A G E N D A

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METRO

MEETING: Metro Solid Waste Advisory Committee

DAY: Wednesday

DATE: November 16, 1994

TIME: 8:30 - 10:30 A.M.

PLACE: Metro Headquarters, 600 NE Grand Avenue, Room 370

1. **Approval of Minutes** — **Ruth McFarland**

2. **Updates** — **Ruth McFarland**

3. **Household Hazardous Waste Plan** — **Lynne Storz, Marie Nelson**

**** SWAC ACTION ITEM ****

Metro staff have been working with the Washington County Cooperative Recycling Program and East Multnomah County representatives to develop a plan for providing household hazardous waste collection services to areas not conveniently served by the two permanent facilities.

The draft plan is attached for your review. If approved by SWAC, it will be incorporated into the new Regional Solid Waste Management Plan that will be presented to the Metro Council for their review and approval by July 1995.

4. **Yard Debris Processing Facilities** — **Bill Metzler**

Metro staff have been working on siting and management options with yard debris processors, local government solid waste staff, local government land use planners, haulers, and the DEQ. The group has recommended a conceptual strategy that has the following key components:

1. Metro would license all new and existing facilities that meet performance standards. License fees would be established on a "cost-for-service" basis such that only the costs associated with facility licensing are included.

2. Local governments would amend zoning ordinances as needed to include clear and objective standards for siting facilities.

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3. Local governments would also amend collection franchises to require all yard debris collected through curbside programs to be delivered to licensed facilities.

4. Processors would apply for a Metro license, make use of Metro technical assistance if needed, and comply with license performance standards.

The work group wants SWAC to review the concept so that they may move forward on working out the details.

6. Regional Solid Waste Management Plan **Terry Petersen**

Attached is Metro staff's concept of how different types of solid waste alternatives (managerial alternatives, programs and facility alternatives, and service provision alternatives) should be incorporated into the new RSWMP. SWAC review of these concepts will help give direction to the planning process.

7. SWAC Organization and Function **Ruth McFarland**

With the new Metro Council and administration next year, there is the opportunity to review the organization of the Metro SWAC. Metro has received several comments during the past year regarding membership and citizen participation. This will be an opportunity for you to make recommendations to the new Executive Officer and Council on the organization and function of SWAC.

7. Other Business/Citizen Communications **Ruth McFarland**

8. Adjourn **Ruth McFarland**

TP:clk
Enclosures: 1. October Minutes
2. HHW Plan
3. RSWMP Alternatives Concepts

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SOLID WASTE ADVISORY COMMITTEE (SWAC)
Meeting Summary of October 19, 1994

MEMBERS PRESENT:

Councilor Ruth McFarland, Chair
Kathy Kiwala, City of Lake Oswego
Ralph Gilbert, Eash County Recycling
Jeanne Roy, Citizen
Holly Halvorson, Washington County (Alt.)
Gary Penning, Waste Management of Oregon (Alt.)
Susan Keil, City of Portland
Lynda Kotta, City of Gresham (Alt.)
E. Patricia Vernon, DEQ
Merle Irvine, WRI
Estle Harlan, Oregon Sanitary Services Inst.
Emilie Kroen, Cities of Washington County
Tom Miller, Wash. Co. Refuse Disposal Assn.
Steve Miesen, BFI
Susan Ziolko, Clackamas County

GUESTS:

Diana Godwin, Regional Disposal
Bill Pendarvis, MCCI
John Guest, BFI, Sacramento
Larry Eisile, Washington County
Doug DeVries, Jack Gray Transport
Robert Peterson, Peterson & Associates

METRO:

Bob Martin, Solid Waste Director
Terry Petersen, SW Planning & Techn. Services Mgr.
Marie Nelson, Solid Waste Planning Supervisor
Aletta Yantis, Administrative Assistant
Debbie Gorham, Waste Reduction Manager
Doug Anderson, Senior Management Analyst
John Houser, Senior Council Analyst
Sam Chandler, Operations Manager

The meeting was called to order by Councilor McFarland at 8:30 a.m.

1. Approval of Minutes

The minutes of September 21, 1994, were approved as submitted.

2. Updates

Chair McFarland updated the group on the Solid Waste Committee's October 18 hearing and discussion concerning Metro Challenge grant funds to local governments.

3. Status Report on the Model Ordinance for Siting Yard Debris Processing Facilities

Bill Metzler, Metro Solid Waste Planner, has been meeting with the region's yard debris processors and DEQ and local government representatives to develop a model ordinance for as a management option for siting yard debris processing facilities. The model ordinance was mailed to local government land use planners for review and comment. Mr. Metzler will report back to the SWAC in November.

4. Status Report on a Plan for Hazardous Waste Service in Outlying Areas

Marie Nelson, Metro Solid Waste Planning Supervisor, discussed the status of meetings with local government representatives to plan long-range household hazardous waste (HHW) collection services in outlying areas not conveniently served by Metro's two permanent HHW collection facilities. The group has worked with Sam Chandler, Metro Operations Manager, to schedule a series of satellite, full-service collection events for FY 1994-95. Recommendations for longer-term services will be presented to the SWAC in November. Final recommendations, including options for long-term service funding, will be presented to the Council Solid Waste Committee on *December 6*.

4. Metro Challenge Grant Program

Bob Martin reported that his recommendation was to distribute Metro Challenge money to local governments for FY94-95. The evaluation committee recommended that local governments work with Metro to collect information needed to develop a comprehensive regional plan for commercial recycling.

5. Regional Solid Waste Management Plan

Terry Petersen reviewed the schedule and process for updating the Regional Solid Waste Management Plan.

SWAC discussed the following 5 key planning issues:

Issue #1: Regional Waste Reduction Priorities

There was considerable discussion on the importance of using the appropriate measurement tools for monitoring waste reduction.

Pat Vernon said that the State has made education a priority and that this should be reflected in the regional plan.

Issue #2: Transfer Stations Service Provision

SWAC directed staff and the Planning Subcommittee to not spend time planning for new transfer stations because existing facilities appear to have sufficient capacity to meet the region's demands for the next 10 years.

It was suggested that adjustment to tip fees through mechanisms such as "convenience fees" might be a method to compensate haulers that are further away from the existing 3 stations.

SWAC believed that Metro should work with Oregon City regarding the tonnage limitation at Metro South.

Issue #3: Other Facilities

SWAC recommended that whenever possible the private sector be given the opportunity to provide solid waste facility services.

Bob Martin said that with the October 1996 rebid of the Metro South and Central operating contracts, now is a good time to look at what services the region wants these facilities to provide.

Steve Miesen mentioned the role of fiber based fuel as a "last-chance" processing option.

There was additional discussion about tip fee incentives to encourage recycling.

Issue #4: Revenue Stability and Equity

Due to time limitations, this issue was not discussed.

Issue #5: Role of Facilities As Collection Technology Changes

SWAC directed staff and the Planning Subcommittee to continue to work on this topic. There was particular interest in how co-collection technology might work with yard debris.

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M E M O R A N D U M

METRO

DATE: November 9, 1994

TO: Solid Waste Advisory Committee

FROM: Marie Nelson, Solid Waste Planning Supervisor

RE: **Household Hazardous Waste (HHW) Collection Services in Areas Not Conveniently Served by the Two Permanent Facilities**

Members of the Washington County Cooperative Recycling Program (which includes city and county representatives) and East Multnomah County representatives have been working with Metro to develop plans for providing household hazardous waste (HHW) collection services to areas not conveniently served by the two permanent collection facilities.

Attached are draft recommendations developed by the group for SWAC review on November 16 and for Council Solid Waste Committee review on December 6. Final recommendations will be incorporated into the Regional Solid Waste Management Plan Update which will be approved by the Council later this fiscal year.

Highlights of the recommendations include:

- Metro and local governments will continue to promote HHW prevention and reduction through adult and school education programs.
- The two existing, permanent facilities are an important base of regional operations for HHW collection. Not only do they provide collection services to residents driving to those facilities, they also house the staff, equipment and processing capabilities that are used for satellite HHW collection events and services.
- Metro will continue to work cooperatively with local government representatives to plan a variety of satellite collection services. These services will include full-service satellite collection events at locations such as Gresham, Aloha, Forest Grove, Hillsboro and Washington Square. Other community services will be provided as appropriate such as paint only collection drives, small events coordinated with community clean-up campaigns and distribution of discount coupons for use at the two permanent facilities.
- Alternative funding sources to cover the cost of HHW collection services will be investigated including product fees, retailer licensing fee, and private sponsorship and grants.

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10-Year Waste Management Recommendations
Household Hazardous Waste

SUMMARY - DRAFT

Items 1 through 9 below summarize recommendations for providing Household Hazardous Waste (HHW) collection services to areas not conveniently served by the two permanent collection facilities. The pages that follow provide more detail about how these services can be provided.

Waste Prevention:

1. Promote household hazardous waste prevention and reduction through adult and school education programs.

Collection Facilities and Services:

2. Promote existing facilities to increase the number of customers served in total and by geographic areas.

3. At this time there does not appear to be a need for fixed, full-service facilities of the type as Metro South and Metro Central.

4. Provide service to outlying areas not conveniently served by permanent HHW collection facilities through regularly scheduled, full-service satellite collection events.

5. Provide new services to identified outlying areas with regularly scheduled, flexible service options (*e.g.*, paint only, neighborhood events, targeted groups, special events) that are sponsored by local governments and neighborhood associations.

6. Monitor the cost and efficiency of all types of collection events and services.

7. Develop a database of customer characteristics who use the facilities and satellite services.

8. Maintain a cooperative agreement with local governments in the entire Metro region to evaluate programs and identify future service needs.

Funding:

9. Seek alternative funding sources for HHW collection services.

10-Year Waste Management Recommendations
HOUSEHOLD HAZARDOUS WASTE

draft

Goal and Objectives

The goal for providing household hazardous waste (HHW) services in the region is to reduce the toxicity of mixed solid waste by keeping hazardous waste out of the mixed solid waste collection and disposal system. A product is considered hazardous if it is toxic, flammable, corrosive or reactive. The strategy for meeting this goal is to:

- Manage hazardous waste based on the Environmental Protection Agency's hierarchy of "reduce, reuse, recycle, treat, incinerate and landfill;"
- Educate residents about alternatives to hazardous products and proper disposal methods for hazardous waste; and
- Provide convenient and safe disposal services for hazardous waste that remains after implementation of prevention and reuse practices.

Existing Facilities and Services

- Waste prevention promotion and education programs for adult, child and youth audiences.
- Two permanent HHW collection facilities located at the Metro South and Metro Central Transfer Stations accept HHW on-site and serve as the base of staff, equipment and processing for satellite HHW collection events and services.
- Full-service satellite collection events staged in communities not conveniently served by the two permanent facilities (*e.g.*, Aloha, Beaverton, Forest Grove, Gresham and Hillsboro). In FY 1994-95, seven full-service events will be staged in outlying areas.
- Flexible community services are being developed as staff's experience increases. Examples of flexible services currently include temporary paint drop-off locations, limited material collection drives, and small-scale collection events that tie in with community clean-ups.
- Funding is provided through disposal fee revenues and grants received from the Oregon Department of Environmental Quality.

Short-term Recommendations (Year 1995 to 2000)

The recommendations that follow were developed by Metro, City and County representatives for managing the region's HHW waste in outlying areas during the next five years. Metro is currently coordinating a process to update the Regional Solid Waste Management Plan, which includes HHW management. Between December 1994 and May 1995, Metro seeks feedback on the following HHW recommendations as well as suggestions for additional options.

HOUSEHOLD HAZARDOUS WASTE PREVENTION

1. Promote household hazardous waste prevention and reduction through adult and school education programs.

Findings/Assumptions

- People will change their behavior through effective education and buy fewer toxic products.
- Children, as the next generation of consumers, should be educated about alternatives.
- Children often motivate adults to "do the right thing."

Roles and Responsibilities

Metro and Local Governments

a. Develop effective regional promotion and education campaigns to motivate the public to reduce the quantity and toxicity of waste generated as well as promote responsible use and disposal of these products.

b. Conduct education programs such as school presentations, adult workshops and other means.

c. Use collection events as an opportunity to educate HHW generators about toxic waste prevention.

Metro

d. Work with Metro departments and services (e.g., Zoo, Convention Center parks, solid waste facilities) to reduce the use of toxic products in the operation of Metro facilities and services.

e. Continue the popular "Alternatives to Pesticides" adult education program.

f. Continue to use the Recycling Information telephone program to distribute HHW prevention information.

g. Perform periodic evaluations (*e.g.*, waste characterization study) to determine whether fewer HHW products are being generated and disposed.

Local Governments

h. Use city and county newsletters, hauler flyers and other means to communicate the message of HHW prevention to the public.

i. Adopt policies to encourage the reduced use of toxic products by local government offices and services.

j. Participate in joint projects such as cleanups.

Private Sector

k. Provide funding and sponsorship for promotion and education programs.

PERMANENT FACILITIES

2. **Promote existing facilities to increase the number of customers served in total and by geographic areas.**

3. **At this time there does not appear to be a need for fixed, full-service facilities of the type as Metro South and Metro Central.**

Findings/Assumptions

- Because the two existing facilities can accommodate more customers, Metro will seek new ways to maximize their use.

- The two existing facilities are the regional base of operations for HHW collection services. They house the staff, equipment and processing capabilities that are used for satellite HHW collection events and services.

Roles and Responsibilities

Metro and Local Governments

a. Promote the use of the two permanent facilities to residents by distributing discount coupons to residents, newspaper ads, feature articles, and other effective means.

Metro

b. Continue to analyze facility use and the effectiveness of promotional efforts.

SATELLITE EVENTS AND SERVICES

4. **Provide service to outlying areas not conveniently served by permanent HHW collection facilities through regularly scheduled, full-service satellite collection events.**

5. **Provide new services to identified outlying areas with regularly scheduled, flexible service options (*e.g.*, paint only, neighborhood events, targeted groups, special events) that are sponsored by local governments and neighborhood associations.**

6. **Monitor the cost and efficiency of all types of collection events and services.**

7. **Develop a database of customer characteristics who use the facilities and satellite services.**

8. **Maintain a cooperative agreement with local governments in the entire Metro region to evaluate the program and to identify future service needs.**

Findings/Assumptions

- Residents who live the farthest from the two permanent facilities are the least likely to use them.
- Well-located and promoted full-service satellite collection events are an effective way to provide equitable service to outlying areas.
- Flexible service community events are another means of providing requested collection services efficiently.
- As experience and efficiencies improve, more effective ways of delivering collection services to targeted areas will emerge.

Roles and Responsibilities

Metro and Local Governments

a. Determine which geographic areas in the region are not conveniently served with HHW collection services; criteria could include:
   - Geographic and travel time from permanent facilities; and
   - Demographics that would limit people from using a permanent facility (*e.g.*, age, income, physical ability, language barriers, lack of transportation).

b. Satellite services will be provided to outlying areas based on the following criteria:
   - Numbers of households served;
   - Population concentration;
   - Community boundaries (which consider inter-jurisdictional agreements, local government franchise systems, education and promotion programs, local media services areas, etc.);
   - Events are scheduled in logical, consistent locations; and
   - Maximum diversion of toxic waste from the waste stream.

c. Meet on a scheduled basis (annually, twice yearly, or more often) to plan appropriate services for outlying and targeted areas and pilot projects. Planning should accommodate budgeting schedules, regional and local promotional campaigns, and event logistics.

d. Develop criteria for providing satellite collection services in areas closer to the permanent facilities.

e. Continue to develop new ways of providing services to the public that are responsive to the public's needs, improve efficiency, reduce costs and are environmentally responsible.

f. Seek private sector funding/sponsorship of collection events and services as appropriate.

g. Encourage public sector (*i.e.*, sewage treatment, water and fire districts) to sponsor and/or provide in-kind support of events and services.

Metro

h. Compile data on collection services and events in order to improve services.

i. Seek additional levels of grant funding from the DEQ for full-service satellite collection events.

Local Governments

j. Assist Metro to evaluate data compiled on services and events in order to improve services.

Private Sector

k. Sponsor/provide grant funding for collection events and flexible services.

FUNDING

9. Seek alternative funding sources for HHW collection services.

Findings/Assumptions

- HHW collection services are expensive to provide.
- The minimum $5 handling fee currently charged at the two permanent facilities covers a small portion of operating costs. Some do not support because it is only charged to residents using permanent facilities and not to those attending satellite events. The fee could also discourage residents from disposing of HHW products responsibly. Others support the fee because it demonstrates that disposal services are costly and the fee could stimulate waste prevention.
- As disposal fee revenues decrease due to effective waste reduction and recycling programs, new revenue sources must be secured to pay for HHW collection.

Roles and Responsibilities

Metro

a. Continue/don't continue to collect a minimum $5 handling fee at the two Metro permanent HHW collection facilities to help off-set expenses.

b. Meet on a scheduled basis (annually, twice yearly, or more often) to plan funding of appropriate services. Planning should accommodate budgeting schedules, regional and local promotional campaigns, and event logistics.

c. Funding priorities should include (in priority order):
   - The two permanent collection facilities;
   - Full-service satellite collection events, other services to outlying areas, and pilot projects;
   - Other community events and services for residents located closer to the permanent facilities.

d. Stabilize funding and staffing for full-service satellite collection events.

e. Investigate alternative funding sources which could include:
   - Advanced disposal fee on HHW products;
   - Retailer licensing fee;
   - Private sponsorship and grants;
   - Public sector (*i.e.*, sewage treatment, water and fire districts) sponsorship and and/or in-kind support.

f. Seek additional levels of grant funding for full-service satellite collection events from the DEQ.

Private Sector

g. Serve on the task force in investigate the advanced disposal fee and how such a fee could be collected.

h. Sponsor collection events and services.

Long-term Options (Year 2000 to 2005)

Because HHW collection is a relatively new service to the region, Metro will continue to gather data, improve efficiencies and work with local governments to develop equitable and convenient collection services to all residents in the region. Long-term recommendations will be developed as experience increases.

Possible long-term options to improve service convenience could include:

- Curbside collection of selected HHW materials such as paint and batteries.
- Product "take-back" requirements for retailers of HHW products.

Glossary of Terms

Household hazardous waste - any discarded, useless or unwanted chemical materials or products that are or may be hazardous or toxic to the public or the environment and are commonly used in or around the household (*e.g.*, paint, pesticides and cleaning agents).

HHW - an abbreviation for "household hazardous waste(s)" used throughout this document.

Permanent (or fixed) HHW collection facility - a receiving place for HHW located on a specific site and consisting of structures on permanent foundations. There are two permanent facilities in the region located at Metro South and Metro Central Transfer Stations.

Satellite, full-service collection event - A specific day(s) when a site, such as a large, paved parking lot, is temporarily set up to receive HHW. These events typically occur annually or twice a year in a designated community not conveniently served by permanent collection facilities.

Flexible community services - HHW collection services or events that are customized to serve specific short-term community needs (*e.g.*, a paint only collection event scheduled to tie in with a community clean-up campaign).

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Regional Solid Waste Management Plan
Staff Report

This report is Metro staff's summary of the solid waste management options that have been discussed to date. There are three basic types of options: **managerial alternatives, programs and facilities alternatives, and service provision alternatives**.

Managerial alternatives use incentives or regulatory approaches to achieve objectives. Examples include disposal bans, advance disposal fees, and rate regulation.

Program and facility alternatives involve programmatic and/or physical approaches to achieve objectives. Examples include home composting programs, education and promotion campaigns, mixed dry waste recovery facilities, and transfer stations.

Service provision alternatives are the different types of arrangements that can be made for providing services associated with programs and facilities. Examples include franchising of private haulers, contracts for recycling services, and ownership/operation of facilities.

These options may be combined in complementary ways in a comprehensive system for solid waste management.

Staff Recommendations

Metro staff's recommendations regarding how the RSWMP should address these alternatives are:

1. The RSWMP should recognize that Metro, local governments, and private enterprises each play different roles in the regional solid waste system. Accordingly, the RSWMP should identify which plan elements are private concerns, local concerns, and regional concerns.

2. The RSWMP should specify the manner in which regional concerns are provided or implemented, but **should not** specify the manner of providing or implementing elements of local or private concerns. The RSWMP should contain appropriate implementation detail for plan elements which are anticipated to involve public-private or regional-local coordination, cooperation, or partnerships.

3. Services for the collection of waste and recyclables are matters of local concern. Accordingly, the RSWMP **should not** specify the manner in which such services are provided or implemented (*e.g.*, contracts, franchises, or private market).

4. Disposal facilities are matters of regional concern. Accordingly, the RSWMP should establish principles and conditions for deciding questions of operation and/or ownership of facilities. The question of ownership and/or operation of specific disposal facilities should be answered on a case-by-case basis as such facilities are proposed.

5. The RSWMP should be specific as to performance benchmarks. ~~For example, the amount of yard debris disposed by single-family households should drop from the current level of 3.0 lbs/hh/wk to 0.5 lbs/hh/wk by the year 2000.~~

   The RSWMP should also be specific as to corrections and remedies if performance benchmarks are not being met.

6. The RSWMP should **recommend** specific programs, facilities, and managerial alternatives that are expected to result in the performance benchmarks being achieved. The RSWMP should identify which of these alternatives are local concerns and which are regional concerns. However, the RSWMP **should not** require that the recommended alternative be implemented without allowing flexibility to consider other alternatives that achieve the same benchmark.

System Cost Analysis

Metro staff and the SWAC Subcommittee have been analyzing direct costs and tonnage for a few major program and facility alternatives. This analysis is a tool to help develop RSWMP recommendations. Metro staff recommends that this analysis be viewed in the following ways:

1. The program and facility alternatives being subjected to analysis are "prototypes" that reflect average costs of collection, processing and disposal based on local data and experiences from other parts of the country. The results suggest **relative** differences among alternatives; rather than the **actual** costs that might be incurred once any alternative is implemented.

2. The program and facility alternatives being subjected to analysis are only a few of the major options that are available to the region. There are many other program and facility alternatives that have not been included in the analysis. One purpose of the analysis is to suggest other solid waste management options.

3. The tonnage estimates provide a basis for predicting the performance of a select group of **programs and facilities**. By themselves, they do not provide sufficient basis for establishing future year benchmarks. This will involve combining the results of the analysis of programs and alternatives with the expected impact of managerial alternatives (*e.g.*, disposal bans) and other program and facility alternatives that are not included in the analysis of direct costs.

Managerial Alternatives

Managerial alternatives are characterized by the use of authority to implement incentives or regulations. They may be used as stand-alone approaches, or to enhance the performance of a program or facility. For example, a source-separated yard debris program may capture more material if implemented in conjunction with a disposal ban.

The list of managerial alternatives that have been discussed with the SWAC Planning Subcommittee and others is shown in Table 1.

Table 1
Solid Waste Management Alternatives: Managerial Approaches

		Administration/Imposition		
Approach	Name of Alternative	Where	By	Potential Materials
Regulatory	Disposal Ban	Transfer stations	Metro	Yard debris, OCC
Regulatory	Mandatory Recycling	Garbage can	Local Gov't.	Yard debris, OCC
Financial	Advance Disposal Fee	Point of sale	Metro	HHW
Regulatory	Flow control	Hauler	Metro & Local Gov't	Waste or Recyclables
Regulatory	Building Design Codes (space for recycables)	Design permitting	Local Gov't	All Recyclables
Regulatory	Universal Collection Service	Household	Local Gov't	Waste
Financial	Tip fee policies	Disposal facilities	Metro	Waste

Programs and Facilities

In contrast to managerial alternatives, programs and facilities are physical approaches to the solid waste system.

The basic list of alternatives being examined with Metro's system cost model is shown in Table 2. The table indicates which element of the hierarchy is addressed by each alternative, and the generator(s) and broad class of material targeted by the alternative. Thus, waste prevention is addressed by a home composting program targeted at residential organics, and a program of audits and education designed to reduce the use of packaging by commercial enterprises. Moving down the table (and down the hierarchy), source-separated recycling is addressed next, followed by post-collection recovery, composting; and finally, disposal.

Table 2

Solid Waste Management Alternatives: Programs and Facilities

Hierarchy		Name of Alternative	Primary Target Generator	Primary Target Type of Material
Waste Prevention				
	I.A	Home Composting	Residential	Organics
	I.B	Commercial Waste Prevention	Commercial	Organics
Source Separated Recycling				
	II.A.1	Expand Curbside	Residential	Recyclables
	II.A.2	Selective Commingling	Residential	Recyclables
	II.A.3	New Collection Technology	Residential	Recyclables
	II.B.1	Commercial Commingled Collection--Paper	Commercial	Recyclables
	II.B.2	Commercial Commingled Collection--Paper & Containers	Commercial	Recyclables
	II.C	Construction Site Source Separation	C&D	Dry Waste
Mixed Waste Recovery and Processing				
	III.A	Mixed Dry Waste Processing	C&D, Commercial	Dry Waste
	III.B.1	Organics Recovery from Food Businesses "Low Tech" Processing "High Tech" Processing	Commercial	Organics
	III.B.2	Residential Organics Recovery "Low Tech" Processing "High Tech" Processing	Residential	Organics
Transfer and Disposal System				
	IV.A.1	Modify Design/Operation of Existing Facilities	All Waste*	All Waste*
	IV.A.2	Manage Flow in Existing System	All Waste*	All Waste*
	IV.B.1	New Transfer Station(s)	All Waste*	All Waste*
	IV.B.2	New Reload Facilities	All Waste*	All Waste*

*Excluding hazardous, liquid, and inert wastes.

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SWAC Discussion Material
10/19/94

DRAFT EVALUATION CRITERIA & BENCHMARKS

Goal	Evaluation Criteria	Current Benchmark Value	Example of Future Year Benchmark	Data Sources
1. Cost Effectiveness	Total System cost per ton	$145/ton	TBD*	Metro Simulation Model
2. Flexibility & Sustainability	1. Adaptability of transfer facilities 2. Stability of processing facilities	Limited ability to respond to changing conditions Compost facility siting issues	Expanded ability to respond to changing conditions No compost facility siting issues	
3. Prevent Waste	Regional per-capita waste generation	1.3 tons/person/year	1.0 tons/person/year	Recycling Level Survey Waste Characterization Metro Transaction Data
4. Recycle & Recover Waste	1. Regional recycling level 2. Amount of waste disposed by program 3. Ease of implementation	38% of waste generated 3.4 lbs yard debris/hh/wk	50% of waste generated 0 lbs yard debris/hh/wk	Recycling Level Survey Program Monitoring Waste Characterization Metro Transaction Data
5. Accessibility of Disposal Services	1. Average haul time per trip 2. Average haul time per ton	WA County: 25 min/trip WA County: 5 min/ton	WA County: 18 min/trip WA County: 3.5 min/ton	Metro Simulation Model
6. Availability of Recovery Facilities	Uniform geographic distribution	Dry waste recovery facilities serve only parts of the region	Dry waste recovery facilities serve entire region	Metro Transaction Data
7. Reduce Toxic Waste	Amount of toxic waste improperly delivered for disposal	1,000 tons/year	0 tons/year	Waste Characterization
8. Rate Equity (Metro fees)	Payments into system proportional to benefits			
9. Conserve natural resources	Proportion of waste managed by different parts of the State hierarchy	Prevention TBD Recycling 28.3% Composting 6.4% Recover Energy 7.9% Disposal 57.4%	Prevention 5% Recycling 50% Composting 10% Recover Energy 5% Disposal 30%	Recycling Level Survey Waste Characterization Metro Transaction Data
10. Conserve landfill space	Total tons landfilled	930,000 tons per year	700,000 tons per year	Metro Transaction Data
11. Reduce vehicle impacts	Total haul miles	TBD	TBD	Metro Simulation Model
12. Reduce illegal dumping	Number of illegal dump sites	32 major sites	5 major sites	Annual Illegal Dumping Survey

*TBD To be determined

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KEY PLANNING ISSUES

Through discussions with the Solid Waste Advisory Committee, Metro Council, and others, several key planning issues have emerged during the process of updating the Regional Solid Waste Management Plan.

The following papers give a brief background on five key issues, identify management options where appropriate, and list several questions that SWAC might want to address regarding each issue.

Metro staff, the SWAC Planning Subcommittee, and private consultants are continuing to conduct a technical analysis that will help evaluate policy and management options.

Before additional work is conducted, however, it would be helpful to make sure all parties agree on the key issues and questions that will be addressed in the updated Regional Solid Waste Management Plan.

The main issues identified so far are:

Issue #1: Regional Waste Reduction Priorities

Issue #2: Service Provision -- Transfer Stations

Issue #3: Service Provision -- Other Facilities

Issue #4: Revenue Equity and Stability

Issue #5: Role of Transfer Stations And Other Facilities As Collection Technology Changes

ISSUE #1:
REGIONAL WASTE REDUCTION PRIORITIES

Background

During 1994, about 930,000 tons of general solid waste will be landfilled by the region. If the regional recovery rate remains constant, population growth will cause the amount of waste landfilled to increase to about 1,040,000 tons by the year 2000. As shown below, if the region is to achieve a 50% recovery rate by that time, the amount of waste landfilled each year must decrease by 200,000 tons.

Year	Recovery Level	Population	Generated Tons	Recovered Tons**	Landfilled Tons
1994	38%	1,287,000	1,540,000	610,000	930,000
2000	38%	1,400,000	1,680,000*	640,000	1,040,000
2000	50%	1,400,000	1,680,000*	840,000	840,000

*Projection based on the assumption that the annual per capita generation rate remains at the 1994 level of 1.12 tons per person. Tonnages exclude petroleum contaminated soils and other special waste.
**Includes all management alternatives to landfilling: reduce, reuse, recycling, energy recovery, and composting.

Management Options

The following table summarizes the waste reduction alternatives examined to date by the SWAC Planning Subcommittee. Both tons and costs are dependent on specification details and are likely to change as the Subcommittee looks at different specifications.

Alternative	Disposal* (tons/year)	Potential Diversion (tons/year)	Program Cost (per ton)
1. Home Composting	139,000 to 152,000	7,000 to 16,000	<$18
2. Commercial Waste Prevention	43,000 to 47,000	5,000 to 10,000	$94 to $143
3. Expand Residential Curbside Recycling	24,000 to 27,000	9,000 to 20,000	$138 to $183
4. Commingled Plastics Collection	7,000 to 8,000	3,000 to 7,000	$332 to $588
5. Commercial Commingled Paper	102,000 to 112,000	40,000 to 65,000	$149 to $161
6. Commercial Commingled Paper & Containers	117,000 to 128,000	46,000 to 75,000	$116 to $120
7. On-Site Construction Recycling	133,000 to 146,000	70,000 to 90,000	$131 to $135
8. Dry Waste Recovery Facilities	203,000 to 223,000	150,000 to 165,000	$114 to $115
9. Commercial Organics Recovery	43,000 to 47,000	11,000 to 25,000	$226 to $269
10. Residential Organics Recovery	109,000 to 120,000	50,000 to 70,000	$334 to $343

*Tons currently landfilled that are targeted by the alternative.

Key Questions

1. What are the regional priorities for new or expanded waste reduction services?
2. What supporting actions are necessary for effective implementation of the recommendations? Supporting actions could include:
   - Disposal bans or mandatory participation.
   - Legislative resolution of the fair market value issue for commercial recyclables.
   - Changes in Metro or local government franchise requirements.
3. What are appropriate waste reduction goals for the region? How should progress be measured?
4. What changes in the solid waste system could reduce the costs of new waste reduction practices?

ISSUE #2:
SERVICE PROVISION -- TRANSFER STATIONS

Background

During FY94/95, the three existing transfer stations (Metro Central, Metro South, and Forest Grove) will receive about 800,000 tons. Under status quo conditions, population growth will cause this tonnage to increase during the next 10 years.

Maximum operating capacity of the three facilities is well above the current tonnage. However, there are several issues that need to be considered when planning for regional transfer capacity, including:

1. The agreement between Metro and Oregon City to make every reasonable effort to limit the tonnage at Metro South to 250,000 tons per year. The intent of this agreement is to mitigate impacts on the host neighborhood.

2. Metro's past policies have supported a concept of "uniform service levels" for disposal facilities. This had very specific implications for transfer station siting and setting of tip fees. This concept will continue to bump up against the question: how much investment in capacity is the region willing to bear in order to achieve a more uniform distribution of disposal facilities?

3. Improving the recovery capability of Metro South may require restrictions on tonnage in order to free up space for recovery equipment.

Management Options

1. The three existing facilities provide transfer services for the region through the year 2005. Haulers continue to be free to choose among these facilities. Modifications, if needed, in station design and operation are made to accommodate future tonnage.

2. No new facilities are built but haulers are directed by Metro from Metro South to Metro Central in order to reduce tonnage at Metro South.

3. Build new facilities, either full transfer stations or reload operations, to improve service in those parts of the region not conveniently served by the three existing stations.

4. Implement new waste reduction activities or new collection technologies (e.g. wet/dry systems) that reduce the demand for refuse transfer services during the next ten years.

Key Issues

1. How important is uniform access to transfer stations as a regional policy goal?

2. In general what criteria should be used to establish tonnage limitations, if any, at transfer stations. More specifically, should the expected delivery tonnage at Metro South be higher than 250,000 tons per year? If not, what is the plan for reducing tonnage?

3. If new stations are built, to what extent will reduced haul costs compensate for additional capital and operating costs of new stations?

ISSUE #3:
SERVICE PROVISION -- OTHER FACILITIES

Background

The RSWMP will identify roles of the private and public sectors in providing solid waste services during the next ten years. Several existing policies regarding facilities other than transfer stations need to be examined. These include:

1. Current Metro policy is to avoid vertical integration of collection, processing, and disposal. This policy is intended to prevent unfair advantages to those haulers that also own facilities.

2. Current practice is to rely on the private sector to provide most of the mixed waste processing and recovery capacity in the region (e.g. the WRI and ERI facilities) under franchises with Metro.

3. Metro does not currently franchise or license processors of yard debris. Given recent siting difficulties, this regulatory policy should be examined to see if there is a need for greater involvement by Metro or other governments.

Management Options

1. Allow private owners of mixed waste recovery facilities to engage in other parts of the system in order to expand the availability of the recovery service.

2. Public procurement of recovery facilities (e.g. Metro issues a Request for Franchise for a dry waste processing facility).

3. Public regulation or franchising of yard debris or other recovery facilities to stabilize service and mitigate any environmental impacts.

Key Questions

1. Should the region continue to depend on the private sector to provide recovery capacity for mixed dry waste?

2. What requirements regarding rates, recovery levels, and vertical integration should be included in franchise agreements with Metro?

3. Should Metro Central play a different role in the future in terms of waste recovery? For example, should Metro establish differential tip fees to encourage delivery of mixed loads that are more recoverable?

4. If recovery of food and other non-recyclable organic waste is a regional priority, what services will be provided by the public and private sectors?

5. Should access to disposal and processing services be made more uniform throughout the region, particularly services for hazardous waste, dry waste processing, and organics recovery? If so, how?

ISSUE #4:
REVENUE STABILITY AND EQUITY

Background

Metro's solid waste activities are funded almost entirely from tip fee revenues collected at transfer stations, landfills, designated facilities, and franchised waste recovery facilities. In addition to waste transfer and disposal, activities funded by these revenues include landfill closure, hazardous waste management, waste reduction, and solid waste planning.

Unlike waste transfer and disposal costs, the costs of these latter activities do not vary with the amount of waste delivered to transfer stations and landfills. Futhermore, these activities are all identified as having regional significance, suggesting that a broad revenue base is most appropriate.

There is an increasing number of management options for select waste types that are exempt from Metro fees. If this trend continues, the burden of paying for Metro's regional solid waste activities will increasingly fall on the narrower segment of ratepayers that continue to deliver waste to transfer stations and landfills.

Management Options

SWAC has previously recommended that Metro continue to examine several funding mechanisms, including:

1. Continue to make use of the tip fee as the primary funding mechanism for waste disposal operations and management.

2. Product fees for hazardous waste and other materials that have extraordinary disposal or management costs.

3. Billing generator fees through the property tax bill, utility bills, jurisdictions, or haulers.

4. A fee system (either as a surcharge or a license/franchise fee) for facilities to the extent that they benefit from Metro's activities, but do not currently contribute to the cost of the system.

Key Questions

1. How do RSWMP recommendations regarding new facilities, programs, and policies increase or decrease any inequities that exist in the current Metro solid waste revenue system?

2. If new or expanded solid waste activities are recommended, are they better funded through alternatives to the tip fee?

3. To counter the budgetary consequence of Metro's promotion of waste reduction and fee exemptions for certain classes of waste, Metro could expand its enterprise activities -- for example, operating MRF's or processing special waste. By seeking fiscal stability in this manner, Metro may enter into competition with the private sector.

ISSUE #5
ROLE OF TRANSFER STATIONS AND OTHER FACILITIES AS COLLECTION TECHNOLOGY CHANGES

Background

As collection technologies evolve, transfer stations and other facilities could be used in new ways to increase efficiency and effectiveness and thereby reduce costs for the ratepayers of the region? For example, can recovery facilities serve "double-duty" as reload facilities and thereby capitalize on existing investment?

One emerging change in collection technology is the use of co-collection trucks that have separate compartments for different waste streams (see attached articles for more detail). While such systems have typically been used for the co-collection of refuse and recyclables, there might be opportunities for other combinations of materials, such as refuse and yard debris.

In addition to reducing on-route costs, there may be economies of "one-stop" dumping if transfer of refuse and co-collected materials were located at or near the same site.

Management Options:

1. Transfer stations continue to function primarily as transfer operations for refuse. Metro would scale back operations if demand for the transfer of refuse declines.

2. Transfer stations provide additional services if co-collection technology is implemented. Options could include:

   A. Co-collection of refuse and yard debris. Refuse transferred to landfill. Yard debris transferred to processor(s).

   B. Co-collection of refuse and organic waste (e.g. food). Refuse transferred to landfill. Organic waste either transferred to off-site processor(s) or composted on site.

3. Dry waste recovery facilities (e.g. WRI and ERI) provide additional services to the region. One option would be reload operations for consolidating refuse loads prior to delivery to a transfer station.

Key Questions

1. The emergence of co-collection technologies has implications for the future use of transfer stations and other facilities. How likely are those technologies to be adopted in the region? Are there barriers (besides cost) to adoption? What is the timing of adoption?

Recommendations to the Solid Waste Advisory Committee
from the Yard Debris Processing Facility Discussion Group, November 3, 1994

Conceptual Management Strategy for Yard Debris Processing Facilities in the Tri-County Region

CITY & COUNTY ACTION

- Amend zoning ordinances requiring yard debris processing facilities to obtain a Metro license as part of the land use permit application process. Update zoning ordinances, definitions and standards that relate to these facilities.
- After a specified timeframe (to accomodate existing facilities), local governments would amend collection franchises to require all yard debris collected through curbside programs to be delivered to licensed facilities.

PROCESSOR ACTION

- Apply for a Metro license. Existing procesing facilities would agree to a specified timeframe for licensing, and comply with requirements. Make use of the technical assistance program to be offered by Metro. If needed, work with Metro, DEQ, and local governments to resolve any potential licensing obstacles.
- Provide input to Metro on the license application process and technical assistance program. Help identify financial constraints, land use issues and operational concerns.

METRO ACTION

- Work with local governments to update zoning ordinances, definitions and standards that relate to these facilities.
- License all new and existing facilities that meet specified performance standards.
- A license would be granted contingent on applicants ability to meet applicable standards and/or willingness to resolve potential problems identified through the application process.
- Existing procesing facilities would agree to a specified timeframe for licensing.
- Licenses could be customized for individual facilities. Standards could include odor control plans, product quality, plan of operation, reporting requirements, and inspections.
- License fees would be established on a "cost-for-service" basis such that only the costs associated with facililty licensing are included.
- Metro will set up a technical assistance program for processing facilities. Metro and the DEQ would work with the facility operator and local government to resolve any potential problems that may be identified and provide the facility with suggestions for prevention, mitigation and/or enhancement measures.

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