

## Executive Summary

### Solid Waste Advisory Committee November 17, 2003

#### I. Call to Order and Announcements

Susan McLain

Announcements: Mr. Gilbert announced that Nature's Needs was given a solid waste franchise by Washington County.

Approval of Executive Summary: Mr. Winterhalter made a motion to approve the Executive Summary dated September 15, 2003; Mr. Korot seconded the motion; none opposed; the Executive Summary stood as read.

#### II. Solid Waste & Recycling Director's Update

Mike Hogle

Mr. Hogle advised that the Regulatory Affairs group has three primary matters of interest currently.

The Council will consider franchise renewals for Willamette Resources, Pride Recycling and Recycling America at the December 2<sup>nd</sup> work session and at the regular council meeting on December 4<sup>th</sup>. Staff has recommended that they be renewed for four years at a 65,000 annual tonnage cap.

Mr. Hogle added that the Council would consider, at these same sessions, six wet-waste non-system licenses (NSLs). Four of the six NSLs under consideration (for Willamette Resources, Coffin Butte, Arrow Sanitary, and American Sanitary) count against the discretionary 10% allowed under the agreement whereby 90% of the region's putrescible solid waste will go to Waste Management Landfills. The other two NSLs are for Pride and Forest Grove.

Mr. Hogle gave details about the fact that Metro published a "public notice" last week for Pacific Land Clearing and Recycling III (PLC III), which is seeking an amendment to its current license to become a dry waste material recovery facility (MRF). PLC III is proposing to take a large variety of materials. Currently, they only take yard debris, roofing and treated wood. The public comment period ends November 28<sup>th</sup>. Mr. Hogle explained that the reason he brought this topic to the attention of the Committee is that under the new Chapter 5.01 and 5.05 Code changes, there has been some delegation of approval authority to the Chief Operating Officer with the contingency that there be a public comment period and an opportunity to respond when license modifications are proposed.

Mr. Hogle went on to discuss the Requests for Proposals for operation of Metro's transfer stations. He explained that the contract with BFI will expire October 2004 and that an RFP is being prepared for a new contract. However, Council will have the option of extending the existing contract or considering the proposals for a new contract to operate both Metro South and Metro Central. The new proposals will be evaluated on issues of costs, material recovery, the approach for material recovery, and lastly, their operation and maintenance approach. Mr. Hogle said that the operation and maintenance costs will be important because of recent compactor failures at the facilities. He did explain, however, that Metro is not looking at any significant capitol improvement costs at either facility. Mr. Hogle informed SWAC members that one of Council's main criteria was to operate in a sustainable manner. Mr. Hogle explained that the SW&R Department would be initiating discussions with the Council over the next month to clarify different sustainability elements to be considered. Mr. Hogle said that we will be issuing a request for letters of interest from vendors in an upcoming major solid waste publication and will be advertising widely for this RFP, if Council does not decide to extend the current contract.

Mr. Hogle talked briefly about two committees which are looking at waste reduction opportunities for the Metro region: the RSWMP Contingency Plan Work Group (CPWG) and the Regional System Fee Credit Task Force. The CPWG is investigating ways to ensure that our region meets the 62% recovery goal. Mr. Hogle explained that the group still has a number of contingency measures to consider and are not finished voting on the issues. Currently, the group is working on narrowing the list of recommendations they will provide to Council. Councilor McLain wanted to clarify that when Mr.

Hoglund used the word "ban" during his explanation of some of these contingency measures being considered and that there is no "ban" as yet, but that there were some suggestions. Councilor McLain explained that it is a situation where the issues being considered are items that are involved in a "task force"; they are only suggestions and are still being mulled over. Those suggestions will then go to staff and then subsequently will be presented to Council and also at the next SWAC meeting.

Mr. Hoglund then spoke about the Regional System Fee Credit Task Force. Mr. Hoglund explained that the questions being asked of both of these committees are very hard questions and, for that reason, the final report of the Regional System Fee Credit Task Force may be delayed. He said this task force hopefully would be coming out with a recommendation by mid-December. Mr. Hoglund said to make a long story short, the Recycling Credit Program will be maintained in the short term, although the committee is looking at trying to come up with some tweaks or fixes to it in the interim. The program as it stands now may not be the exact program implemented for the next couple of years.

Councilor McLain explained that the Council has asked to review the recommendations from each task force in an integrated fashion. She explained that there are some short-term expectations of the budget over the last few years that need to be handled, but that the Council is looking long-term as updates from these two committees become apparent.

On a final note, Mr. Hoglund talked about a resolution for \$300,000 for the Regional System Fee Credit Program. The Council will be discussing releasing that money which should ensure funding of the credits through until February 2004. The Council will more than likely start asking questions as to what happens in the next budget, and hopefully the budget process will answer those questions.

Councilor McLain asked for comments/questions. There were none.

### **III. Updating the Regional Solid Waste Management Plan**

**Janet Matthews**

Councilor McLain then introduced this agenda item and explained that this is the first major update of the Regional Solid Waste Management Plan (RSWMP). She explained that the Council is very interested and concerned that this update prepares us for the 21<sup>st</sup> Century and all of the new ways that business is being done in both recycling and the solid waste disposal business. Councilor McLain credited Janet Matthews with doing a good job by putting together a timeline, concepts and ideas of how the update process will be managed.

Ms. Matthews talked about how the two plans that guide solid waste and recycling are different. She explained that the Strategic Plan is a short-term plan, which gives Metro direction in implementing roles laid out by the RSWMP, and it also recognizes emerging issues. Ms. Matthews said, in contrast, the RSWMP is a regional plan that has been referred to as a "functional" plan. Ms. Matthews explained that the RSWMP sets out roles and responsibilities and strategies for achieving the goals and relies upon the cooperation of a lot of parties in the public and private sector.

Ms. Matthews explained that the current plan expires in 2005 and therefore we need to embark on the planning process for updating the RSWMP. Ms. Matthews then referred the audience to the RSWMP Update Project schedule of Phases and Major Tasks and the Organization Chart. Ms. Matthews introduced Marta Conkle McGuire as the Assistant Project Manager. Ms. Matthews also introduced Paul Ehinger, Manager of Engineering & Technical Support Section, and Karen Blauer, Community Grants Coordinator for the Community Relations Section, as key members of this project update. Ms. Matthews said that even though this project will be a marathon effort, she was really excited about it.

Ms. Matthews then showed the SWAC members a PowerPoint presentation. During the presentation, she discussed the purpose of RSWMP, Metro's role, what is covered in the current plan, the scope of the update project; and what role will SWAC play in the update. Ms. Matthews covered the history of SWAC's involvement in the RSWMP. She indicated that the participation of SWAC is evident both as a group and probably also as individual stakeholders. The SWAC group will be asked to identify key planning issues, shape goals and objectives for the next 10 years, and review proposed strategies that will ultimately end up a part of the plan.

Ms. Matthews asked if there were any questions. She did mention that at the January SWAC meeting an agenda item may be expected which will unveil the plans for the public involvement portion of the plan. She said the project would really get underway in the months that follow.

Councilor McLain clarified the definition of "public outreach" by including the industry and other players in the system, but explained that it also includes the general public who either buy the services or expect the services that Metro SW&R is providing.

Mr. Hycke asked if the target date of December 3<sup>rd</sup> to have the Request for Proposal completed for the consultant was still the projected date. Ms. Matthews responded by saying that she was in the process of developing the RFP and that it was her goal to have it completed by December 3<sup>rd</sup>. Councilor McLain explained that there is going to be a lot of work that is done in-house, however, she would like to have whatever needed discussion about the proposed RFP before it "hits the street." Ms. Matthews explained that the primary purpose for the RFP is to hire a consultant that would be responsible for writing the draft and the final plan in a reader-friendly fashion.

#### **IV. 2002 Regional Recovery Rate and Analysis**

**Steve Apotheker**

Steve Apotheker, Senior Solid Waste Planner, Waste Reduction Section, started his presentation by thanking Mary Sue Gilliland and Peter Spendalov from DEQ for providing the information he would be talking about and also Julie Cash for assisting in assembling the information into a comprehensive fashion in a short period of time. Ms. Gilliland apologized for not providing the information about finding 4,000 more tons for Metro to Mr. Apotheker in a timely fashion.

Mr. Apotheker explained that the recovery rate this year was 48%, which is the calculated rate, and on top of that is 6% credits, for a total recovery rate of 54%. The region's goal is 62%. Mr. Apotheker referenced PowerPoint graphs (attached). He explained that he had left the 6% credits off and was only looking at the calculated recovery rate in terms of the curbside, commercial and C&D recovery programs. He explained that when you look at the trend in the 1990s, we were pretty flat, covering about 42%. However, we started to show some growth between 1999 and 2001 and then last year fell back about 1%. Of the growth between 2000 and 2001, probably about ½ of that growth was real program growth. A lot of the growth was attributed to wood recovery, the other half was due to more comprehensive reporting, in particular, getting some additional scrap metal dealers to report in. He also explained that DEQ added brick as a new material and that all of those factors contributed to program growth in wood in 2001. In 2001, one of the driving factors for increase in wood collection were energy prices which reached somewhat of a historic high, at least in the last 5 or 6 years and those prices came down somewhat in 2002. The other factor was that towards the end of 2002, one of the markets that were buying wood to be used in manufactured wood products had changes in ownership of some mills, and the policy became to use sawmill residuals instead of scrap wood. So again, he explained, when you have more wood on the market and less of an incentive due to lower energy prices, there's not quite as much recovery.

He explained the "trend line" that showed that if we continued our progress, we would miss our recovery rate goal of 56% by a little over 4 points. Mr. Apotheker did state that the good news is that between 1995, the beginning of the RSWMP, and today, we are recovering 250,000 tons more of recyclable materials, including yard trimmings, which reflects a definite increase in our programs to recover materials. However, he explained, the fact that the recovery rate isn't growing faster indicates that our increase in recovery is keeping up with our increase in consumption.

Mr. Apotheker then discussed the graph regarding the difference between recycling and composting and energy recovery.

Mr. Apotheker reviewed the "Winners for 2002" which included materials such as: yard debris, brick, plate glass, container glass, food waste, tires, lead acid batteries, textiles, etc.

Mr. Apotheker also reviewed the "Losers for 2002" which included materials such as: total metals, wood waste, roofing, gypsum wallboard, tinned cans/aluminum, rigid plastic containers, total plastic, carpeting (used), and used motor oil. Mr. Walker questioned if the figure for aluminum was a statewide figure.

Ms. Gilliland answered that it was. There was discussion between SWAC members regarding the Bottle Bill and the rationale behind the figures.

Mr. Apotheker examined with the group the "Metro Disposed Waste Composition" trends from 1998 through 2002 with items such as: food, recyclable paper, wood (all), non-recyclable paper, metal (all), yard trimmings, wallboard, mixed containers, and roofing (recyclable). He said, overall, the recycling programs are doing well.

## **V. Current Research**

### **Paul Ehinger & Tom Chaimov**

Paul Ehinger, Manager of Engineering & Technical Support Section for Metro, gave a Transfer Capacity Analysis PowerPoint presentation to the group. Mr. Ehinger discussed the Transfer Capacity Study by reviewing with the group the goals of the project, which, he stated was to provide an estimate of the region's existing capacity to transfer wet waste. The question to be asked, per Mr. Ehinger, is how much capacity do we have to get material out of town. Mr. Ehinger explained that the "total need" goal includes both wet waste and dry waste. He explained that there are two types of facilities in the region, those that handle both wet and dry waste and those that are limited to dry waste, however, they both use essentially the same equipment to get rid of the residue.

Mr. Ehinger gave an overview of what we can use the data for: (i.e., system planning such as the RSWMP update; to assist policy makers in decision making; etc.) and noted that these are capacity estimates, not maximum desirable operating levels. He explained that this data is "not capacity estimates that in anyway set some type of regulatory number or pick a set of magic numbers for any particular facility to operate in." He explained that these numbers are estimates based on a certain set of criteria. The purpose of these estimates are to give us a good planning level estimate of what our ability is to transfer waste. Mr. Ehinger clarified what "Transfer Capacity" means; "It is the lesser of either how much you can load into the facility over a period of time or, how much you can load out the back door to take to the disposal site." He informed the group that it does get more complicated because it cannot exceed the facilities' storage capacity.

Mr. Ehinger then went on to discuss how the engineers evaluate the receiving capacity, load out capacity, and storage capacity, using various factors. Mr. Ehinger explained that his total aggregate estimate is 2,061,000 tons of transfer capacity in the region and that we are currently disposing of 1.3 million tons in the region. He explained that at any reasonable time frame, we have a significant amount of unused capacity. He quantified that statement by stating this does not include all the facilities in the region, but only the mixed waste facilities.

Mr. Ehinger advised that the fieldwork has been completed on this project, the data has been gathered, and the initial calculations are finished. From these, he has preliminary estimates. He said that a draft report would be forthcoming in approximately three weeks for internal review.

Sarah Jo Chaplen asked how the unused capacity is considered during the "peak hours" and does the unused capacity stay the same during the peak hours. Mr. Ehinger answered by saying that "Yes, we do." He made clear his answer in engineering terms, and explained his formula for those calculations, which proved that the capacity would balance out during the peak times.

Steve Schwab asked if the flood of 1996 tested the capacity levels and why it was that Metro Central and Metro South got shut down. He remembered that the stations stopped all collections and they were forced to travel to Marion County. Mr. Ehinger answered that question by stating "absolutely not." Councilor McLain explained that it was an emergency systems issue and we were told to "hold" all receiving. Councilor McLain clarified that this reporting is not during an emergency situation and that there are other issues to be brought into the factoring during that type of event, such as the flooding.

Tom Chaimov, Senior Solid Waste Planner, Financial Management & Analysis Division presented an Activity-based Cost Model of Metro's Transfer Station Operations via a PowerPoint presentation.

He gave an explanation of the cost model schematics and went on to explain that this cost model is simply a way to characterize the costs of operating Metro Central and Metro South Transfer Stations. He said that the cost model is used for: good business practices; to inform contract-pricing structure; and to assess impacts of policy options. He said we currently have a contract with an operator and want to make sure that the pricing structure of the contract is fair and accurately reflects what it costs to provide services at the transfer stations. Mr. Chaimov went on to explain some secondary uses for this cost model, such as: knowing your customer, management of queuing, and other operational optimization. He explained that the model helps us to quantify better and know what kinds of materials come into our transfer stations in different loads. He said that there may be other operational optimization factors that would come out of this study, but definitely the management of queuing is an important one.

Mr. Chaimov clarified that the cost model will not predict hauler or generator behavior. If conditions change, for example, this model will not tell how others will react in the event of a policy change or some other change in the system. The model would not contemplate anything that has to do with operations of private facilities and would not model system costs. He said that this model is only a small piece of "system costs."

Mr. Chaimov explained to the group the timeline for this cost model. He said the model structure is essentially defined, but may have some small tweaks, and the input model is fairly well completed. He said that they are currently in the implementation stage of building this cost model by working on modeling the activities and the costs of various activities. The aggressive timeframe is to have a working model by Thanksgiving, and documentation will follow in December.

Councilor McLain said that both Mr. Ehinger and Mr. Chaimov introduced a lot of information to this meeting that would be very useful to the SWAC members and Metro.

## **VI. Other Business and Adjourn**

**Susan McLain**

Councilor McLain closed by saying she felt the group has a couple of months of exciting agendas ahead with the Contingency Plan Work Group's report, the RSWMP update, and also some budget decisions that always cause a ripple effect. She said it is very important that the SWAC members be on top of these issues this year.

As there were no further comments or business, Councilor McLain adjourned the meeting.

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### **Documents to be kept with the record of the meeting (copies available upon request):**

#### Agenda Item III:

- RSWMP Update Project Phases and Major Tasks
- RSWMP Update Project Organizational Chart
- PowerPoint Presentation, "RSWMP Update Project"

#### Agenda Item IV:

- PowerPoint Presentation: Metro Region Recovery Rate, Recovery By Disposition, Per Capita Disposal, Recovery and Generate, Waste Reduction Initiative Targets, Winners/Losers in 2002, Metro Substream Disposal, and Metro Disposed Waste Composition (see attached)

#### Agenda Item V:

- PowerPoint Presentations: "Transfer Capacity Analysis" and "Activity-Based Cost Modeling"

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Attachments  
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## **RSWMP Update Project**

SOLID WASTE ADVISORY COMMITTEE  
November 17, 2003

## **Presentation Summary**

- What is the Purpose of RSWMP?
- What is Metro's Role in the Plan?
- What does the current Plan cover?
- What is the scope of the RSWMP Update Project?
- What role will SWAC play in the Update?

## **RSWMP Purpose**

- Provides framework for regional coordination
- Establishes direction (i.e. goals, policies, strategies)
- Identifies roles and responsibilities
- Fulfills state requirement for waste reduction plan

## **Metro's Role in Update Project**

- Lead public process
- Prepare Plan
- Adopt Plan
- Enforce Plan

## **Contents of Current RSWMP**

- History of system & context of times
- Current practices/growth projections
- Key solid waste planning issues
- Vision, goals and objectives
- Recommended practices
- System financing
- Implementation and monitoring

## **Starting Assumptions**

- Current plan is starting point
- Ten year timeframe
- Disposal/regulatory issues will be more prominent in update
- Feasibility of WR goals will be reviewed

## **Schedule**

- Preliminary planning concludes 01/04
- Plan assessment, public outreach, research & analysis concludes 06/04
- Draft development concludes 08/04
- Final draft review concludes 02/05
- Council and state consideration of Update 06/05

## **Role of SWAC**

- Participate in Update Development
  1. Identify key planning issues
  2. Shape goals & objectives
  3. Review/recommend strategies

## Activity-based Cost Modeling

of Metro's Transfer Station Operations

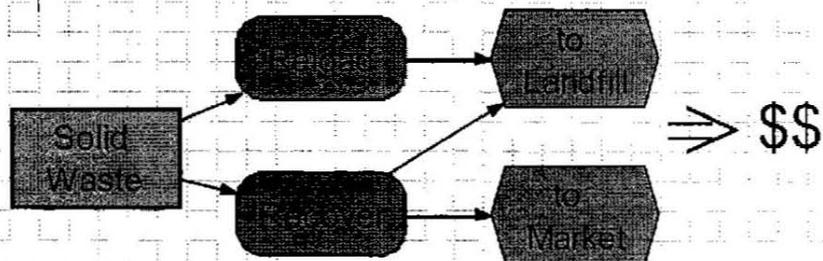
## What is it?

A way to characterize the costs of operating Metro Central and Metro South

## Cost Model Schematics



*Example*



## What's it for?

- ◆ Good business practice
- ◆ Inform contract pricing structure
- ◆ Assess impacts of policy options

## What else is it for?

- ◆ "Know your customer"
- ◆ Manage queueing
- ◆ Other operational optimization

## What won't it do?

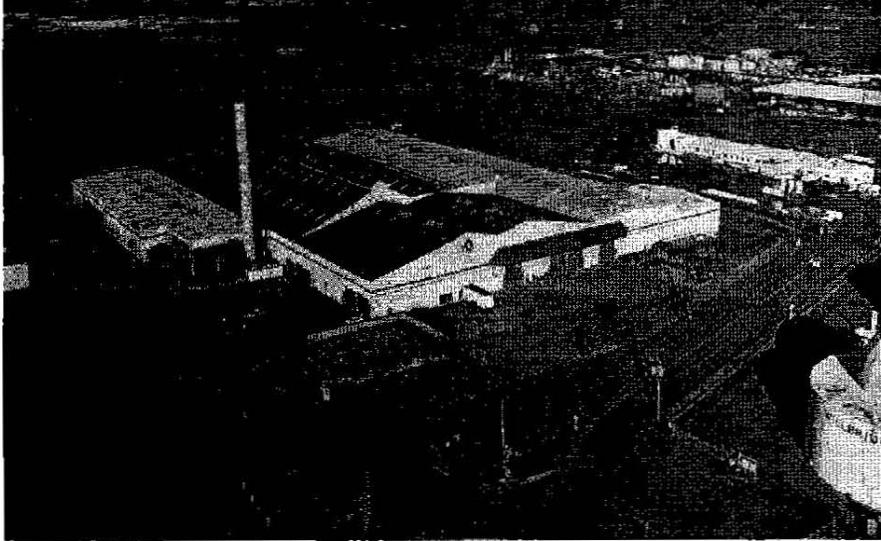
- ◆ Predict hauler or generator behavior
- ◆ Model private facilities
- ◆ Model system cost

## Timeline

- ◆ Design is complete
- ◆ Input (tonnage) is nearly complete
- ◆ Activities are currently being modeled
- ◆ Working model by Thanksgiving

# Transfer Capacity Analysis

Presented to SWAC  
November 17, 2003



## Transfer Capacity Study

- Identify Project Goals
- Describe Use of Project Data
- Define Transfer Capacity
- Identify Key Capacity Criteria
- Report on Initial Findings
- Answer Questions

## Project Goals

- To Provide an Estimate of the Region's Existing Capacity to Transfer Wet Waste to Disposal Facilities.
- Compare the Estimated Capacity to Future Needs based on Metro Tonnage Forecasts.

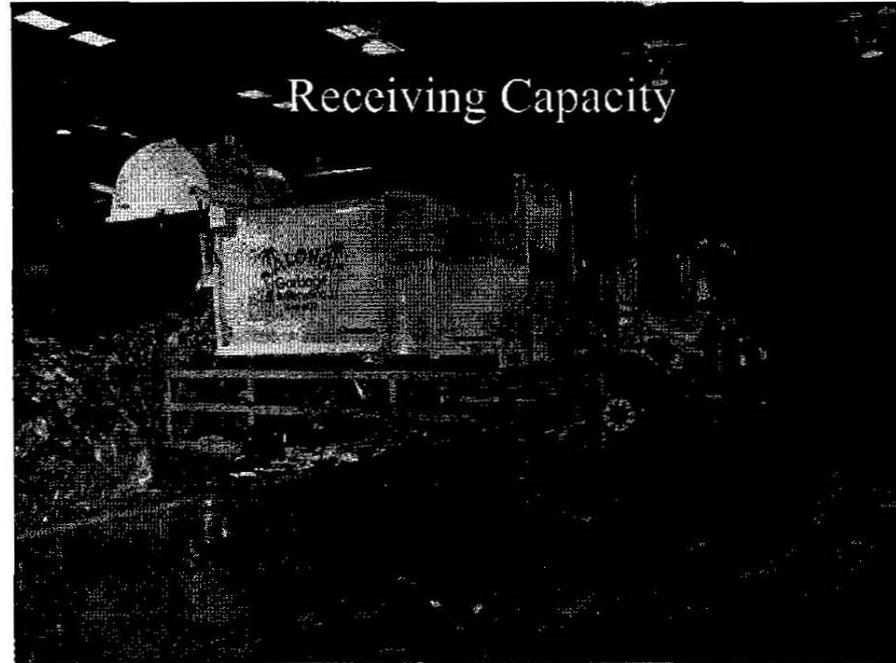
## Use of Capacity Data

- System Planning
- Assist Policy Makers in Decision Making
- Note that these are Capacity Estimates, not Maximum Desirable Operating Levels

## Transfer Capacity

- Transfer Capacity is the Lesser of the amount of Waste that a Facility can Receive or Load Out over a Specific Time Period without exceeding the Facility's Storage Capacity.

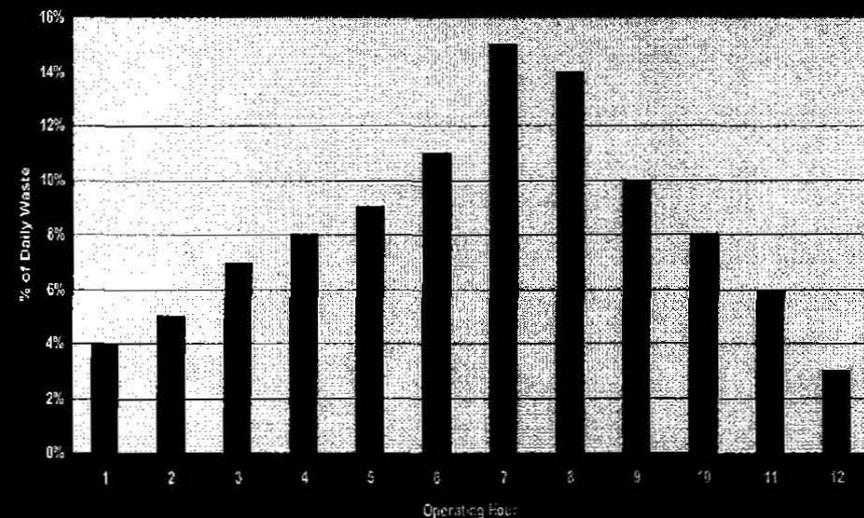
## Receiving Capacity



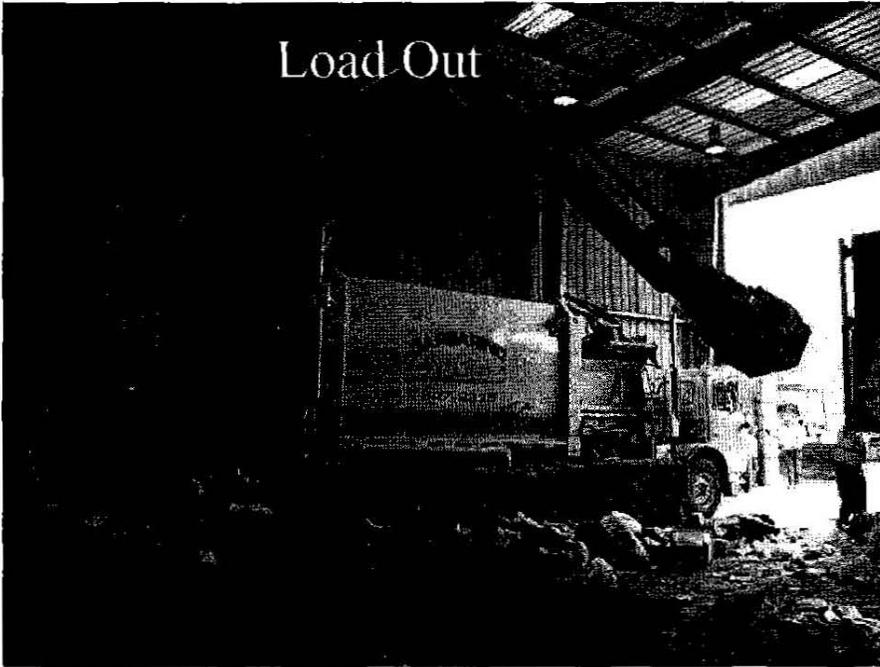
## Receiving Capacity

- 7 Vehicles per Stall per Hour
- 5.5 Tons per Load
- Loads Received over 12 Hours
- 5 Day Week
- Same Distribution of Arrivals as Metro

## Waste Deliveries



## Load Out



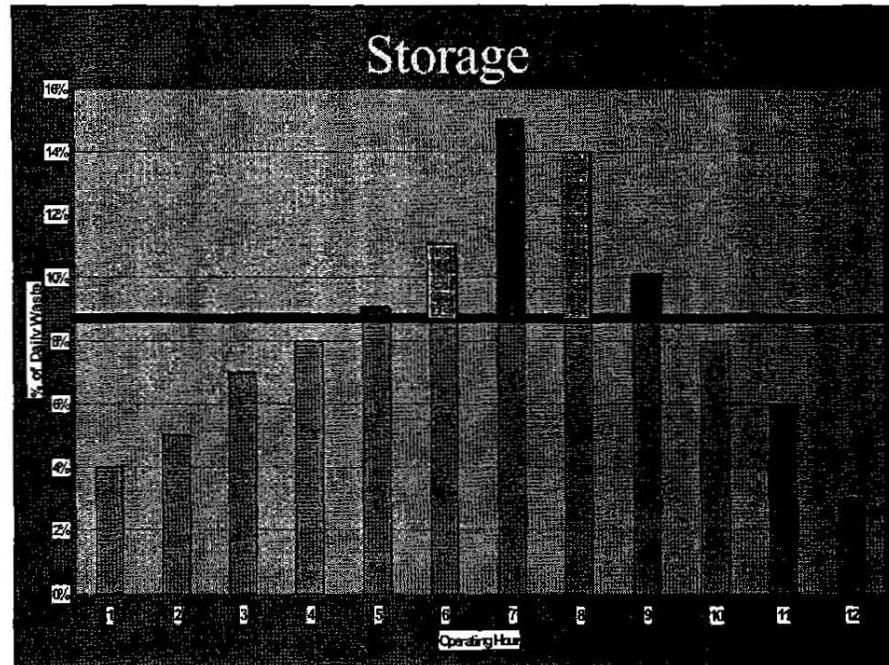
## Load Out Capacity

- Equipment Capacity based on Manufacturers Rated Capacity
- Capacity Based on Primary Load Out Method Only.
- Direct Dump and Top Load Rates based on Operator's Reported Production Rates
- 12 Hour Load Out Day
- 5 Day Work Week



## Storage

## Storage



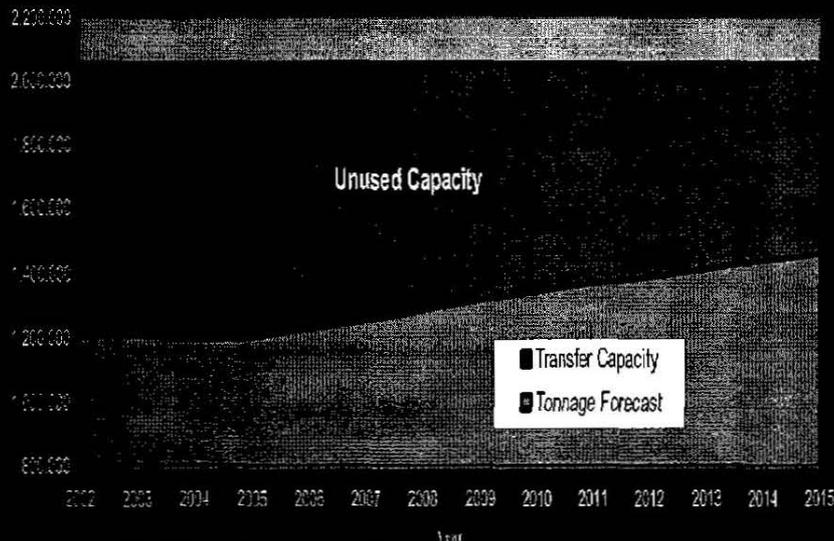
## Other Factors

- No New Investment, Facilities Evaluated Based on Current Status
- All Facilities are Rated Without Consideration to Related Collection Activities.
- Tonnage Limits due to Local Land-Use Actions or Permitting Agencies are Considered Hard Limits.

## Preliminary Estimate Total Transfer Capacity

	<i>Tons/Year</i>
Metro Central	624,000
Metro South	560,000
Private Facilities	877,000
<b>Total</b>	<b>2,061,000</b>

Transfer Capacity vs. Projected Need  
Mixed Waste Facilities Only



## Project Status

- Field Work and Data Gathering Complete
- Preliminary Estimates Prepared
- Draft Report within 3 weeks.