



**METRO**

2000 S.W. First Avenue  
Portland OR 97201-5398  
503-221-1646

*Jerry Uba*  
**Agenda**

**MEETING:** Solid Waste Policy Committee

**DATE:** May 12, 1989

**DAY:** Friday

**TIME:** 7:30 - 9:00 a.m.

**PLACE:** Metro Council Chambers

- |      |   |        |
|------|---|--------|
| I.   | Committee members and citizen communications  | Hansen |
| II.  | Approval of March 10, 1989 minutes<br>(white pages)   | Hansen |
| III. | Updates   | Hansen |
| IV.  | Approval of strategy to incorporate waste reduction into the Regional Solid Waste Management Plan * (ivory pages)   | Carson |
| V.   | Approval of yard debris generation methodology * (blue pages)   | Carson |
| VI.  | Discussion of "select waste" issue.<br><br>What management options should be employed to replace disposal at the region's limited purpose landfills that are near capacity? | Carson |
| VII. | Next Meeting - July 8, 1989   |        |

\* Action items

## **SOLID WASTE PLANNING POLICY COMMITTEE**

### **Minutes**

**March 10, 1989**

The meeting was called to order at 7:40 a.m. by Chair Gary Hansen. The following were present:

#### **Members and Alternates**

Gary Hansen, Metro, Chair  
Sharron Kelly, Metro  
Steve Larrance, Washington County  
John Lang, (for Earl Blumenhauer) City of Portland  
Bill Stark, Wilsonville  
Clifford Clark, Forest Grove  
Ramsey Weit, Multnomah County  
Dale Harlan, Clackamas County

#### **The following members were not present:**

Rena Cusma, Metro  
Carol Powell, Oregon City  
Barbara Rutherford, Wood Village  
Shirley Huffman, Washington County  
Fred Hansen, DEQ  
Brian Campbell, Port of Portland

#### **Metro Staff**

Debbie Gorham  
Robert Newman  
Marilyn Matteson  
Rich Carson  
Robert Newman  
Becky Crockett  
Leigh Zimmerman  
Beverly Nason  
Sandy Gurkewitz

#### **Guests**

Beth Erlendson, City of Beaverton  
Don Robertson, City of Milwaukie  
Michael Sievers, Oregon Waste Systems  
Jan Nelson, City of Tualatin  
Estle Harlan, OSSI  
Bill Martin, Washington County  
Rod Grimm, Grimm's Fuel  
Karen Grimm, Grimm's Fuel  
Bill Bree, DEQ

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The meeting was called to order at 7:40 a.m. by Chair Gary Hansen. He summarized the recent activities on yard debris for the group. He stated that Council had agreed to the regional yard debris planning process, and that they had approved two new positions for the project.

It was moved and seconded that the Minutes of January 13, 1989 be approved; motion carried.

Bob Martin discussed the landfill transport contract. He stated that five bids were received in early January. The low bid was from Jack Ray Transport, a trucking firm from Gary, Indiana. The firm will use a triple axle truck and will operate out of Arlington. It is estimated that trucks will make two trips per day, and employ over 50 people. The firm will begin transporting in 1990 from the Metro South Station, and in 1991 from the new East Transfer Station.

Bob Martin continued that Metro had hired the consulting firm of R.W. Beck to look at public options for the Metro East Transfer Station, and to evaluate those options against the criteria in the Regional Solid Waste Management Plan. Commissioner Harlan asked how the transfer station options would deal with the issue of appropriate zoning. Bob Martin responded that both public or private proposals would be required to have zoning which permitted transfer stations. He also pointed out that the proposals are for the east waste shed and not for Washington County.

Bob Martin also discussed waste reduction activities. Council has agreed to add five new staff positions in Solid Waste and two and one-half in Planning to implement the 1986 Waste Reduction Program. He pointed out that DEQ and Metro are currently negotiating a Stipulated Order to identify the activities and time lines for implementing the Program. The major change from the 1986 Program is greater emphasis on intergovernmental cooperation in implementing the plan, particularly in those areas affecting collection.

Clifford Clark asked about time lines for these programs. Bob stated that there are 49 separate deadlines incorporated in the Stipulated Order. DEQ and Metro hope to complete negotiations on the Order by the end of March.

Ramsey Weit stated that he had never seen the Stipulated Order. Rich Carson suggested that this item be placed on the next agenda for review with the Committee.

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Becky Crockett reviewed the proposed process for developing the Regional Yard Debris Plan. She stated that the Waste Reduction Subcommittee will work with Metro staff to conduct the technical analysis. All local governments and yard debris processors in the region will be notified of the Waste Reduction Subcommittee meetings.

She pointed out that the Technical and Policy Committees and the Metro Council will review the Regional Yard Debris Plan before it is submitted to DEQ for approval.

Ramsey Weit asked about the role of the Policy Committee in this process and the schedule for plan development. Becky Crockett responded that the Policy Committee approves the planning process for yard debris and the final plan prior to forwarding it to the Metro Council. The Committee will be updated periodically as the plan is developed. The scheduled completion date is July, 1990.

Gary Hansen emphasized the importance of including people with special yard debris expertise, such as landscape contractors and processors, in the planning process. Becky indicated that yard debris processors would serve as ex-officio members of the Waste Reduction Subcommittee during plan development.

Motion and Vote

Dale Harlan moved and Steve Larrance seconded the motion to approve the regional yard debris planning process. Clifford Clark requested that ex-officio members on the Waste Reduction Subcommittee include representatives from the landscape industry and from Oregon State University. The motion carried unanimously with this clarification.

Steve Larrance reviewed the status of Washington County's yard debris plan. He stated that the County fully intended to coordinate with Metro as the regional plan is developed. He indicated that a staff person has been hired to begin work on the county yard debris plan.

Following Commissioner Lawrence's update, a panel of yard debris experts (Estle Harlan, OSS; Bill Bree, DEQ; Sandy Gurkewitz, Metro; and Rod Grimm, Grimm's Fuel) made a presentation to the group on key issues in this area. These include 1) how to collect yard debris in a safe and efficient manner; 2) determining yard debris generation for the region; 3) determining marketing capacity; and 4) determining program costs.

Estle Harlan described existing yard debris recycling programs in the region. Bill Bree discussed methods for processing yard debris. Sandy Gurkewitz addressed marketing, and Rod Grimm discussed the issue from a processor's perspective.

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**The next meeting will be held May 12, 1989.**

**The meeting adjourned at 9:40 a.m.**



# METRO

2000 S.W. First Avenue  
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# Memorandum

DATE: May 4, 1989

TO: Policy Committee

FROM: *RC* Richard Carson, Director  
Planning and Development

RE: INCORPORATING WASTE REDUCTION INTO THE SOLID WASTE MANAGEMENT PLAN

On April 28th, the Technical Committee approved a strategy for incorporating waste reduction into the Regional Solid Waste Management Plan. The committee recommends incorporating waste reduction into the plan in two places: 1) in the Waste Reduction Chapter and 2) in the Unified Work Programs Chapter.

The Waste Reduction Chapter will establish a long and short-term plan for achieving waste reduction in the region and will identify the roles and responsibilities of Metro, local governments, and the solid waste industry in carrying out specific waste reduction activities. It will consolidate the work that has already been done as part of the System Measurement Study and the amended 1986 Waste Reduction Program.

The Unified Work Programs Chapter will describe a process for implementing the waste reduction programs identified in the Waste Reduction Chapter. The strategy recommends an implementation approach which stresses intergovernmental coordination and voluntary compliance through five-year and annual work programs. The five-year program would incorporate the waste reduction activities of Metro and local governments. The annual work programs would be specific to each jurisdiction.

Attached for your review is a summary of the proposed strategy and outlines for the two plan chapters. At the May 12th meeting, we request you review and approve this strategy.

Attachments

PROPOSED WASTE REDUCTION STRATEGY

SOLID WASTE MANAGEMENT PLAN

Waste Reduction Chapter

Unified Work Programs Chapter

IMPLEMENTATION

Five Year Work Plan for Region

Metro's Annual Work Program

Annual Work Programs for  
Cities and Counties

## **UNIFIED WORK PROGRAMS CHAPTER - DISCUSSION DRAFT**

### **I. UNIFIED WORK PROGRAMS POLICY**

#### **II. PURPOSE**

- A. TO SET UP A VOLUNTARY/COOPERATIVE PROCEDURE FOR IMPLEMENTING AND MONITORING WASTE REDUCTION PROGRAMS IDENTIFIED IN THE WASTE REDUCTION CHAPTER**
- B. TO COORDINATE/INTEGRATE THE WASTE REDUCTION ACTIVITIES OF METRO AND LOCAL GOVERNMENTS**
- C. TO ENSURE PLANNING CONSISTENCY FOR WASTE REDUCTION BETWEEN STATE REQUIREMENTS, THE REGIONAL SOLID WASTE MANAGEMENT PLAN, AND LOCAL PLANS.**

#### **III. FIVE YEAR WORK PROGRAM FOR THE REGION**

- A. IDENTIFIES METRO PROGRAMS/ACTIVITIES**
- B. IDENTIFIES LOCAL GOVERNMENT PROGRAMS/ACTIVITIES**
- C. INCORPORATES REGIONAL RECYCLING GOALS AND PERFORMANCE STANDARDS**
- D. ESTABLISHES CONSISTENT DATA REPORTING TECHNIQUES FOR THE REGION**
- E. ESTABLISHES GENERAL TIME FRAMES FOR IMPLEMENTATION**
- F. IDENTIFIES FINANCING MECHANISMS\*\***

#### **IV. ANNUAL WORK PROGRAMS FOR METRO AND LOCAL GOVERNMENTS**

- A. MORE DETAILED WORK PROGRAMS FOR METRO AND EACH CITY AND COUNTY**
- B. INDIVIDUAL PROGRAM GOALS/PERFORMANCE STANDARDS**
- C. METRO AND LOCAL GOVERNMENTS FORMALLY ADOPT TO ENSURE COMPLIANCE WITH SOLID WASTE MANAGEMENT PLAN AND STATEWIDE PLANNING GOAL ON PUBLIC FACILITIES.**

#### **V. UPDATE AND EVALUATION PROCESS**

- A. EVALUATE PROGRAM EFFECTIVENESS YEARLY**
- B. ROLLING FIVE YEAR WORK PROGRAM ADJUSTED ANNUALLY BASED ON ONGOING SYSTEM MEASUREMENT**

**\*\* Financing Chapter will specify that financing mechanism must be identified prior to implementation of waste reduction programs.**

A. DESCRIBE VIA THE STATE HIERARCHY (RESIDENTIAL, COMMERCIAL, MIXED WASTE STREAM)

B. GENERAL IMPLEMENTATION STRATEGIES

1. PROMOTION AND EDUCATION
2. MARKET DEVELOPMENT
3. TECHNICAL ASSISTANCE
4. FINANCIAL INCENTIVES
5. DISPOSAL REGULATION
6. LEGISLATION (INCLUDING MANDATORY RECYCLING)

C. FINANCING OPTIONS

1. RATES
2. TAX CREDITS AND EXEMPTIONS
3. BONDS
4. GRANTS AND LOANS
5. TAX BASE

V. THE REGION'S RECYCLING FUTURE

A. LONG-TERM (20 YEAR) RECYCLING GOALS AND PROJECTIONS

1. METHODOLOGY
2. ONGOING SYSTEM MEASUREMENT
  - a. WASTE COMPOSITION STUDIES
  - b. WASTE REDUCTION GOALS
  - c. PERFORMANCE STANDARDS AND MEASUREMENT

B. SHORT TERM PROGRAM (FIVE-YEAR PROGRAM)

1. IMPLEMENTATION/EVALUATION CRITERIA (FROM SYSTEM MEASUREMENT STUDY)
2. PROGRAMS SELECTED
  - a. SUMMARIZE SYSTEM MEASUREMENT STUDY AND RECOMMENDED PROGRAMS, INCLUDING METRO'S ROLE AND LOCAL GOVERNMENT'S ROLE
  - b. SUMMARIZE SPECIFIC ACTIVITIES IN 1986 WASTE REDUCTION PROGRAM, AS AMENDED

VI. METRO IMPLEMENTATION TOOLS

- A. LOCAL GOVERNMENT COORDINATION
- B. RATE INCENTIVES
- C. FLOW CONTROL

- D. FUNCTIONAL PLANNING AUTHORITY
- E. CERTIFICATION AND RATE PENALTIES
- F. MANDATORY RECYCLING

## VII. METRO'S IMPLEMENTATION PREFERENCE

- A. VOLUNTARY LOCAL GOVERNMENT COORDINATION
- B. FIVE-YEAR AND ANNUAL WORK PROGRAMS

# **REGIONAL SOLID WASTE MANAGEMENT PLAN**

## **WASTE REDUCTION CHAPTER OUTLINE - DISCUSSION DRAFT**

### **I. WASTE REDUCTION POLICIES**

#### **II. PURPOSE**

- A.** TO ESTABLISH A LONG-TERM (20 YEAR [2010] PROJECTION) AND A SHORT-TERM (FIVE YEAR PROGRAM [1995]) PLAN FOR WASTE REDUCTION IN THE REGION.
- B.** TO DEFINE THE ROLES AND RESPONSIBILITIES OF METRO, LOCAL GOVERNMENTS, THE SOLID WASTE INDUSTRY AND CITIZENS IN IMPLEMENTING WASTE REDUCTION PROGRAMS.
- C.** TO SELECT THE APPROACH THE REGION WILL TAKE TO IMPLEMENT ITS WASTE REDUCTION PLAN AND TO ACHIEVE WASTE REDUCTION GOALS.

#### **III. BACKGROUND**

##### **A. NATIONAL CONTEXT**

DESCRIBE RANGE OF APPROACHES FROM MANDATORY RECYCLING PROGRAMS WITH STRONG GOVERNMENT INVOLVEMENT TO VOLUNTARY, COMMUNITY-BASED PROGRAMS WHICH ARE MARKET DRIVEN.

##### **B. OREGON CONTEXT**

###### **1. LEADER IN RECYCLING**

###### **2. AGGRESSIVE WASTE REDUCTION USING VOLUNTARY APPROACH**

- a.** THE HIERARCHY
- b.** BOTTLE BILL
- c.** 405 OPPORTUNITY TO RECYCLE ACT
- d.** TAX INCENTIVES FOR INVESTMENT

##### **C. THE METRO REGION; ROLES AND RESPONSIBILITIES IN WASTE REDUCTION**

- 1.** DEQ
- 2.** METRO
- 3.** LOCAL GOVERNMENTS
- 4.** HAULERS
- 5.** PRIVATE INDUSTRY
- 6.** CITIZENS

#### **IV. WASTE REDUCTION PROGRAM OPTIONS**



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# Memorandum

Date: May 5, 1989

To: Policy Committee

From: <sup>JK</sup> Richard Carson, Director  
Planning and Development

Re: Yard Debris Generation Methodology (attached)

The DEQ Yard Debris Recycling Rules require that standards be developed in the regional yard debris plan which establish yard debris recycling requirements for the region.

In order to develop these standards, it is necessary to determine the amount of yard debris currently existing in the region. Further, this information will be used as the primary data base for determining yard debris processing capacity, market capacity and recycling impact (amounts generated) of local yard debris collection systems.

The attached methodology has two components. The first is used to determine how much yard debris is generated on a regional basis. The second is a model to be used to determine how much yard debris is generated within any given local jurisdiction.

Staff believes the methodology has an error factor of plus or minus 10 percent. Data obtained from DEQ on the amount of yard debris burned both within the burn ban area (hardship permits) and outside the burn ban area indicate that about 4.5 percent of yard debris generated is actually burned. This amount appears to be insignificant for purposes of the regional data, but may be significant for those jurisdictions outside the burn ban area. Staff will work with those jurisdictions outside the burn ban area to more clearly determine the role of burning in the context of the regional yard debris plan.

The Technical Committee recommends that you approve this methodology, recognizing it is a starting point in establishing a data base for developing the regional yard debris plan.

## YARD DEBRIS GENERATION

### Purpose

The purpose of this report is to present methodologies for estimating the amount of yard debris generated within the entire tri-county region and the amount generated within a particular jurisdiction by single-family dwellings (SFD). This information can be used as a starting point in developing regional yard debris plan strategies. As more data becomes available over time the quality of the information will improve. Conversion factors commonly used are listed at the end of the report.

### Regional Yard Debris Generation      *For Regional Generation*

In order to determine full market and processing capacity of the region it is necessary to determine the amount of yard debris generated within the tri-county region. In estimating the amount of yard debris generated within the entire tri-county region the following methodology can be used:

$$\begin{aligned} & \text{amount landfilled} + \text{amount processed} + \text{amount home composted} \\ & = \text{total amount of yard debris generated}^1. \end{aligned}$$

The amount of yard debris landfilled is estimated to be 101,000 tons or 10.5% of the total waste landfilled as determined by the "1987 Metro Waste Characterization Study". This information was developed by manually sorting 705 samples of refuse into separate categories over the course of four seasons.

The amount of yard debris processed is estimated to be 32,000 tons as determined by the "1987 Metro Recycling Survey". This figure was obtained by totaling the receipts of all the yard debris processors in the region (Grimms, McFarlanes, USA, West Linn, East County).

The amount of yard debris home composted represents all the material which is not landfilled or processed but is composted at the site of generation by the generator. Because this process is very decentralized its difficult to accurately quantify. Currently staff uses 30% of the total generated to indicate the amount home composted. The 30% figure was obtained by a DEQ survey conducted in 1979 and appears in the "1983 Metro Yard Debris Recycling Demonstration Project". Therefore the amount home composted per year represents approximately 57,000 tons. Due to the fact that the survey was conducted ten years ago staff will conduct a new survey to verify this figure.

Utilizing the methodology and data mentioned above the total amount of yard debris generated within the entire tri-county region is as follows:

$$101,000 \text{ t.} + 32,000 \text{ t.} + 57,000 \text{ t.} = 190,000 \text{ tons}$$

<sup>1</sup> Methodology does not take into account generators outside of the burn ban area who burn their yard debris.

~~Individual cities encouraged to use this methodology  
to determine area generation~~

### Yard Debris Generation by Single Family Dwellings

The generators of yard debris can be divided into three categories: single-family dwellings, multi-family dwellings, and institutions (parks, schools, businesses, etc.). By determining the amount generated by each category it is possible to estimate the amount of yard debris generated by a single jurisdiction and evaluate appropriate collection systems. Staff at this time cannot estimate the quantity of material generated by multi-family or institutions due to a lack of data. However it is possible to estimate the amount of yard debris generated by single-family dwellings by extrapolating data derived from the yard debris programs in Gladstone and Oregon City. Since the two communities offer "free" weekly curbside collection of yard debris to all single family dwellings it can be assumed that all yard debris generated by participating SFDs in these two communities is being collected. Mr. Richard Bloom, operator of the two yard debris programs, estimates that participation is 95%+. Therefore the total number of SFDs in Oregon City and Gladstone used in the following analysis are reduced by 5%.

In 1987 Oregon City collected from 3,452 SFDs<sup>2</sup> approximately 3,232,000 pounds or 1,616 tons of yard debris<sup>3</sup>. In 1988 Oregon City collected 3,730,000 pounds or 1,865 tons of yard debris<sup>4</sup>. The average of the two yearly totals amounts to 1008 pounds per year per SFD.

In 1987 Gladstone collected from 2,716 SFDs<sup>5</sup> approximately 2,800,000 pounds or 1400 tons of yard debris<sup>6</sup>. In 1988 Gladstone collected 3,255,060 pounds or 1627.5 tons of yard debris<sup>7</sup>. The average of the two yearly totals amounts to 1114 pounds per year per SFD.

To determine the approximate amount of yard debris generated by SFDs within a jurisdiction simply multiply the number of SFDs by either 1008 or 1114 pounds as shown below:

$$\# \text{ of SFD} \times (1008) \text{ or } (1114) \text{ pounds} = \\ \text{approximate amount of yard debris generated by SFDs per year}$$

<sup>2</sup> Oregon City Planning Department - 4/10/89

<sup>3</sup> Annual Recycling Data Form, 1987 submitted by Oregon City Garbage Co.

<sup>4</sup> Annual Recycling Data Form, 1988 submitted by Oregon City Garbage Co.

<sup>5</sup> Gladstone Planning Department - 4/10/89

<sup>6</sup> Annual Recycling Data Form, 1987 submitted by Gladstone Disposal Co.

<sup>7</sup> Annual Recycling Data Form, 1988 submitted by Gladstone Disposal Co.

However prior to extrapolating data from Oregon City or Gladstone a jurisdiction must first identify conditions that may effect total generation. For example:

- \* Age of Community - Generally the older the community the greater the amount of vegetation requiring clipping and pruning. Conversely in newer communities there is less vegetation. Oregon City contains primarily older development; Gladstone primarily newer.
- \* SFD Average Lot Size - The larger the average lot size relative to Oregon City and Gladstone the greater the amount of yard debris generated; conversely the smaller the lot size the less yard debris generated. [Average lot size of SFDs in Oregon City varies between 6,000 to 10,000 square feet; average lot size of SFDs in Gladstone is approximately 7,000 square feet].  
*Develop  
the  
generic  
adjustment  
factor*
- \* Demographics - A community composed primarily of middle income families are likely to generate more yard debris than communities composed of young adults or the elderly.

#### Conversion Factors

10 cu.yds. of yard debris = 1 ton of yard debris

1 compacted cu.yd. = 3 loose cu.yds.

1 ton = 2000 pounds

<sup>8</sup> Oregon City Planning Department, 4/7/89

<sup>9</sup> Gladstone Planning Department - 4/7/89

Yard Debris Burned Within the Tri-County Region \*

Within burn ban area:

1029 hardship permits issued in 1987

10 cu.yds. of yard debris burned per permit

8.3 pounds of yard debris per cubic foot

224 pounds of yard debris per cubic yard

2240 pounds of yard debris burned per permit

2,304,960 pounds of yard debris burned within burn ban area

1152 tons of yard debris burned within the burn ban area in 1987

Outside burn ban area:

percent of population outside AQMA:

Multnomah - 1% - 5630

Washington - 6.8% - 18,924

Clackamas - 23% - 58,282

Total - 82,836

182.6 pounds of yard debris burned per person per year outside the burn ban area.

15,125,854 pounds of yard debris burned outside the burn ban area in 1987.

7,562 tons of yard debris burned outside the burn ban area in 1987.

Amount of yard debris burned within the tri-county = 8715 tons

\* Information derived from the Department of Environmental Quality Air Emissions Inventory.

# SOLID WASTE POLICY COMMITTEE

05/12/89

- East Transfer Station — Mitigation Agreements with the City of Portland  
(30-35 pages)
- Note: 18 facilities Total
  - 7 Yard Debris only facilities
  - 5 facilities in Seasonal ~~Burn~~ <sup>Burning</sup> Area
- Yard Debris Regional Plan Outline  
Standards (in question) for Determining Plan Goal  
Market Capacity and Processing Capacity
- Burn Boundary based on Air Quality Management Area or Boundary

## X GENERIC ADJUSTMENT FACTORS:

- (Average) Lot Size
- Income of residents
- Age of residents
- Age of dwellings ??
- Geographic factors — Topography
- Legal Issues — Burn area/non-burn area