



METRO

MEETING: Regional Solid Waste Advisory Committee
DAY: Wednesday
DATE: February 21, 1996
TIME: 8:30 - 10:00 a.m.
PLACE: Metro Regional Center, 600 NE Grand Avenue
Room: Council Chamber Annex, 2nd Floor

- | | | |
|---------|--|------------------|
| 30 min. | 1. Updates and Introductions
Forest Grove Transfer Station Bid
Regional Food Debris Management | McFarland/Shanks |
| 5 min. | 2. Approval of Minutes
Action Requested: Approve the minutes of Jan. 17, 1996
(See Enclosure 2) | McFarland |
| 20 min. | 3. Organic Waste Management
Organic Waste Processing Demonstration Project - Phase 2
Report from the Organics Work Group
Action Requested: Recommend Release of the RFP for Phase 2
(See Enclosure 3) | Goddard |
| 20 min. | 4. 1995 Compost Bin Distribution Program
Results of Program Evaluation
Report from Staff
No Action Requested
(See Enclosure 4) | Gorham/Adams |
| 5 min. | 5. Discuss Tentative Meeting Agenda for March 20 | McFarland/Nelson |
| 10 min. | 6. Other Business/Citizen Communications | McFarland |
| | 7. Adjourn | |

All times listed on this agenda are approximate. Items may not be considered in the exact order listed.
 Committee Chair: Councilor Ruth McFarland (797-1547)
 Staff Liaison: Marie Nelson (797-1670)
 Committee Clerk: Connie Kinney (797-1643)

Information in this packet that is not related to the February 21 meeting agenda:

- Disaster Debris Management - Responses to the January 17 questionnaire.
- Fact Sheet - Metro Licensing Program for Yard Debris Processing and Reload Facilities

**SOLID WASTE ADVISORY COMMITTEE
SUMMARY MEETING OF: January 17, 1996**

Voting Members Present

Committee Chair: Ruth McFarland, Metro Councilor
Hauling Industry: Steve Schwab, Clackamas County Haulers Assoc.
Jim Cozetto, Jr., Multnomah County Haulers Assoc.
Tom Miller, Washington County Haulers Assoc.
David White (Oregon Refuse & Recycling Assoc.,
Tri-County Council)
Solid Waste Facilities: Ralph Gilbert (East County Recycling)
Citizens: Jeanne Roy (Recycling Advocates)
Government: Ken Speigle, Clack. County (County Staff)
Debbie Noah, Mult. County Cities (Mayor, City of Gresham)
Lynne Storz, Wash. County (County Staff)
Loreen Mills, Wash. County Cities (Saff, City of Tigard)
Susan Keil, City of Portland (City Staff)

Alternate Members Present

Recycling Industry: Jeff Murray (Farwest Fibers)
Government: Lynda Kotta, Mult. County Cities (Staff, City of Gresham) *
* Did not vote because regular member, Debbie Noah, was present

Non-Voting Members Present

Metro: Bern Shanks (Director, Regional Environmental Management)
Clark County: Carol Devenir (Staff)

Voting Members Absent

Recycling Industry: John Drew (Far West Fibers)
Solid Waste Facilities: Doug Coenen (Oregon Waste Systems)
Steven Miesen (BFI/Trans Industries)
Citizens: Merle Irvine (United Disposal)
Bruce Broussard (Cad Tek)
Government: Gary Hansen, Multnomah County (County Commissioner)
Bob Kincaid, Clackamas County Cities (Staff, City of Oregon City)

Guests Present

Easton Cross, Consultant
Ray Phelps, OWSI
Diana Godwin, Regional Disposal
Lexus E. Johnson

Metro Staff Present

Debbie Gorham Kelly Shafer Hossaini
Marie Nelson Tomas Parker
Doug Anderson Chuck Geyer
Jim Goddard Connie Kinney

1. Updates and Introductions

Chair Ruth McFarland introduced herself to the Committee and told them she was glad to be back as chair.

Bern Shanks announced that the final Regional Solid Waste Management Plan (RSWMP) had been printed. Each SWAC member and alternate present was then given a copy of the document in a canvas bag with a waste reduction message. The bag was a thank-you to the Committee for their hard work on the RSWMP.

Mr. Shanks then reported that over the holidays there had been numerous incidents of illegal medical waste at the transfer stations. Staff will be developing strategies for addressing the problem. One incident involved radioactive waste from a local hospital. Each of the transfer stations will soon be equipped with equipment to detect radioactive materials.

Mr. Shanks then told the Committee that the bids to haul waste from the Forest Grove Transfer Station have been withdrawn, and it is hoped that it will be re-bid in March.

2. Approval of Minutes

Jeanne Roy noted two errors in the November 8, 1995 SWAC minutes. In agenda item four of the minutes, Other Business/Citizen Communications, the minutes should have read "The first method is a cellophane-lined brown paper bag that residents fill with food waste and put in their ~~garbage~~ yard debris cans. The hauler then sorts the food into one truck compartment, and the ~~waste~~ yard debris into another." There were no objections, and the minutes were unanimously approved as amended.

3. Regional Solid Waste Management Plan (RSWMP) - Strategy to Monitor and Report on Plan Progress

Douglas Anderson, Technical Services Supervisor, presented RSWMP requirements for measuring and monitoring the plan. He began by stating that RSWMP supplements existing measurement programs, rather than replace them. For example, the Recycling and Recovery Level Survey will continue, and recycling and recovery rates for the region will be reported. The SWIS Report will also continue to be published. And so forth. To these, the RSWMP adds reporting of per-capita disposal rates and disposal rates by households and businesses.

Mr. Anderson identified the three broad areas of measurement and reporting specified by RSWMP: (1) Program Monitoring - a regional "checklist" approach to determine what programs are implemented for which materials and generators, by jurisdiction. (2) Program Evaluation - designed to determine whether specific programs are functioning as required. This fiscal year, at least two programs will be evaluated: the regional curbside yard debris programs, and the Compost Bin Distribution program. A third may be added: comparing wet-dry collection/MRF recovery with other approaches to recycling. (3) Regional Benchmarks - general measures designed to monitor solid waste trends and the net effect

of solid waste programs. Regional benchmarks include the regional recycling rate, per-capita disposal, etc.

The RSWMP calls for annual reports during the first quarter of each fiscal year. Mr. Anderson presented a very early draft of a "State of the Plan" report that shows some possibilities for content and format. The purpose of sharing a draft with SWAC is to provide an early opportunity for comment and suggestions.

Sue Keil told Mr. Anderson that the City of Portland is interested in the potential wet-dry collection program, and might want to collaborate with Metro on the program if it is pursued. She also said that the results of the City of Portland's Commercial Cost of Service study might be of some assistance, and something might be gained by going back to the same businesses involved in that study.

4. Disaster Debris Management Planning - Report from the Disaster Debris Management Task Force

Kelly Shafer Hossaini, Assistant Solid Waste Planner, gave the Committee an update on the Disaster Debris Management Plan planning process. She said that the purpose of the project was to ensure that the Metro region is prepared to deal with the removal and disposition of disaster debris in a way that is coordinated, efficient, effective, and that causes minimal environmental impact. When finished, the Plan will specify goals, objectives, management practices, and implementation strategies. The completed Plan will become a part of both the Regional Emergency Management Plan and the Regional Solid Waste Management Plan.

A task force has been assembled for the purpose of developing the Disaster Debris Management Plan and forwarding recommendations to SWAC. The task force consists of representatives from emergency management, solid waste, public works, and the Army Corps of Engineers. Three of the task force members are also on SWAC - Tom Miller, Lynda Kotta, and Lynne Storz.

Ms. Hossaini then reviewed the proposed timeline for the project, as well as the draft format of the Disaster Debris Management Plan.

Ms. Hossaini introduced the proposed recommended practices for disaster debris management. Their purpose is to create a path for achieving the disaster debris management goal and objectives through the outlining of tasks and the assigning of responsibilities to both public and private agencies. She then reminded the Committee members to give her a copy of their completed questionnaires, as attached to their packets, either after the meeting, or by fax or mail. (See attachment 1 to these minutes for the results of this questionnaire.)

Lynda Kotta reviewed the proposed recommended practices with the Committee. She began by explaining the main objectives of the practices:

1. Ensure efforts are coordinated and cooperative.
2. Ensure local resources are the first choice for use in collection and disposal.
3. Ensure a high degree of recycling and recovery.

4. Ensure FEMA reimbursement.
5. Restore normal garbage service as quickly as possible.

Sue Keil recommended that some work be done to determine the state of emergency planning in each of the jurisdictions. She also noted that it wasn't clear who would be in charge of seeing that this plan is carried through. Tom Miller replied that coordination efforts will be addressed through Recommended Practice 5, and will be a part of the Plan.

Loreen Mills stated that often documents like a Disaster Debris Management Plan are released but they end up unused on a shelf, and the people who need the information never get it. She said it is important to identify key people that need the information and ensure that they get the document.

Debbie Noah said that the coroner or other medical personnel should be added to the list of private sector players in disaster debris management. She asked what would be done with bodies and body parts in the debris.

Dave White asked at what point would the completed Plan take effect? Would it only be activated when the federal government becomes involved? Or when a disaster crosses jurisdictional boundaries? Or only when it is of a certain magnitude? Kelly Hossaini told him that the task force would take a look at that and define it.

5. Organic Waste Management - Long-Term Implementation Framework

Jim Goddard presented the framework goals and objectives for long-term organic waste management. He explained that their purpose was to provide direction for developing and implementing management practices, as mandated by the RSWMP, to reduce the amount of food waste and non-recyclable paper disposed in landfills. He said that the core group that will be used to develop the framework will include, local governments, haulers, processors, the DEQ, and Metro. He asked if the Committee had any comments about the goals and objectives or the process for their development.

Sue Keil said she thought it was thorough and thoughtful. Jeanne Roy agreed, but asked that in Goal 2 the year 2000 benchmark be included, as well as the year 2005 benchmark. Mr. Goddard replied that it might be too confusing if that were added, and the interim goals cover that. This was intended to be an overall, long-term goal.

Dave White asked whether the Goal 1, Objective 3 was meant to include flow control. Jim Goddard replied that it wasn't.

Ruth McFarland then asked the Committee for approval of the Framework Goals and Objectives, which was given unanimously.

6. Set Tentative Calendar and Topics for SWAC

Marie Nelson gave the Committee a copy of the tentative SWAC calendar listing meeting dates and topics through June 1996.

7. Other Business/Citizen Communications

None.

8. Adjourn

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DRAFT

**REQUEST FOR PROPOSALS
for**

Phase II

Commercial Food Waste Collection and Processing

RFP # 95R-17B-REM

**Metro
Regional Environmental Management Department
600 NE Grand Avenue
Portland, OR 97232**

Printed on recycled paper

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REQUEST FOR PROPOSALS**Phase II
Commercial Food Waste Collection and Processing****I. INTRODUCTION**

The Regional Environmental Management Department of Metro, a metropolitan service district organized under the laws of the State of Oregon and the 1992 Metro Charter, located at 600 NE Grand Avenue, Portland, OR 97232-2736, is requesting proposals to provide commercial pre-consumer vegetative food waste collection and processing services (RFP #95R-17B-REM). Proposals will be due no later than 4:00 p.m., Friday, April 19, 1996, in Metro's business offices at 600 NE Grand Avenue, Portland, OR 97232-2736. Details concerning the project and proposal are contained in this document.

II. BACKGROUND/HISTORY OF PROJECT

According to the 1993/94 Metro Waste Characterization Study, approximately 200,000 tons of food waste and 60,000 tons of non-recyclable paper were delivered to the region's disposal facilities during the year-long study period. This waste will be described as "food waste" throughout this Phase II RFP. There are currently no significant on-site or post-collection recovery programs in place to divert these materials from the landfill. The Regional Solid Waste Management Plan, which gives the metropolitan region direction for meeting solid waste needs during the next decade (1995-2005), identifies source-separated organic waste recovery as an important program element that will bring the region closer to its 53% recycling goal by 2005.

In 1993/94 Metro conducted a series of public workshops to help develop a regional organic waste management strategy. The participants targeted composting pre-segregated food wastes from the commercial sector as a viable part of the overall strategy. This approach is valuable because it not only diverts waste from the landfill but converts it to a useful end product. In August 1995, a work group of Metro staff was formed to ascertain what elements are necessary to ensure the success of a food waste recovery system. This RFP is a result of the work group recommendations.

Currently, the Metro region diverts almost 100,000 tons a year of yard debris from the landfill, creating valuable soil products from it. Processing food waste is the next logical step to removing even more organic material from the wastestream. In fact, estimates predict that recovering food wastes and non-recyclable paper can be done in the long-term that is equal-to or lower cost than collecting, transferring and landfilling waste. This has been proven in many areas of the country where food waste composting has already begun. It should be possible to economically recover food waste in the Metro region as well. The information obtained from this project will help Metro, local governments, food businesses, waste collectors, and food

waste processors determine how they can best work together to implement organic waste recovery programs that are cost effective, environmentally sound, and publicly acceptable.

III. PROJECT OVERVIEW

The overall purpose of the project is to test the collection and recovery of commercial pre-consumer vegetative food waste (excluding meat, dairy products, greases and fats) from food-related businesses as an alternative to the current practice of landfilling. Pre-consumer means food which has not been served to or purchased by the public. Examples include: food waste from the preparation of meals in a restaurant, spoiled or past-dated food from a grocery store; waste from a food warehouse, or processing residual from a food plant/facility.

This project is expected to help establish an economically viable and self-sustaining food waste recovery system that will help the region meet its waste recovery goals, without using flow control. This could be the first step toward establishing a comprehensive system that could process all food waste regardless of type or origin. The project will be completed through partnerships between Metro, local governments, DEQ, and private industry who will identify opportunities and remove barriers that prevent the food waste recovery system from developing.

This RFP is the second phase of a two phased proposal process. Responses to this RFP can only be made by those who submitted a proposal in response to the Phase I RFP (RFP # 95R-17A-REM) which was issued in November 1995. The Phase II RFP follows the same format as the Phase I RFP with proposers being asked to answer questions and provide specific information in a predetermined format. The categories of information requested for Phase II are the same as in Phase I, but more detail is required. Based on results from the Phase I RFP process, alternative processing proposals for type of feedstock, volumes and processing timeframe will be considered for the pilot project.

Proposers must also be able to provide collection and processing service whereas Phase I proposers could provide either or both services. Proposers who only provided one part of the project in Phase I, collecting or processing, will need to team with another firm to provide a complete food waste management system for Phase II. If one part of a Phase I proposal was not acceptable the proposer may want to consider teaming with another Phase I proposer to submit a Phase II proposal.

Metro intends to issue one contract for all collection and processing services for this demonstration project. However, more than one collector can provide collection services for a processor. A collector can also submit a proposal with more than one processor. The contract will contain the appropriate requirements for both collection and processing operations. These requirements will likely include extensive conditions to ensure proper health and safety during the demonstration project with the opportunity to check incoming waste and dispose of it at a transfer station if Metro, local governments or DEQ deem it necessary. It may also include

provisions for immediate removal of material from the processing site for disposal at a transfer station.

The successful project team will be expected to collect and process at least 1,000 tons of preconsumer vegetative waste (excluding meat and dairy products, grease and oils) from food warehouses, grocery stores and restaurants over a period of eight months. Non-recyclable paper may be included if it is acceptable for the process. The proposer may propose to handle more waste over a similar period of time. If a proposer believes that they can process a more diverse mix of food waste while meeting the other project parameters, they may propose to do so as an alternative proposal. The total period of the pilot study shall not exceed 12 months. The successful proposer will be responsible for obtaining the food waste and any bulking agent required by the process.

Metro has allocated \$175,000, for this demonstration. This money is intended to defray the extraordinary costs associated with a small scale project and the costs associated with meeting Metro, local government, and DEQ data requirements. These requirements include reporting, monitoring and testing as described in this RFP. Metro does not make a financial commitment to the successful food waste collector and processor team beyond the term of this project. Therefore, proposals that appear to be economically viable and self-sustaining in long-term operations, will be viewed more favorably than those that require long-term subsidy.

IV. PROJECT DESCRIPTION

A. Collection

This project requires the participation of a Metro area collection firm permitted by the local government to collect pre-segregated food waste in their jurisdiction. Food waste will be collected from food related businesses (e.g., grocery stores, restaurants, food processors) and delivered to a designated processing site. A Metro Transfer Station could potentially be used to reload and consolidate food waste for transport to a processing site. The condition for using a Metro Transfer Station as a reload are included in appendix 1.

The successful proposer must have a sufficient number of food related businesses on their hauling routes that will be willing to participate in this project. In addition, the businesses should be clustered within a relatively concentrated geographical area. The clusters of businesses are analogous to "urban centers" which are hubs for provision of goods and services in the Metro region. Urban centers are a key focus of Metro's Region 2040 growth concept. This food waste trial supports the objective of the 2040 growth concept.

Metro and local governments will, upon request from the successful proposer, assist in establishing a program for the participating businesses to source-separate food wastes. Metro and local governments would work

closely with the participating businesses and waste hauler to: 1) develop in-house separation and collection methods; 2) provide informational material; and, 3) provide in-house training and follow-up to ensure separation efficiencies and minimize contaminants to the food and paper wastes. These wastes will be limited to pre-consumer vegetative material (excluding meat, dairy products, greases and fats) and non-recyclable paper depending on the needs of the processor with whom the collector is teamed. The food and paper wastes must be preseggregated from other waste by the participating businesses and collected by the hauler on a regularly scheduled basis for the duration of this project. The organic wastes (e.g., vegetative food waste, and bulking agent such as non-recyclable paper, and yard debris) may be collected together if they meet the processors requirements and they can be managed together on the generation and processing site.

B. Processing

A wide variety of methods exist for processing the organic fraction of the wastestream. These processes range from windrow composting to producing electricity from methane generated by anaerobic digestion of the organic matter. Metro is interested in processes which are economically viable in the long-term. At this time, Metro does not expect to be able to guarantee flow to an organics processing facility. However, Metro is willing to explore other contractual arrangements with the hauler and processor in order to facilitate a food waste recovery system.

An appropriate site for the processing facility will be critical to the success of this project. While different processes will have different siting requirements, no processing proposal will be accepted unless a specific processing site is identified. This site must be appropriate for the particular process proposed. Full permitting of the site will be required before final award of the Phase II contract. A memorandum of understanding may be signed with the selected proposer until the permitting is complete. The proposer must also determine how odors and other nuisance conditions will be controlled at the processing site. All proposers must keep in mind that this material is classified as a solid waste. In addition to local government land use permits, building and other permits, the proposed site will be required to meet all applicable Metro regulatory requirements and obtain all applicable Department of Environmental Quality (DEQ) permits.

V. PROPOSAL SUBMITTAL QUESTIONS

Proposers are required to answer all of the questions and provide all of the information requested in this section. Proposals must follow the format and sequence of this section.

A. Collection

A1. Describe your current collection operations.

- *Where do you currently collect waste?*
- *Where are you franchised?*
- *Will you be collecting waste from areas that are beyond your current collection area? (If so, include a Letter of Approval from the new jurisdiction(s) and agreement with the franchised hauler in the area(s))*

A2. Describe how you will get businesses to participate in the proposed food waste collection program.

- *How will you work with generators to set up a food waste separation program?*
- *How will you get them to use the program?*
- *What monitoring and continuing education will you provide?*

A3. What type of recycling programs have you set up for businesses in the past?

A3.1 Describe other programs or experience you have in setting up programs involving source-separated organics.

A4. Describe your proposed collection method.

Describe the equipment to be used by the customer (types and size of containers, and location.)

- *Describe your collection equipment and how you will prevent liquids from leaking out of the collection vehicle. Do you propose any modifications to your collection truck?*
- *What will be the frequency of food waste collection?*
- *What are the biggest problems you anticipate facing with your proposed collection method and how will you address them?*
- *Describe incentives to ensure customer participation.*

A5. List on form A the customers that you will target for participation in this pilot project. Include a letter from each customer stating their willingness to participate in the project.

A6. Itemize the capital and operating cost on form B for collecting food waste in the pilot project. Indicate the level of funding required from Metro for the project

B. Processing

B.1 Site

B1.1 Provide the following information about the proposed food waste processing site.

- Address and tax lot(s).
- Size (acres) and configuration.
- Zoning and existing land use permits.
- Permits/licenses that you need to participate in this project. Indicate the status of the permits/licenses and the schedule for obtaining all of them. Attach any applicable permit/license documents.
- Attach a completed DEQ Land Use Compatibility Statement (Form C) for the proposed project. The form must be completed and signed by both the applicant and the local government planning department.
- Ownership. (Attach a statement from the land owner allowing use of the site for the project.)
- Describe, in detail, the existing site conditions and current use of the property (please include photographs of the proposed site).
- Attach a location map showing the site's location relative to the Metro region.

B1.2 Provide the following information about the area surrounding the proposed food waste processing site:

- Describe adjacent land uses.
- Describe why you believe that the site is suitable for this project.
- Provide a vicinity map showing current land use for at least a one mile radius from the site. Show the distance to the nearest residence, business or public facility, major access routes, and nearby environmentally sensitive areas. Show the prevailing wind direction.

B1.3 Provide a site plan showing the location of the proposed operations at a scale no smaller than one-inch equals 100 feet. Distinguish between existing elements and proposed elements that will be constructed as part of this project. The following must be provided:

- A schematic drawing of the site and facilities showing layout and general dimensions of all proposed processes to be

utilized in the processing of food waste and in the production of a final product, including but not limited to: delivery access and mixing area, staging, equipment storage, processing, curing and final product storage area.

- The location of all buildings and any other pertinent location data with respect to the operation of the proposed facility (i.e., utilities, water supply and capacity, fencing, access roads, paved areas, etc.)
- The drainage patterns of the proposed site and surrounding areas. At a minimum, the direction of both on-site and off-site drainage, as well as the location of any ditches, swales, berms, paving or structures that exist or will be constructed to control runoff and leachate generated by the operation.
- Describe, in writing, all improvements and modifications required to conduct food waste processing on the site.

B2. PROPOSED PROCESS

Since this pilot project is expected to lead to a long-term food waste processing operation, questions will be asked about processing in the pilot project and long-term operations. Please answer both sets of questions.

B2.1 PILOT PROJECT

B2.1.1 Provide the following information about the proposed methods and equipment that will be used to process the food waste in the pilot project. (Describe the proposed process.) The narrative should be written to follow a load of food waste through the entire process; from its delivery to the site, through the processing equipment and processing areas, to storage and delivery of the final product. The narrative should reference the process flow diagram and site map to add clarity. Indicate the time for each step

B2.1.2 Describe food waste requirements. What type and quality of food waste or other currently non-recyclable organic materials will be acceptable in your proposed process?

- What quantity of food waste or other currently non-recycled organic materials will you process during this project?. Indicate the size of loads you will receive and the regularity of delivery required to make this a continuous operation during the pilot.
- List the contaminants that you expect to arrive with the food waste, and how these will affect operations, and how they will be removed and where they will be disposed.

B2.1.3 Describe bulking agent requirements

- What type and quality of bulking agent will you need to process the food waste? Is processing required to make it acceptable to the process. Also describe unacceptable contaminants and how they will be dealt with if they arrive on-site.
- What quantity of bulking agent will you need to process the proposed amount of food waste? Indicate the size of loads you will receive and the regularity of delivery required to make this a continuous operation during the pilot. If a greater quantity of bulking agent is required than you anticipate, is it available and in what quantities? How will you store the bulking agent?
- What is the source of bulking agent and how will it be delivered to the processing site?
- What is the proposed ratio of food waste to bulking agent? Discuss how you determined the quantities.

B2.1.4 Describe the methods that will be used to control and monitor the process.

- How will you control and monitor each stage of the process, including material receipt and storage, size reduction and/or mixing, processing, and, final product production and storage?
- Describe each monitoring procedure and/or test, the reason for selecting it, the acceptable range of results and corrective action to be taken if the process is out of the acceptable range.
- How will the proposed process ensure destruction of pathogens and weed seeds?

B2.1.5 Process equipment. List all major equipment used in the process. Include its size, manufacturer, whether it is new or existing and if it will be used exclusively for this pilot. Reference the process flow diagram and site layout drawing as needed.

- What are the utility and enclosure requirements for the process?
- How will equipment breakdowns affect the pilot project and how will the process be affected until the equipment is brought back into service? include a maintenance schedule.

B2.1.6 End products

- List types of end products produced, the size of the target markets for each, and the value of the end products.
- How will the end products be marketed and sold?

B2.1.7 Odor control

- How will you reduce or avoid generating odors and how the odors produced will be controlled, (i.e., processing controls and monitoring, biofilter, enclosed building, rural location)?
- What measures will be taken if odors are not controlled by the proposed process?
- How will you work with the surrounding community if they complain about odors?

B2.1.8 Nuisance Controls. Describe the proposed means of controlling:

- insects, birds and animals
- noise
- dust and airborne particles
- What measures will be taken if the nuisances are not controlled by the proposed process?
- How will you work with the surrounding community if they complain about nuisances?

B2.1.9 Environmental Controls.

- Describe methods for handling leachate from both *delivered feedstocks and generated from the processing method*. Include how the leachate will be collected, treated, reused or disposed.
- Describe methods that divert precipitation run-on around the processing site, and methods to control the run-off from the facility resulting from precipitation.

B2.1.10 What is the expected tipping fee for the trial project?

B2.1.11 Provide a narrative description of how you propose for this project to be funded. How much through tip fees and how much financial assistance from Metro?

B2.1.12 Itemize the capital and operating cost on form D for processing food waste in the pilot project list the support required from Metro for the project.

B3. PILOT PROJECT OPERATING PARAMETERS

- B3.1** Complete the schedule (form E) to show how soon you can begin to process the food waste once a pilot project contract is signed including permitting, procurement, construction and startup.
- B3.2** Who will be in charge of the project? List their experience as it relates to the pilot project.
- Site manager, (the person on-site during the pilot project).
 - Project manager (if different from site manager).
 - Technical expert, (if different from site manager or project manager)
- B3.3** Describe the company's experience as it relates to this pilot project.
- Other food waste recovery and processing projects similar to this pilot. Describe the start date, process used, costs, and current status of the operation (if it is no longer in operation, describe why).
 - Work in related areas.
 - How will you meet the reporting, testing and monitoring requirements contained in Form F

B4. LONG-TERM OPERATIONS

- B4.1** Describe the differences between the pilot program and a long term operation. What aspects would change? Remain the same?
- B4.2** Describe the required changes needed to transition from the pilot scale operation to full scale operations.
- Changes to the site.
 - Changes to the equipment.
 - Changes to the process.
- B4.3** What is the expected tipping fee for long term operations? Itemize the capital and operating cost on form G for collecting and processing food waste in a long term operation.

VI. SCHEDULE

Issue Phase I RFP	Nov. 95
Review Phase I proposals (involve local government work group)	Jan. 96
* Project Check Point: Verify Feasibility	
Identify those eligible to propose Phase II	Jan. - Mar. 96
Develop Phase II RFP	Feb. 96
Review Phase II RFP with Metro management, SWAC, Metro Councilors, local government work group, DEQ and potential proposers. Get input.	Feb. 96
Issue Phase II RFP	Mar. 96
* Project Check Point: Verify Feasibility	
Award Phase II RFP	May 96
Begin accepting food waste	Jul. - Aug. 96
Complete Pilot Project	Aug. 97
Assess feasibility of food waste recovery in the region (local governments, DEQ, Metro). Report with recommendations.	Sept. - Oct., 97

VII. PAYMENT

Payment terms are dependent on the selected proposal. (Initial payment before July 1996 should be less than \$25,000.)

VIII. PROJECT ADMINISTRATION

Metro's project manager and contact for this project is Jim Goddard, in the Waste Reduction & Planning Services Division of Metro's Regional Environmental Management Department.

Metro intends to award a contract to a single contractor after completion of the Phase II RFP process. This contractor will assume responsibility for any/all subcontractor work, as well as the day-to-day direction and internal management of the project, unless otherwise specified in this RFP or otherwise agreed upon in the actual contract.

IX. PROPOSAL INSTRUCTIONS

A. Submission of Proposals

Five (5) copies of the proposal shall be furnished to Metro, addressed to:

Jim Goddard
Metro Regional Environmental Management Department
600 NE Grand Avenue
Portland, OR 97232-2736

B. Deadline

Proposals will not be considered if received after 4:00 p.m., April 19, 1996

C. RFP as Basis for Proposals

This Request for Proposals represents the most definitive statement Metro will make concerning the information upon that Proposals are to be based. Any verbal information that is not addressed in this RFP will not be considered by Metro in evaluating the Proposal. All questions relating to this RFP should be addressed to Jim Goddard at (503) 797-1677. Any questions, that in the opinion of Metro, warrant a written reply or RFP amendment will be furnished to all parties receiving this RFP. Metro will not respond to questions received after Friday, April 5, 1996.

D. Information Release

All proposers are hereby advised that Metro may solicit and secure background information based upon the information, including references, provided in response to this RFP. By submission of a proposal all proposers agree to such activity and release Metro from all claims arising from such activity.

E. Minority and Women-Owned Business Program

Metro and its contractors will not discriminate against any person or firm based on race, color, national origin, sex, sexual orientation, age, religion, physical handicap, political affiliation or marital status.

Metro extends equal opportunity to all persons and specifically encourages disadvantaged, minority, and women-owned businesses to access and participate in this and all Metro projects, programs, and services.

In the event that any subcontracts are to be utilized in the performance of this agreement, the proposer's attention is directed to Metro Code provisions 2.04.100 & 200.

Copies of that document are available from the Risk and Contracts Management Division of Administrative Services, Metro, Metro Center, 600 NE Grand Avenue, Portland, OR 97232 or call (503) 797-1717.

X. PROPOSAL CONTENTS

The proposal should be submitted on recyclable, double-sided recycled paper (post consumer content). No waxed page dividers or non-recyclable materials should be included in the proposal. The following are proposal requirements to ensure that they are concise and provide only the requested information.

The total submittal for the Phase II proposal will consist of the responses to the questions and the information requested in section V of this Request for Proposals. A cover letter signed by an officer of the proposing company will also be included. Additional information will not be considered during the review of the proposals. An electronic version of Section V is available from Metro upon request.

XI. GENERAL PROPOSAL/CONTRACT CONDITIONS

A. Limitation and Award

This RFP does not commit Metro to the award of a contract, nor to pay any costs incurred in the preparation and submission of proposals in anticipation of a contract. Metro reserves the right to waive minor irregularities, accept or reject any or all proposals received as the result of this request, negotiate with all qualified sources, or to cancel all or part of this RFP.

B. Billing Procedures

Proposers are informed that the billing procedures of the selected firm are subject to the review and prior approval of Metro before reimbursement of services can occur. Contractor's invoices shall include an itemized statement of the work done during the billing period, and will not be submitted more frequently than once a month. Metro shall pay Contractor within 30 days of receipt of an approved invoice.

C. Validity Period and Authority

The proposal shall be considered valid for a period of at least one hundred and twenty (120) days and shall contain a statement to that effect. The proposal shall contain the name, title, address, and telephone number of an individual or individuals with authority to bind any company contacted during the period in that Metro is evaluating the proposal.

D. Conflict of Interest

A Proposer filing a proposal thereby certifies that no officer, agent, or employee of Metro or Metro has a pecuniary interest in this proposal or has participated in contract negotiations on behalf of Metro; that the proposal is made in good faith without fraud, collusion, or connection of any kind with any other Proposer for the same call for proposals; the Proposer is competing solely in its own behalf without connection with, or obligation to, any undisclosed person or firm.

XII. EVALUATION OF PROPOSALS

Phase II proposal evaluation will be performed by a team of Metro, local government and DEQ staff. (NOTE: Scores from Phase I RFP will not have a bearing on Phase II evaluations).

FOOD WASTE COLLECTION

10% Suitability of Existing Customer Base

- Number and type of businesses in geographically concentrated areas.
- Potential quantity and quality of feedstock.

10% Type of Equipment

- Suitability, new or proposed modifications.

10% Approach and understanding of project objectives

- Previous experience with business recycling programs.
- Ability to work with the targeted businesses and secure their participation.

FOOD WASTE PROCESSING

30% Site

- Appropriate location, ability to secure all necessary permits in a timely manner (e.g., land use, DEQ), existing and proposed on-site and off-site conditions for project.

25% Proposed Process

- Overall soundness of proposed processing system
- Appropriate feedstock requirements and sources
- Appropriate and effective odor and environmental controls
- Reasonable processing costs and tipping fee
- Ability to transition pilot project into long-term operations
- Ability to produce and market end product

15% Pilot Project Operating Parameters

- Ability to implement and follow through on proposal

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FORM A -- PROPOSED CUSTOMER BASE - FOOD WASTE COLLECTION

Name of Business	Proposed collection method and frequency EXAMPLE: 1 20 yard compacted drop-box per week				Estimated Volume and Description of Vegetative Waste Per Week EXAMPLE: 1/2 of drop-box is food waste (mixed produce, paper)
	Drop Box	Compacted Drop Box	Container	Other	
Grocery Stores					
Restaurants					
Food Warehouses/Distributors					
Food Processors					

FORM B -- COLLECTION CAPITAL AND OPERATING COSTS

	Total Cost	Metro Support
Capital Costs		
Collection		
Vehicle		
Containers		
Educational Materials		
Other		
TOTAL CAPITAL COSTS		

Operating Costs		
Collection		
Labor		
Fuel, Tires, etc.		
Miscellaneous		
TOTAL OPERATING COSTS		

TOTAL CAPITAL AND OPERATING COSTS

WHAT IS A LUCS? The LUCS is the process DEQ uses to determine that DEQ permits and other approvals that affect land use are consistent with the local government comprehensive plan.

WHY IS A LUCS REQUIRED? Oregon law requires that state agency activities related to land use be consistent with local comprehensive plans. DEQ Division 18 administrative rules identify agency actions that are defined as programs affecting land use. These programs must have a process for determining local plan consistency.

WHEN IS A LUCS REQUIRED? A LUCS is required for nearly all DEQ permits, some general permits, and certain approvals of plans or related activities that affect land use. These activities are listed in this form. In cases where a source needs more than one DEQ permit or approval, a single LUCS may be used.

A permit modification requires a LUCS when:

- there is a physical expansion on the property or the use of additional land is proposed
- there is a significant increase in discharges to water
- there is a relocation of an outfall outside of the source property, or
- there is any physical change or change of operation of an air pollutant source that results in a net significant emission rate increase as defined in OAR 340-28-110.

A permit renewal requires a LUCS if one has not previously been submitted, or if one of the above four permit modification factors apply.

HOW TO COMPLETE A LUCS:

- The LUCS form is included in the DEQ permit application or approval packet.
- Applicant fills out Section 1 of the LUCS and then submits it to the city or county planning office.
- The local planning office determines if the business or facility meets all local planning requirements.
- The local planning office must attach written findings of fact for local reviews or other necessary planning approvals that are required of the applicant.
- The applicant includes the completed LUCS and attachments with the permit application or approval submittal.

WHERE TO GET HELP: Questions on the LUCS are to be directed to region staff responsible for processing the source permit or other approval application or, to Management Services Division at 800-452-4011 or (503) 229-6408.

SECTION 1 - TO BE FILLED OUT BY APPLICANT

1. Name of applicant _____ Contact person _____
Telephone _____

Mailing address:

Location address:

_____	_____
_____	_____
_____	_____

Tax Acct.# _____ Tax Lot # _____ Township _____ Range _____ Section _____
Latitude _____ Longitude _____

2. Describe type of business or facility and the services or products provided:

DRAFT

Fed. Permit WQ Cert.
WQ NPDES/WPCF Permit**
WQ Stormwater General Permit
Wastewater/Sewer Facility Plan***
Other WQ General Permit # ****

4. This application is for a: new permit permit renewal permit modification other

5. The facility proposal is located: inside city limits inside UGB outside UGB

**jurisdiction means the legal entity that is responsible for land use decisions for the subject property or land use.*

7. The business or facility complies with all applicable local land use requirements: yes no

7a. List all local reviews or approvals that were required of the applicant before the LUCS consistency was determined (This does not include past requirements that do not relate to the pending DEQ permit request.):

7b. If no, identify reasons for noncompliance or list requirement(s) that the applicant must comply with before LUCS consistency can be determined:

7c. Is local government currently processing remaining requirements to attain LUCS consistency: yes no
Anticipated date of decision _____

7d. Is a public notice and hearing required? yes no hearing date

8. Planning official reviewer's telephone number: _____

SIGNATURES

Planning official (print planning official's name) Title _____ Date _____

Planning official (print planning official's name) Title _____ Date _____
(depending upon city/county agreement on jurisdiction outside city limits but within UGB)

ATTENTION: A LUCS approval cannot be accepted by DEQ until all local requirements have been met. Written findings of fact for all local decisions addressed under 7 thru 7b must be attached to the LUCS.

FORM D -- PROCESSING CAPITAL AND OPERATING COSTS

	Total Cost	Metro Support
Capital Costs		
Process		
Design and Engineering		
Permits		
Site Improvements		
Process Equipment		
Rolling Stock		
Other		

TOTAL CAPITAL COSTS

Operating Costs		
Process		
Labor		
Utilities, Fuel, etc.		
Supplies		
Bulking Agent		
Testing and Misc.		

TOTAL OPERATING COSTS

TOTAL CAPITAL AND OPERATING COSTS

DRAFT

FORM E -- SCHEDULE FOR PILOT PROJECT

(PENDING)

DRAFT

FORM F -- REPORTING, TESTING AND MONITORING REQUIREMENTS

(PENDING)

**FORM G -- LONG-TERM PROCESSING AND COLLECTION CAPITAL AND
OPERATING COSTS**

	Total Cost	Metro Support
Capital Costs		
Process		
Design and Engineering		
Permits		
Site Improvements		
Process Equipment		
Rolling Stock		
Other		
Subtotal Process		
Collection		
Vehicle		
Containers		
Educational Materials		
Other		
Subtotal Collection		

TOTAL CAPITAL COSTS

Operating Costs		
Process		
Labor		
Utilities, Fuel, etc.		
Supplies		
Bulking Agent		
Testing and Misc.		
Subtotal Process		
Collection		
Labor		
Fuel, Tires, etc.		
Miscellaneous		
Subtotal Collection		

TOTAL OPERATING COSTS

TOTAL CAPITAL AND OPERATING COSTS

**APPENDIX 1
CONDITIONS FOR USING A METRO TRANSFER STATION**

Metro Central Transfer Station

If Metro Central Transfer Station is proposed for use as a reload facility for this demonstration project, the following conditions will apply:

1. Haulers will deliver source separated loads of food waste to Metro Central Transfer Station during normal operating hours. The loads will be tipped per the directions of the transfer station operator.
2. The processor will provide equipment and labor for transporting food waste from Metro Central to the processor's site. Final arrangements need to be made directly with the transfer station operator. The maximum loading height of the transfer equipment will be 12 feet from the transfer station floor.
3. The transfer station operator will provide space at the transfer station for the reload operation plus the equipment and labor required to reload the food waste into the transportation equipment provided by the processor. The price for this item will be set at \$5.00 per ton for the term of the food waste collection and processing contract.
4. The processor will make arrangements with the hauler to recover the cost of transporting reloaded food waste from the transfer station to the processing site and for the tipping fee at the processing site. Metro will deduct the reload cost from the food waste collection and processing contract and make payment to the transfer station operator for the reload operation.
5. If a load of food waste received at the transfer station is deemed to be inappropriate to send to the processing site, it will be disposed at a fee of \$75 per ton. If the transfer station is not used, Metro reserves the right to reject any inappropriate loads that arrive at the processors site and have them disposed at a Metro Transfer Station at a cost of \$75 per ton.

Metro South Transfer Station

If Metro South Transfer Station is proposed for use as a reload facility for this demonstration project, the following conditions apply:

1. Haulers will deliver source-separated loads of food waste to Metro South Transfer Station from station opening until 8:00 a.m., or after 2:00 p.m. until station closing. Loads will be tipped per directions of the transfer station operator.

2. The processor will provide equipment and labor for transporting food waste from Metro South to the processor's site. Final arrangements need to be made directly with the transfer station operator. Maximum loading height for transfer equipment will be 12 feet from the transfer station floor.
3. Transfer station operator will provide a space at the transfer station for the reload operation plus equipment and labor required to reload the food waste into the transportation equipment provided by the processor. The price for this item will be set at \$5.00 per ton for the term of the food waste collection and processing contract.
4. The processor will make arrangements with the hauler to recover the cost of transporting reloaded food waste from the transfer station to the processing site and for the tipping fee at the processing site. Metro will deduct the reload cost from the food waste collection and processing contract, and make payment to the transfer station operator for the reload operation.
5. If a load of food waste received at the transfer station is deemed to be inappropriate to send to the processing site, it will be disposed at a fee of \$75.00 per ton. If the transfer station is not used, Metro reserves the right to reject any inappropriate loads that arrive at the processing site and dispose of it at a Metro transfer station at a cost of \$75.00 per ton.

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HIGHLIGHTS OF METRO'S DISCOUNT HOME COMPOST BIN PROGRAM EVALUATION

BACKGROUND

Metro contracted with Market Decisions Corporation, a Portland marketing research firm, to conduct a telephone survey in December 1995 of Metro's home compost bin distribution program. 875 households were surveyed. 700 of these were households that had purchased compost bins at a discount from Metro in 1994 and 1995 (the Toro Yardcycler and the Earth Machine bins). 175 of the households were selected at random from the general population.

The objectives of the survey were as follows:

- Determine the awareness of the compost bin program.
- Evaluate the effect of the bin program on composting among the bin purchasers when compared to the general public.
- Investigate amount of yard debris and food waste put into the compost bins.
- Determine willingness of participants to pay for bin and determine optimum price point.
- Determine demographic characteristics of bin purchasers compared to the general population.

KEY FINDINGS

Organized in terms of Program Satisfaction, Effects on Composting Behavior, and Quantities of Material Diverted, the results are as follows:

Program Satisfaction

- Bin purchasers were very satisfied with the Earth Machine and Toro Bins. 91% were somewhat satisfied or above. Only 1% were dissatisfied. 74% said they would recommend the bin to a friend even at higher prices.
- There was a great deal of support for a government sponsored discount compost bin program. 92% of bin purchasers said yes to keeping this type of program, 80% of the general population supported the idea.
- A pricing sensitivity analysis indicated that the price of least resistance where the largest number of Earth Machine or Toro bins could be sold would be \$27. However, the acceptable pricing range was between \$15 and \$45. The pricing questions were only asked of bin purchasers and not the general population.

Effects on Composting and Recycling/Disposal Behavior

- There was an increase in the number of new composters from the sale of the bins. Of bin purchasers, 49% are new to food scrap composting and 44% are new to yard debris composting.
- Bin purchasers reported an increase in composting levels after receiving the bin. 52% said they composted more yard debris and 39% said they composted more food scraps after receiving the bin.
- Bin purchasers reported putting out less yard debris, less frequently for curbside pickup than prior to purchasing the bin. They also reported disposing less food waste in the trash or garbage disposal.
- Bin owners are more than twice as likely to compost yard debris and nearly three times as likely to compost food scraps than the general population.

Quantities of Material Diverted

- The amount of yard debris and food scraps composted by bin purchasers compared to the composting portion of the general population who did not purchase a Metro bin is about the same for food waste and slightly less for yard debris.
- The average amount of yard debris composted each week by bin purchasers was one, 32 gallon can per week compared to 1.5 cans for the general population who home compost. This finding is attributed to the high levels of composting reported by the general population in this survey. The average amount of food scraps composted was 3.1 one pound coffee cans per week compared to 2.9 pounds for general population.
- Based on this study's findings, the discount bin did not result in larger volumes of material diverted than would occur from composters in the general population. The bin program does, however, increase the incidence of home composting. Since twice as many bin owners compost yard debris and three times as many compost food scraps, bin owners, per household, are composting greater quantities of material.
- Based on volumes reported by bin purchasers, preliminary estimates indicate a range of 550 to 950 pounds per year per household (750 pounds average) diverted through home composting. The actual amount depends on types and condition of yard debris.(i.e., wet grass versus loose prunings). *

* Conversion factors from Department of Environmental Quality.



Market Decisions Corporation

Marketing Consulting and Research

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METRO

Compost Bin Program Evaluation

Summary of Findings

January, 1996

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APPENDIX A: RESEARCH DESIGN

APPENDIX B: STUDY QUESTIONNAIRE

Introduction

The following report presents the findings of a research study conducted for Metro and evaluates usage and awareness of composting with Toro and Earth-Machine bins. This research explores the awareness and behavioral changes created by the compost bin program.

The study was conducted and results were compiled by **Market Decisions Corporation (MDC)**, an independent and impartial research and consulting firm in Portland, Oregon.

Research Objectives

The primary goal of this study is to provide Metro with accurate information regarding yard debris and food scraps diversion among those who purchased Metro provided bins and compare bin owners' level of composting to that of the general population. To accomplish this task, the following informational objectives were established:

- Determine the awareness of the compost bin program;
- Evaluate the incremental effect that the compost bin program has had on composting among program participants when compared to the general public;
- Investigate whether the amount of yard and food waste put into compost bins changed among those who composted before bin purchase;
- Determine the willingness of participants to pay for bins to establish if the current subsidy may be reduced; and
- Profile those participating in the program by demographic characteristics and compare them to the general population.

Study Methodology

A telephone methodology was implemented.

Sampling Technique

Two sample segments were drawn in the following ways:

Metro bin owners: This segment was drawn from lists provided by Metro. An "nth" selection technique was used so that each respondent had an equal probability of being included in the study.

Random "general population": This segment was drawn from designated Portland area directories using a raised integer dialing technique ("plus one" dialing) in order to include new listings and unlisted phone numbers. "General population" (those who can/might compost) were screened from those who may never compost (e.g., apartment dwellers, handicapped, elderly, etc.).

Screening

All respondents were screened to ensure that they were:

- 18 or older; and
- Living in a household where they share responsibility for the disposal of food and yard debris.

Sample Frame

When a sample (a portion of a population) is the audience for a study rather than a census (the entire population), the findings are subject to sampling variability. This variability can be calculated, and depends on the sample size and confidence level. For this study, a sample of 175 random households and 701 composting bin customers has been interviewed. Bin owners and the general population have the following maximum sampling variabilities at the 95% confidence level:

<u>Respondents</u>	<u>Sample</u>	<u>Variability</u>
"General population" (control)	175	±7.4%
Metro program bin owners	700	±3.7%

This model predicts that bin owners' sampling variability is ±3.7% at the 95% confidence level. This means that if the study were replicated 100 times with different random samples of bin owners, the overall results to questions asked of all bin owners would vary by no more than ±3.7% in 95 out of 100 of the samples.

Report Format

This report is presented in Market Decisions Corporation's graphical *summary reporting style*. It contains the findings of the study organized into two primary sections. Section titles and a brief description of their contents appear below.

- The **EXECUTIVE SUMMARY** is composed of the study objectives, an overview of the research design, a description of the reporting format, a listing of definitions used in this report and a synopsis of the most significant findings and conclusions.
- The report **APPENDICES** contain the complete description of the research design (Appendix A) and the study questionnaire (Appendix B). The reader should refer to the study questionnaire when uncertain of specific question wording.

While every effort has been made to include all major findings in the body of this report, we consider the computer cross-tabulations (delivered under separate cover) to be an integral part of the reporting. Do not hesitate to contact your Market Decisions Account Executive for assistance in interpretation of these tables or to request additional services.

Bob Beaulaurier
(503) 245-4479

Definitions

For the purpose of the study, the following definitions are applied:

- **Compost** – a dark, crumbly mixture of decomposed organic matter – such as grass clippings, leaves, twigs, branches and food scraps.
- **Food scraps** – compostable fruit, vegetables, fruit and vegetable peels or trimmings, egg shells and coffee grounds. In this report, compostable foods scraps do not include meat, bones, cheese, bread and pasta.
- **Yard debris** – grass clippings, leaves, twigs and small branches.
- **General population** – a sample of Portland area residents used to compare Metro "bin owners" to the "general public" as a "control group."
- **Bin owners** – those who have purchased a Toro or Earth Machine bin from Metro.

SYNOPSIS OF FINDINGS

The following section provides a brief overview of the study findings. For a more thorough treatment of study findings please turn to the Analysis of Findings section.

Composting Incidences

A major evaluation criteria for the Metro bin program is whether or not it has aided in getting people to compost materials at home, avoiding the cost to city in moving and disposing of the materials. By this criteria, bin owners are significantly more likely to be composting than the general population. In fact, the bin program appears to have signed on many "new composters":

- Nearly half (49%) of bin owners are "new" to food scrap composting (they did not compost food scraps before purchasing a Metro bin).
- Over four in ten bin owners (44%) are "new" to yard debris composting (they did not compost yard debris before purchasing a Metro bin).

Overall, bin owners are significantly more likely than the general population to be diverting waste materials. Bin owners are more than twice as likely to compost yard debris as the general population (95% vs. 44%), and nearly three times as likely to compost food scraps (76% vs. 26%, respectively.)

Composting After Bin Ownership

Many of those who were composting before they bought the bin have increased the amount of food scrap and yard debris composting they do. Among bin owners who composted before they bought the bin, half (52%) are composting more yard debris and a third (33%) are composting more food scraps.

Rationales for Composting More

As the following table shows, the top reasons for composting more food scraps are different than the top reasons for composting yard debris. Note that, especially among food composters, the reasons for composting more are attributed directly to the bins.

Reasons for Composting More		
	Yard Debris n=191	Food Scraps n=77
I am composting more / a greater variety of things now	16%	9%
Fertilizer for my garden	16	6
The bin gives me a convenient place to put my waste --I didn't have that before	16	9
The bin's lid keeps animals out	9	22
The bin is closer to our house than a compost pile in the yard	10	17
The bin breaks down compost faster than other bins or just leaving it in a pile	11	13

Among Bin Owners:

- The amount of food scraps composted is highest among households with two or more people (3.2 "coffee can sized containers" per week avg.), among those with incomes over \$75,000 (3.6 avg.) and the amount of food scraps composted also appears to decrease slightly with age:

	Avg # of cans
<i>Under 35</i>	3.3
<i>35-54</i>	3.2
<i>55 plus</i>	3.0

Note that the above segment differences are also true regarding the amount of food disposed of in the out-going trash and the garbage disposal as well. That is, younger, larger or affluent households both compost and dispose of more food than their counterparts. This relationship also holds among the general population.

Usage of Curbside Service

Bin owners are less likely to place yard debris at the curb for pick-up than the general population (55% vs. 63%, respectively).

- Fifty-six percent (56%) of bin owners using curbside pick-up say they are putting yard debris out less frequently than before purchasing the bin.
- Fifty-four percent (54%) of bin owners report placing smaller quantities out for curbside pick-up than before purchasing the bin.

However:

- When compared to the general population, twice as many bin owners put out yard debris weekly (26% vs. 13%). This may directly linked to awareness of pickup availability -- bin owners are nearly three times as likely to "know it is available weekly" (60% vs. 22%).

Satisfaction with Bin

Over nine out of ten bin users are at least "somewhat" satisfied with their bins (91%). More importantly, only 1% of bin owners are "not at all" satisfied.

- Food scrap composters are significantly more likely to be "satisfied" or "very satisfied" with the way the bin works than yard debris composters (91% vs. 83%, respectively).

Nearly three quarters (74%) of those using the bin would be "likely" to recommend it to a friend even at a price where they thought the bin was "expensive" (see "bin pricing" section).

Metro Bin Subsidy

There is a great deal of support for this type of program among the general public, especially when the program is linked to reducing waste in landfills. When asked if Metro should provide discounted bins to reduce the amount of compostable garbage placed in our landfills, over ninety-two percent (92%) of bin owners, and eighty percent (80%) of the general population said "yes."

Support for discounted Metro bins is greatest among those who have been in the area less than ten years, who are younger and have higher incomes.

SUPPORT OF BIN DISCOUNT BY DEMOGRAPHIC CHARACTERISTICS		
	Bin Owners	General Population
TIME IN THE AREA		
Less than 5 years	97%	Sample too small
5 - 10 years	93%	90%
11 or more	92%	79%
AGE		
Under 35	96%	95%
35 - 54	94%	81%
55 plus	90%	63%
INCOME		
Under \$30,000	91%	75%
\$30,000 - \$75,000	95%	79%
\$75,000 plus	96%	83%

Interest in Buying a Compost Bin

Three out of ten (30%) of the "non-composter" general population is "somewhat interested" or "very interested" in purchasing a compost bin with instructions on how to compost at home. Purchase of a Metro bin is most attractive to those with incomes over \$75,000 when compared to those with incomes under \$30,000 (46% vs. 11%, respectively).

Bin Pricing

A "price sensitivity" analysis was conducted in order to establish bin owners' willingness to pay for the bins. This analysis determined a maximum penetration price or "optimum price" of \$27 dollars. Most bin owners would not be shocked to find bins similar to the ones they purchased priced as high as \$45; however, fewer bins would be sold at any price above \$27.

Many other issues can affect the marketability of the bins. For example:

- Advertising the bins as having a "retail value" of \$45 and offering them to area residents at \$27, by means of a Metro subsidy and/or volume discount, will make the bins even more attractive.
- Making potential buyers aware of the "external benefits" such as reducing the amount of waste in landfills and "personal benefits," such as "savings" and "organic fertilizer" will also enhance the bins' marketability.
- To attract the most buyers, it is important to keep the message focused so that the top reasons to compost are heard.

Also note that a significant percentage of bin owners would not consider the bins "too expensive" at prices above \$45. It is possible to market bins above this point. Product managers can, and do, successfully market products above this point. Note that:

- At \$55 >30% still do not feel the bins are "too expensive."
- At \$90 >10% do not feel the bins are "too expensive."
- Not surprisingly, those with incomes above \$75,000 are less price sensitive.

Awareness of Bin Program

It is a positive finding that nearly one in five (18%) of the general population are aware of the Metro composting bin program by name when reminded of the Toro and Earth Machine bins Metro and local governments distributed. Still, 83% of the general population are not aware of any "Metro Programs" on composting and more communications will be required in order to increase the market penetration.



QUESTIONS AND ANSWERS

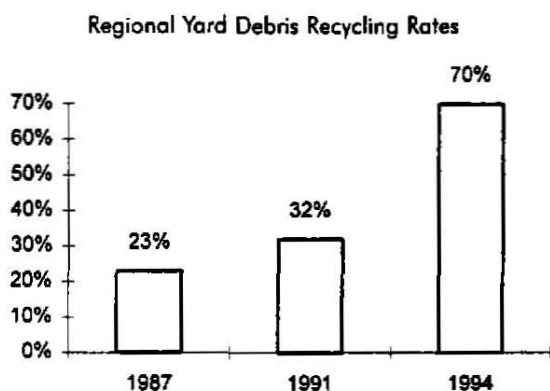
The Metro Licensing Program for Yard Debris Processing and Reload Facilities

Regional Environmental
Management
600 NE Grand Ave
Portland, OR 97232
(503) 797-1650
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On November 30, 1995, the Metro Council adopted licensing standards for yard debris processing and reload facilities. As of March 1, 1996, the licensing program will be in effect for all new facilities. Operators of existing facilities will have up to 18 months (August 1997) to apply for a license and to comply with the program standards.

Why was the licensing program developed?

Yard debris recycling in the metro region has increased from 23 percent in 1987 to 70 percent in 1994. The success of yard debris recycling programs has created many opportunities, as well as problems.



The substantial growth in yard debris collection has lead to an increase in the number of facilities that process yard debris. In 1987 there were only three yard debris processing facilities in the region -- there are now 14.

Many facilities are located in areas that are becoming urbanized. As a result, nuisance impacts such as odor, dust and noise have caused heightened public awareness and concern.

In response, Metro convened a regional task force to work on solutions that would be effective, as well as acceptable, to the yard debris processing industry. The task force consisted of yard debris processors, local governments, haulers and the Oregon Department of Environmental Quality (DEQ). The licensing program was developed with the guidance of this task force.

What will the licensing program do?

The program will help ensure that facilities are operated in a manner that minimizes nuisance impacts on surrounding communities.

The program will require operators of facilities in the metro region to apply for a Metro license and to comply with program standards, which include requirements for facility design, operating standards and odor minimization.

Does the program apply to facilities outside the Metro boundary?

Metro does not require yard debris facilities outside its boundary to be licensed. However, it is important to note two factors:

1. Processors prefer to be located close to the source of their feedstock and markets (typically urban).
2. Zoning outside the Metro boundary tends to be predominantly rural or agricultural in nature and is generally not favorable for siting these types of commercial operations.

Metro will work with city and county land-use planners and recycling coordinators to encourage zoning standards that set conditions for approval on participation in the Metro regional licensing program.

How will licensing standards be enforced?

An important part of the program is to solve problems before any enforcement action needs to be taken. However, if issues cannot be resolved in a satisfactory manner, Metro will take enforcement action that may include the following:

- Request corrective action
- Issue notice of intent to assess fines
- Initiate contested case proceeding
- Issue findings of compliance/noncompliance
- Issue temporary restraining order (emergency action)
- File for an injunction
- Suspend or revoke the license

Metro, cities, counties and the DEQ will share information about facilities. If complaints warrant Metro action, local governments can request Metro's assistance. Metro will independently monitor facilities and take appropriate action in cooperation with the local jurisdiction. The processor will be closely involved throughout the process.

Who should I call if I have a complaint about a yard debris processing facility?

Complaints about yard debris processing and reload facilities can be made by calling Metro Recycling Information at 234-3000, Mon. through Sat. 8:30 am-5:00 pm.

What will happen after Metro receives a complaint?

Once a complaint has been received, the information will be given to the Metro licensing program coordinator. The following action will be taken:

- Metro will notify the facility operator and the city or county nuisance division about the complaint.
- Metro will coordinate with the facility operator and the city or county nuisance division to determine how the problem can be resolved. Metro is also available to provide technical assistance to processors.
- Metro will notify the complainant of action taken.
- The record of complaint and action taken will be filed at Metro for future reference.
- If the situation creating the nuisance condition is not resolved in a satisfactory manner, additional action will be taken by Metro. Subsequent complaints may result in additional corrective action.

Other questions?

For more information about the yard debris processing facility licensing program, contact Bill Metzler at Metro's Regional Environmental Management Department, Waste Reduction and Planning Services Division, 797-1666.

About Metro

Metro is the directly elected regional government that serves more than 1.2 million residents in Clackamas, Multnomah and Washington counties and the 24 cities in the Portland metropolitan area.

Metro is responsible for growth management, transportation and land-use planning; solid waste management; operation of the Metro Washington Park Zoo; regional parks and greenspaces programs; and technical services to local governments.



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**METRO**

DATE: February 13, 1996
TO: Solid Waste Advisory Committee
FROM: Kelly Shafer Hossaini, Assistant Solid Waste Planner
THROUGH: Marie Nelson, Supervisor, Planning Services
RE: Disaster Debris Management Plan - Proposed Recommended Practices

In your January 17, 1996 meeting packet you received a copy of the proposed Recommended Practices for disaster debris management. There was a questionnaire included with the proposed Practices, which was to be filled out and returned to me.

I am pleased to report that I did receive a number of questionnaires. I have summarized the comments received on those questionnaires and attached those responses to this memo.

I would like to thank everyone who returned questionnaires to me. The comments will be considered in the formulation of guidelines and strategies for disaster debris management. I will be back before the Committee in April to give an update, and to bring forward a revised set of recommended practices.

KH:clk

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**January 17, 1996 SWAC Meeting
Comments Regarding the
Proposed Disaster Debris Management Recommended Practices**

Practice 1: Discussion Question

Question 1

Do you believe that the information listed in this recommended practice will be adequate for disaster debris preparation? If not, what other kinds of information should be required for collection and who should be responsible for collecting it?

- Consider listing the Association of General Contractors (AGC) under private sector roles and responsibilities and tasking them with the responsibilities of supplying information and disseminating information to their membership.
- Consider any requirements insurance companies may have on claim requirements prior to removal of debris. May want to add insurance company representatives in private sector roles.
- The key to the usefulness of this information will be its constant updating. It can become out-of-date very quickly.
- Determine the state of planning in each of the jurisdictions for emergency management and, specifically, disaster debris management. This way we can make sure what we're doing coordinates with existing and developing plans, and vice versa.
- It will be important to identify the key people who need to get this information and ensure they receive a copy of the Disaster Debris Management Plan.

Question 2

It is important that the information collected is kept in such a way that it is quickly and easily accessible when it is needed. A central system containing all of the collected information is an option. Metro could serve as the regional caretaker of this information.

Is this a role you would like to see Metro take for the region? If not, how do you think the task of assembling and disseminating the information should be handled, and by who?

- Does Metro even have the authority to handle this information?
- Metro is better positioned than anyone to take on this role.
- Metro should be the caretaker of the information, with the capability to share this information with others. Information could be kept on a disk for this purpose.
- Metro should have all the information, but the authority order should be open for discussion.

Practice 2: Discussion Questions

Question 1

During the first 72 hours after a disaster occurs, efforts focus on immediate hazards to public health and safety. Only those debris removal activities that are essential to protecting the public health and safety will likely be undertaken. Public and private agencies can use some of this time to mobilize and prepare for the next phase of the disaster, the recovery phase. Some of these preparation tasks are defined under "Guidelines for a Response Phase strategy."

Are there are other tasks that should be included in this section in addition to what's listed? If so, who do you think should implement them?

- Track incremental waste increases and plan how best to use any increase in disposal revenues. Perhaps use them to offset costs to local governments.
- Who will actually do the work/make the decisions on items listed in section "a" of Key Elements?
- Determine the point at which this Plan would take effect in the event of a "disaster." If a localized event occurs and can be handled with local resources, does this plan have authority? Is it only when the federal government becomes involved? What are the threshold points at which this plan will take effect?
- Keep in mind that there will be body parts, etc. to clean up. How is this handled?

Question 2

The information and communication system for disaster debris removal will be a critical part of the disaster debris management process. Information on how residents can handle their disaster debris will be disseminated through the media, written information, and phone contact.

How important do you think it is that disaster debris removal information is standardized? Should we strive for one set of instructions for the entire region? Or is it okay for local areas to have their own procedures and programs? For example, should all communities handle the putrescible surge in essentially the same manner?

- There are good arguments for uniformity and standardization of services, but it will be impossible to accomplish. Allowing each jurisdiction to have their own procedures will lead to confusion.
- One set of procedures is always preferable if it is practical and functional. However, can one set of standard instructions work well? Or are there too many local nuances that make this impractical?
- Allow flexibility for local governments to tailor programs to local conditions and needs. The Disaster Debris Management Plan would be a sound basis upon which to build.
- A role Metro could play would be to distribute information to citizens about how the structure should/will work and how they will be getting information.

Practice 3: Discussion Question

The recommended practices emphasize recycling and recovery over disposal. There is evidence that applicants for FEMA reimbursement stand a better chance of having recycling costs reimbursed with a strong disaster debris management plan in place.

What degree of pre-commitment from participants in disaster debris clean-up is necessary to ensure that recycling will be given priority over disposal during the recovery phase?

- To ensure that recycling is given priority over disposal:
 - Local emergency management plans should have a recycling policy.
 - Develop general promotion and education materials.
 - Have one location to dump materials and then sort it out later.
 - Free or reduced disposal at recycling facilities (money can come from FEMA and/or increase in revenue generated from increased disposal).
- Get pre-commitments from AGC, haulers, and local governments.
- The Plan should identify suitable vacant lands for temporary storage sites, and then ensure that any necessary DEQ and local government approval requirements are established ahead of time.
- The issue is less pre-commitment and more a system organization that lends itself to recycling rather than disposal, e.g., convenient sites for recycling, etc.

Practice 4: Discussion Question

FEMA will require a full accounting of disaster debris removal costs to be reimbursed. This includes all of the proper back-up materials such as contracts, agreements, receipts, load tickets, and time sheets. Metro could take on the responsibility of administering such an accounting system for disaster debris. Metro already has a tracking system in place for tons received at regional facilities. The same system could be used in a somewhat modified form for this purpose. For example, temporary processing facilities would be added to the system.

Is this a role you would like to see Metro take in the event of a disaster? If not, how would the task of keeping track of debris removal expenses best be handled, and by who?

- Yes, this is a role Metro could take.
- This should be decided by local governments.
- Maybe a better solution is for local governments to report to Metro (or directly to FEMA?) the costs associated with collection, and let Metro handle the portion of the costs relating to disposal.
- This is a role for Metro.

Practice 5: Discussion Question

Mutual aid activities occur when different communities agree to use their resources to help each other in the event of a disaster. This may mean loaning equipment or people for clean-up efforts, and may or may not involve repayment. Intergovernmental agreements for mutual aid can be prepared and executed before a disaster occurs.

What would be the best way to coordinate mutual aid agreements? Should individual communities be responsible for all of their own agreements? Or should there be a more formal, regional process?

- Mutual aid agreements should be emphasized in the Plan. Let local governments work out IGAs/contracts with other local governments. Metro could provide technical support when needed or requested.
- This should be decided by local governments.
- Put together a disaster relief meeting of local governments and Metro. A model inter-governmental agreement could be developed and signed by all the participants. If jurisdictions don't sign, then they would be responsible for working out their own agreements.
- A formal regional process would be a good idea.

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