcement Unit was established in September 1993 primarily to recover the Metro fees and charges on solid waste that were believed to be escaping the system. At that time, estimates of lost revenue ranged from \$360,000 to \$2 million a year. No attempts have been made since then, however, to attribute any changes in Metro's revenue to the Unit's activities. The Unit has been active during its first two years of enforcement, and can claim \$145,000 in retroactive fees and fines assessed, as well as several specific cases of improved reporting by haulers.

Evaluating the effectiveness of the Unit's discrete activities is difficult because they have not been related to Metro's solid waste management goals. We believe that the Unit's activities must be integrated into Metro's mission and objectives in a direct fashion to better focus its efforts and to allow measurement of its value to the organization.

Metro's solid waste system requires proper control of solid waste flow

Metro has been charged with managing the flow of solid waste in the region. As a part of this responsibility, Metro has chosen to finance solid waste operations and waste reduction programs by levying charges on solid waste generated within the Metro area. A flow control ordinance was adopted in 1989, partly to satisfy bondholders about Metro's ability to maintain sufficient revenue to repay bonds. The ordinance also set out Metro's legitimate actions regarding flow control. With so much of the financing of the solid waste system depending on solid waste fees and charges, prudent managers need to assure themselves that flow control fee schedules are followed. Compliance and enforcement actions will not only reduce the risk that some revenues may go uncollected, they will also help insure that waste generators and haulers are treated equally under the rules.

Initial estimates of risk

During the consideration in 1993 of forming a Metro solid waste enforcement activity, a claim was put forward that

ongoing costs of the Unit, estimated at \$320,000 a year, would be covered by the anticipated increase in revenue from the Unit's efforts. A Metro staff study done for the deliberations estimated that 3% of total waste, or 30,000 tons, was being diverted from the revenue stream. The study estimated \$360,000 in lost revenue might be recovered by an enforcement unit if its efforts could cut the risk in half. A number more commonly associated with the revenue at risk, however, is \$2 million. This estimate was used by the then director of the Solid Waste Division (now Regional Environmental Management Department) in support of the need for a solid waste investigative and enforcement unit⁴.

No ongoing estimates of current risk attempted

In the two years since the Unit was formed, Metro has not attempted to estimate whether organized enforcement has decreased the risk to its solid waste revenues. We were told that officials within the Regional Environmental Management Department believe the Unit pays for itself but they also stated that this belief could not be supported with hard figures. In simplest terms, Metro and the Unit might point to increasing solid waste tonnage since 1993 as proof that enforcement is reducing the risk and bringing in more revenue.⁵ However, we believe that neither rising revenues nor management belief are sufficient to support a conclusion that enforcement has had an overall effect on lowering the risk to Metro's solid waste revenues.

We do not know whether an accurate estimate of a decrease in risk attributable to the Unit could be made, but we believe that it would be useful to try. If an estimate could be generated, Metro management and the Council would have a direct measure of the Unit's success in meeting the original need for organized enforcement. As a start, the existing solid waste information forecasting model operated within the

⁴One way to arrive at \$ 2 million is to use the 30,000 ton estimate of diverted solid waste and multiply it by \$68 a ton, the tipping fee in 1992.
 $\$68 \times 30,000 = \$2,040,000$

⁵

1993	1142.8 thousand tons
1994	1184.9 thousand tons
1995	1208.1 thousand tons (estimated)

Regional Environmental Department could be examined to see if the effects of enforcement could be detected. Another possibility is to rerun the model used by the Center for Urban Studies in their 1992 study of the reasons for a fall in solid waste tonnage.

Assessment of retroactive fees and fines

Another way to look at the Unit's effect on reducing risk to revenues is to look at direct enforcement actions. The Solid Waste Enforcement Unit has taken several enforcement actions that have led to retroactive fee assessments and has fined a number of haulers for noncompliance with Metro flow control ordinances. For example, unreported tonnage at three area landfills was discovered by the Unit in 1994 and resulted in about \$60,000 in retroactive fee assessment and \$1,000 in fines. Additionally, five construction cleanup haulers were caught during 1994 reporting Metro area trash as being from outside the area, thereby sidestepping Metro user fees. Charged with theft by deception, they all paid retroactive user fees based on the amount of misreported solid waste and two haulers were fined.

In 1995 there have been relatively few monetary assessments due to flow control enforcement by the Unit. We were told this is primarily due to greater concentration on illegal dumping. In addition, the Unit's enforcement actions may have made misreporting less attractive. The table below shows retroactive revenue and fines assessed based on the Unit's actions.

	<u>Retroactive User Fees</u>	<u>Fines</u>	<u>Total</u>
1993 (3 months)	\$ 0	\$ 26,419	\$ 26,419
1994	107,831	1,905	109,736
1995 (9 months)	<u>9,387</u>	<u>0</u>	<u>9,387</u>
Total	\$ <u>117,218</u>	\$ <u>28,324</u>	\$ <u>145,542</u>

Source: *Program Overview and Statistics*, Metro Solid Waste Enforcement Unit, various editions.

Increase in reporting solid waste correctly as to source Metro has accomplished another revenue increase by obtaining better reporting of Metro area solid waste volume by some specific haulers. For example, between January and May of 1994, five construction/demolition haulers, as noted above, were caught incorrectly reporting Metro area solid waste as being from outside the Metro area. In addition to the retroactive user fees and fines assessed by the Unit, those still in business are now reporting much higher tonnage from inside Metro. For example, one company went from reporting 100% of its solid waste as originating outside the Metro area to over 90% originating inside after enforcement action by the Unit. This company's volume is about 14 tons a month and the increase in Metro revenue is a direct result of the Unit's action.⁶

In 1995, another hauler increased its reporting of Metro area solid waste by about 140 tons a month after being presented with evidence of misreporting. No fines or retroactive fees were assessed, but the resulting increase in Metro revenue should continue. The Unit's coordinator said that they were being less confrontational during the first nine months of 1995. He noted that the new director of the Regional Environmental Management Department is interested in returning to more vigorous enforcement of flow control ordinances.

Information given to generators and haulers Beyond specific direct and indirect monetary achievements, the Unit has also taken actions that may have improved the solid waste community's compliance with flow control regulations. For example, in November 1994 they notified 13,467 construction-related businesses that generate or haul solid waste about flow control requirements and the boundaries of Metro. Another effort at that time was an advertisement in several major newspapers with a brief synopsis of the responsibilities of solid waste generators and haulers. Further, the Unit has received positive publicity from several local media outlets regarding its work. However, the Unit did no follow-up with haulers or waste generators regarding the effect of the mailings and advertisements. We

⁶ The minimum increase is \$17.50 a ton. If it is hauled to a Metro-owned facility, the increase would be \$27.00 a ton.

believe that sampling of haulers/ generators regarding their knowledge of flow control regulations would be a useful tool in designing enforcement work plans.

Information needed about size of enforcement problem As much as statistics about retroactive fees, specific increases in revenue tonnage, and information mailings make enforcement actions and results concrete, they only tell half the story. The other half is to tell where these actions have taken Metro and the Unit in their attempts to reduce the risk to Metro's solid waste revenues. Existing accomplishments can become more useful to Metro leaders if they are given context. For example, the statistics about incorrect reporting of solid waste origin would take on much more meaning if there were some attempt to estimate how many haulers/generators are likely to incorrectly report. We realize that precise information of this nature is difficult to produce. We believe, however, that without an attempt, statistics will pile up to no avail.

Enforcement actions to reduce illegal dumping The Unit targets construction/demolition businesses and small scale haulers in its enforcement actions against illegal dumping. The Unit's efforts are based primarily on evidence found during cleanup of illegal sites. Evidence has been found in about one-third of the sites cleaned up by Metro. Dumping solid waste outside landfills or transfer stations is banned under Oregon law and under many county and city ordinances. However, illegal dumping within Metro boundaries was difficult to prosecute when the Unit was formed. Each of the counties' sheriff's departments could enforce the Oregon State Ordinance against offensive littering, which is a criminal statute with its attendant strict burden of proof. It was little used. During the first year, the Unit used a combination of requests for a violator to clean up the illegal dump and of billings to the dumpers for cleanup costs during the first year.

The Metro Council passed an ordinance in 1994 to allow the Unit's officers to issue civil citations for illegal dumping anywhere within Metro boundaries. The Unit has stated that this change has made their prosecution of illegal dumpers much easier. This anti-dumping ordinance was adapted from a model illegal dumping ordinance that Metro put together in 1991. Local jurisdictions within the Metro area are now being

encouraged to seek delegation of enforcement under Metro's ordinance as a way to bring about consistency between various jurisdictions regarding prosecution of illegal dumpers. We believe that Metro should increase its efforts in this regard.

**Effectiveness of
flow control
enforcement**

Overall, we can not say how effective the Unit has been in this area. While the flow control enforcement efforts have borne some fruit, adding up fines, revenue recoveries, and noting specific accomplishments is an incomplete exercise without a standard against which to judge the outcomes. The Regional Environmental Management Department and the Unit have had two years of operational experience. They can build on past successes to establish achievable and measurable outcomes for the Unit. When such goals are in place, management and the Council will more easily see the value of the Unit, and the Unit's efforts can more easily be directed towards contributing to the mission of the department.

We further believe that the efforts of the Unit must be recognized in the Regional Solid Waste Management Plan. The enforcement activities of the Unit are not mentioned in the Plan. However, several elements of the Plan's goals and objectives contain possible useful starting points. For example, in the overall statement of the Plan's goal, Metro is to, among other things, "...develop and implement...a solid waste system that is...cost effective." Given our position that flow control compliance enforcement is necessary to reduce the risk to Metro's revenue base, we believe that being cost effective includes collecting all the revenues due. In the details of the plan, Goal # 16, Revenue Equity and Stability, mentions that there will be sufficient revenues to fund the costs of the solid waste system. This goal could accommodate flow control enforcement as a subordinate objective. Knowing Metro's expectations for the Unit in meeting the Regional Solid Waste Management Plan's goals will facilitate directing the work's future and make setting measurable objectives easier at the Department and Unit level.

Specific flow control problems may require executive and council involvement There are two major gaps identified by the Unit where Metro solid waste still may not be fully subject to fees and charges. One has to do with the issue of "beneficial material," a classification which has been used to exempt some industrial waste from Metro user fees. The other has to do with continued misreporting of solid waste origin at some landfills. Resolution of both of these issues may require involvement of Metro executive management, and possibly of the Council.

Some solid waste exemption classifications need review Landfills are required to cover each day's waste with clean dirt or a material like a large tarp. If a hauler brings in an acceptable covering material, they are usually not charged by the landfill for dumping the dirt or other so-called beneficial material. Landfills designated by Metro to receive Metro area solid waste can also exempt the hauler from paying any of the Metro fees on beneficial material. One such landfill has been exempting large volumes of a particular type of solid waste from an industrial source. The Unit recently investigated and found that this so-called beneficial material was being dumped as regular waste and not used as cover.

The landfill should not exempt a hauler or industry from Metro fees based on the concept of beneficial material unless it uses the material in the expected fashion. Officials of Metro's Regional Environmental Management are currently negotiating with the industrial source to find a solution. We encourage this effort, and believe that the Unit should systematically investigate other landfills and industries that could also be misusing the beneficial fill exemption.

Landfills and other solid waste facilities may be accepting Metro area solid waste without collecting requisite fees The Unit has made several cases, noted above, where Metro-area solid waste has been misreported as originating from outside the Metro area. Its current investigations reveal that similar problems are still occurring, especially at several nearby landfills. Metro has a difficult problem in this regard. It has no real authority over nonMetro area landfills. If nondesignated landfills do not cooperate with Metro officials in reporting the source of solid waste, leakage from the Metro revenue base could continue and even grow. Further, haulers and waste generators who are following the rules could be

competitively harmed by businesses which continue to avoid paying legitimate Metro user fees. We believe that enough ad hoc evidence of diversion at nondesignated facilities exists to call for Metro Executive Officer and Council involvement in this resolving this issue.

Cleaning Up Illegally Dumped Solid Waste

The Solid Waste Enforcement Unit's other major responsibility assigned by the Council is cleaning up illegal dump sites. In contrast to flow control enforcement, where Metro has clear authorities and responsibilities, the Unit's role in illegal dump site cleanup is in effect a service offered to citizens of Metro. As each county within Metro, and several of the larger cities, have similar responsibilities, overlapping efforts are a matter of concern.

During the Unit's first two years of operation, it has cleaned up almost 1200 sites and found evidence which could lead to prosecution of the illegal dumpers at almost 400 of these sites. However, most of these efforts have taken place in the Multnomah County Metro area. We believe that Metro should do more to make the cleanup crews and the improved prosecution tools available to other governments within Metro boundaries. As with the flow control enforcement program, illegal dump site cleanup has no tie into Metro's solid waste management goals set out in its ten-year plan.

Cleaning up illegal dump sites The Unit is continuously cleaning up illegal dump sites, reaching almost 1200 in two years of effort. In 1994, the Unit won approval for a second crew because of the backlog of illegal dump sites. Each crew is made up of a Multnomah County Corrections Officer and a number of volunteer Multnomah County jail inmates. In addition to removing illegal dumps with their attendant problems, the work crews have been trained to retrieve evidence from the dump to identify the illegal dumper. The crews report dumps that contain hazardous materials to Metro's hazardous waste specialists.

The following table displays dimensions of the illegal dump cleanup effort undertaken by the Unit.

	<u>1993-1994</u>	<u>1995 (9 months)</u>	<u>Total</u>
Illegal dump sites cleaned up	403	782	1185
Tons of waste removed	78.9	149.8	228.7
Sites where evidence found	104	278	381
Sites where hazardous waste found	19	125	144

Note: A second work crew was added in September 1994.

Source: *Program Overview and Statistics*, various editions, Metro Solid Waste Enforcement Unit.

In addition to the cleanup statistics noted in the table above, the work crews also recover salvageable appliances (white goods) and tires. To date, the work crews have picked up 3,524 tires at illegal dump sites as well as 57 appliances.

Metro cleanup concentrated in Multnomah county

Of the 1,200 illegal dump sites the Unit's crews cleaned up in the first two years, almost 90% are in Multnomah County. The table below compares Metro's illegal dump cleanup to the Metro area populations of the three counties and to the illegal dump sites identified in a survey of the Metro region.

<u>Counties</u>	<u>1993-1995 Illegal site cleanup by Metro^(a)</u>	<u>1995 Metro area population^(b)</u>	<u>1988 Illegal dump sites^(c)</u>
Multnomah	1,059 (88%)	617,000 (53%)	26 (33%)
Washington	31 (3%)	327,000 (28%)	20 (26%)
Clackamas	114 (9%)	213,000 (18%)	33 (42%)

Note: 1988 is used because a later survey did not include cities.

Source: ^(a)*Program Overview and Statistics*, op cit.; ^(b)Metro's planning department, and ^(c)*1994 Illegal Dump Site Survey*, Planning and Technical Services, Regional Environmental Management Department, Metro.

The preceding table clearly shows that Metro's illegal dump cleanup activity in Multnomah County (88%) is much higher

than its population (53%). In addition, the incidence of illegal dumping in Multnomah County (33%) as shown by the 1988 survey is also out of proportion to the Unit's cleanup of that county. Metro's cleanup activity in Washington and Clackamas Counties is conversely disproportionate.

Given the seeming overconcentration of the Unit's cleanup activity in Multnomah County, we believe that there is a question of consistent, equitable treatment of citizens within the Metro region. To determine whether this is a valid concern, we believe there should be a collection of data about each jurisdictions' illegal dump cleanup activity. With the results of such a survey, Metro and the other jurisdictions could better judge if the Metro efforts are inappropriately concentrated in Multnomah County.

During our review we learned that there has been disagreement about Metro's role in cleaning up illegal dumps in Washington County. Code enforcement officials there address illegal dumping on private property through citation of the property owner, and do not offer a cleanup service. According to Metro officials, Washington County officials have requested that the Unit curtail its cleanup of illegal dumps there. Strained relationships, differing perceptions of roles, and limited cooperation are neither new nor specific to illegal dump cleanup. As the recent audit report on the Waste Reduction Program pointed out,⁷ better definition of roles could go a long way toward improving relationships and promoting effective and efficient actions, in this case to clean up and deter illegal dumping.

We believe that Metro has a lot to offer in the way of investigative resources as well as trained cleanup crews. Metro also has experience in prosecuting violators under the model illegal dumping code that may be useful to other jurisdictions. Therefore, we believe that the Regional Environmental Management Department and the Executive Officer should reach out to all the governments within the Metro region to gain an under-

⁷*Metro's Regional Waste Reduction Program, Performance Audit Report, Talbot, Korvola, and Warwick, October 1993.*

standing of how the various entities can work better together on this issue. This understanding should serve as a springboard to allow each citizen of the Metro area equal access to illegal dump cleanup services.

**Illegal dump site
cleanup needs
clear, integrated
goals**

As with the flow control enforcement activities, we believe that the illegal dump cleanup activities of the Unit should be integrated into the Regional Solid Waste Management Plan. Clear goals in this effort are very important because of the seemingly limitless availability of illegal dump sites. Cleaning up more illegal sites and gathering more tires and appliances is a measure of the symptom, not a measure of progress towards reducing illegal dumping.

We are aware that an illegal dumping plan, which will become a part of the new ten-year Regional Solid Waste Management Plan, is not yet complete. As the Regional Environmental Management Department works on this plan, an excellent opportunity exists to set clear goals for the Unit in this area. In this regard, another use of the comprehensive illegal dump site data that we believe should be collected would be to highlight the location and significance of chronic sites. A clear, measurable goal could then be to eliminate illegal dumping at a number of such sites. Repeated cleanup by the Metro crews may still be necessary to gather evidence, but the Unit could also begin to involve other elements of Metro to help reach this goal. We believe that the outreach to other jurisdictions suggested above is also necessary, as is involving other groups such as neighborhood associations.

Conclusions and Recommendations

Metro's Solid Waste Enforcement Unit has achieved several significant accomplishments in its two years of existence, including increased revenue collections and successful prosecution of violators of Metro's flow control ordinances and fee schedules. Broader evaluation of the Unit's effectiveness is not possible at this time because of the absence of measurable objectives for the Unit. We believe that revenue collections by the Unit are incomplete measures for this task, and in any case direct revenues fall far short of the cost of the Unit. We are concerned that seemingly ad hoc efforts may not achieve improved compliance by haulers, generators, and landfills. The illegal dumping efforts are so concentrated on one county that questions of equity arise. In addition, chronic illegal dump sites may need more Metro involvement to reduce their repeated use.

The establishment of the Solid Waste Enforcement Unit was a prudent step by the Council to reduce the risk to Metro's solid waste disposal revenues. We believe that with two years of operations experience, this is an excellent time for the Unit to take stock of its accomplishments and to make adjustments to more effectively perform its duties.

Recommendations The Office of the Auditor believes that Metro should take several steps to improve the operations of the Solid Waste Enforcement Unit:

- An analysis of solid waste trends should be made, perhaps similar to the Center for Urban Studies' 1992 analysis, to give the Unit and Metro a sense of whether enforcement has decreased risk to solid waste revenues.
- Regional Environmental Management leadership should ensure that the Unit's flow control enforcement and illegal dump cleanup activities are more integrated into the objectives of the ten-year Regional Solid Waste Management Plan.

- Regional Environmental Management leadership should initiate a process whereby the Unit establishes measurable objectives for enforcement efforts. An important step is to attempt to measure the potential size of the problem, such as asking solid waste generators and haulers about their knowledge of Metro's ordinances or identifying the type of people or businesses more likely to ignore such ordinances.
- Metro should increase its efforts to delegate authority under its illegal dumping ordinance so as to facilitate the prosecution of illegal dumpers and to make enforcement penalties consistent within Metro's boundaries.
- Data on illegal dumping sites should be compiled using all jurisdictions' information. With such a data base in hand, Metro could better judge if there is too much concentration on Multnomah County and could decide how to involve other Metro and community elements to reduce use of chronic sites.
- Coordination with other local jurisdictions is needed to insure that all Metro citizens can count on cleanup, investigation, and prevention of illegal dumping in an equitable fashion.
- Metro leadership should continue its efforts to solve the problems of the definition of "beneficial materials," and to address the continuing misidentification of Metro area waste at area landfills.

Other issues During our audit work, we became aware of two possible changes in Metro's solid waste system that might have a significant impact on future enforcement efforts in solid waste. The first possibility is that Metro may revise financing of its solid waste operations. If Metro chooses an option which lowers the tipping fee at Metro transfer stations, enforcement needs might lessen. This is because the rapid increase in Metro fees and the relatively higher total Metro tipping fee were said to be one reason that the risk to Metro solid waste revenues was serious enough to create an

investigative and enforcement unit at Metro. Lower the fees and the risk may lessen.

A second possibility is that Metro's implementation of flow control rules might be challenged in federal courts. This arises from a US Supreme Court decision in 1994 that found a New York town's flow control requirement illegal under the Commerce Clause of the Constitution. While Metro's General Counsel has stated that its flow control ordinances and regulations are proper under federal law, there is still the chance that some entity could mount a legal challenge to Metro's solid waste system. If Metro's flow control authority were abridged in some way, the need for the current enforcement approach would also need review.

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Response to the Report



METRO

DATE: February 2, 1996
TO: Alexis Dow, CPA, Metro Auditor
FROM: Mike Burton, Executive Officer
RE: Response to Audit of Metro's Solid Waste Enforcement Unit

I have received the draft Audit report on the Solid Waste Enforcement Unit (SWEU) dated February 1996. Thank you for the opportunity to review and respond to this report. The following constitutes the response of the Executive Officer and staff to the report.

I. Recommendation: An analysis of solid waste trends should be made, perhaps similar to the Center for Urban Studies' 1992 analysis, to give the Unit and Metro a sense of whether enforcement has decreased risk to solid waste revenues.

The Regional Environmental Management (REM) Department will initiate a project to model the effects of enforcement on revenue flow. The REM Department will have the econometric model recalibrated and updated to take into consideration the effects of the enforcement program.

II. Recommendation: Regional Environmental Management leadership should ensure that the Unit's flow control enforcement and illegal dump cleanup activities are more integrated into the objectives of the ten-year Regional Solid Waste Management Plan.

A chapter will be added to the Regional Solid Waste Management Plan (RSWMP) that incorporates the Unit's activities into the Plan as recommended. As with any RSWMP revision, this will include public review and approval by the Metro Council and the DEQ.

III. Recommendation: Regional Environmental Management leadership should initiate a process whereby the Unit establishes measurable objectives for enforcement efforts. An important step is to attempt to measure the potential size of the problem, such as asking solid waste generators and haulers about their knowledge of Metro's ordinances or identifying the type of people or businesses more likely to ignore such ordinances.

The REM Department will develop such measures. In addition to recovered revenue, these measures should account for the economic value of environmental compliance and the reduction of hazards due to exposure to infectious, hazardous, and radioactive waste.

IV. Recommendation: Metro should increase its efforts to delegate authority under its illegal dumping ordinance so as to facilitate the prosecution of illegal dumpers and to make enforcement penalties consistent within Metro's boundaries.

The REM Department will offer local jurisdictions the authorization to have their Code Enforcement Officers or other appropriate authorities issue citations under the Metro illegal dumping ordinance. This offer has been made in the past to several of the major jurisdictions. In response to this audit recommendation, the REM Department will follow up on these past offers and extend them to all jurisdictions in the region.

V. Recommendation: Data on illegal dumping sites should be compiled using all jurisdictions' information. With such a data base in hand, Metro could, better judge if there is too much concentration on Multnomah County and could decide how to involve other Metro and community elements to reduce use of chronic sites.

The SWEU will continue its efforts to obtain information on the locations of dumpsites reported to and handled by local jurisdictions so that a more comprehensive data base may be established. An outreach program will be developed to bring together neighborhood associations, local governments, and Metro to utilize barriers, signage, patrols, and other measures in order to reduce the attractiveness to dumpers of the most chronic dumpsites. This outreach effort might best be performed by planning rather than enforcement staff in the REM Department.

VI. Recommendation: Coordination with other local jurisdictions is needed to insure that all Metro citizens can count on cleanup, investigation, and prevention of illegal dumping in an equitable fashion.

The SWEU presently coordinates closely with the City of Portland and Clackamas County to provide clean-ups and investigations on a uniform basis. Efforts are currently underway to establish a closer working relationship with Washington County as well.

VII. Recommendation: Metro leadership should continue its efforts to solve the problems of the definition of "beneficial materials," and to address the continuing misidentification of Metro area waste at area landfills.

The REM Department has prepared a draft recommendation for a clearer definition of "beneficial materials". The draft is currently being reviewed by the Executive Officer and will be presented to the Council within the next six months. The REM Department is also requiring formal documentation of details on the use of beneficial materials claimed as exempt beginning January 1996. The SWEU will be making unannounced inspections throughout the year to verify that such materials are actually used as claimed. In addition, the REM Department is studying the advisability of revising the Metro Code so as to reduce incentives and opportunities to claim exemptions inappropriately.

The problem of misidentification of Metro-area waste has been considerably reduced in the past two years because of Metro's enforcement actions. The REM Department will continue to monitor the transaction data and conduct periodic surveillance of designated facilities. In addition, the REM Department will research other methods of preventing misidentification of Metro-area waste. Feasible options will be recommended to the Council.