## METRO



MEETING:

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

Agenda

DAY: Thursday DATE: April 22, 1993 TIME: 9:00-11:00 PLACE: Metro Headquarters, 2000 SW First Avenue **Council Chambers** 1. Introduction of SWAC Committee Members Roger Buchanan 2. Approval of Committee By-Laws Roger Buchanan 3. Organic Waste Planning Project Jeep Reid 4. Long-Term Financing Project Terry Petersen (discussion materials attached) Discussion items: ٠ Long-term financial impacts Conceptual alternatives ٠ Future work schedule • 5. Other Business Roger Buchanan 6. Adjourn Roger Buchanan

Metro Solid Waste Advisory Committee

TP:clk /share/pete/swac/swac0422.agd

Printed on recycled paper

# METRO SOLID WASTE ADVISORY COMMITTEE

Councilor Roger Buchanan, Chair

# **BRIEFING:**

## ORGANIC WASTE PLANNING PROJECT

Presented at the Committee meeting of April 22, 1993

# **OVERVIEW**

## THE NEED FOR CHANGE

- > SITUATION
- > NEED
- > DEFINITIONS
- > A 3-STEP PLAN FOR CHANGE

# BUILDING A STRATEGY FROM ALTERNATIVE TECHNOLOGIES

- » INTERCEPT/DIVERT/RECLAIM
- » METHOD AND TIMETABLE

## CONCLUSION

METRO SOLID WASTE ADVISORY COMMITTEE BRIEFING

# **ORGANIC WASTE FLOW**



# METRO SOLID WASTE ADVISORY COMMITTEE BRIEFING

## THE NEED FOR CHANGE

#### **SITUATION**

- Compost Facility closed more than a year ago. No current means to recover organic waste.
- Organic waste continues to be landfilled.
  Approximately 300,000 tons per year; 1/3 of the waste stream.

## WHY NOT LANDFILL ORGANICS?

- Wasteful practice (Organic waste contains soil nutrients that should be recycled.)
- Contrary to State Mandated Hierarchy (Reduce, Reuse, Recycle, Extract Energy, Landfill)
- Must recycle organic waste to reach long term recycling goals
- Change (Changes are occurring. Metro should encourage positive changes which benefit all rate payers in the Region.)

## DEFINING "ORGANIC WASTE"

#### Organic Wastes that:

- Came from the soil as plant material.
- · Can be recycled back into soil nutrients.

(Examples: Most food, contaminated paper and cardboard.)

NOT INCLUDED:

- Organic Waste that is NOT easily broken down into soil nutrients. (Examples: Tires, plastics, lumber.)
- Organic Wastes which are better recovered in their present form. (Example: Clean recoverable paper should be recovered as paper.)

### A 3-STEP PLAN FOR CHANGE

- > IDENTIFY FEASIBLE ALTERNATIVE TECHNOLOGIES.
- COMBINE BEST ALTERNATIVES INTO AN ORGANIC WASTE STRATEGY AND UPDATE THE REGIONAL SOLID WASTE MANAGEMENT PLAN.
- > SEEK ADOPTION BY THE METRO COUNCIL.

# METRO SOLID WASTE ADVISORY COMMITTEE BRIEFING

# BUILDING A STRATEGY FROM ALTERNATIVE TECHNOLOGIES



# METRO SOLID WASTE ADVISORY COMMITTEE BRIEFING

## **INTERCEPTION - DIVERSION - RECLAMATION**

### **INTERCEPTION ALTERNATIVES:**

CONCEPT: Intercept organic waste before it begins its trip to a transfer station.

Examples of existing activities:

Organic Waste Recyclers - a local enterprise which composts waste food materials.

*Vermiculture* - worms process fruit and vegetable wastes from grocery stores into useful soil material; 70% used for organic farming, 30% sold for soil enrichment, and worms are marketed separately.

These alternatives tend to favor small, local, private industry and provide jobs for citizens living in or near the Metro Region.

#### **DIVERSION ALTERNATIVES:**

CONCEPT: Selectively collect and divert organic materials from transfer stations to Organic Recovery Facilities (ORFs). Similar to Material Recovery Facilities (MRFs).

Examples: MRFs currently operate as separate facilities in other cities.

Seattle may build an ORF pending the outcome of a pilot study.

These alternatives tend to favor small, local, private industry but may provide opportunity for larger corporations with greater resources.

#### **RECLAMATION ALTERNATIVES:**

CONCEPT: Interception and diversion will not extract 100% of the organic waste from the waste stream. Some amount will arrive at the transfer stations. Opportunity may remain to reclaim some amount of organic waste before landfill disposal.

Example: The former Compost Project. This type of facility does not receive segregated waste but accepts commingled waste.

These alternatives favor a private/public partnerships since large investments in sophisticated equipment are needed to extract a proportionally smaller amount of organic material.

METRO SOLID WASTE ADVISORY COMMITTEE BRIEFING

## METHOD AND TIMETABLE

# THREE TECHNICAL CONFERENCES 6 MONTHS

Conference #1. Develop lists of Alternative Technologies.

*Conference #2.* Refine lists to Feasible Alternative Technologies and indicates needed update of the Regional Solid Waste Management Plan.

*Conference #3.* Select best combination of Feasible Alternative Technologies to comprise a STRATEGY.

# PUBLIC PROCESS LEADING TO ADOPTION 3 MONTHS

Staff recommends a Strategy and an associated update of the Regional Solid Waste Management Plan. Solid Waste Advisory Committee initiates the process leading to adoption by the full Metro Council.

METRO SOLID WASTE ADVISORY COMMITTEE BRIEFING

## CONCLUSION

THE NEED: To develop a strategy for the management of organic solid waste which is based on feasible alternative technologies. Concurrently, to update of the Regional Solid Waste Management Plan.

BUILDING A STRATEGY: The natural flow of solid waste lends itself to technologies and management concepts based on interception, diversion and reclamation. Three technical conferences, would be sufficient to distill the knowledge and experience of many disciplines into a set of feasible alternatives which, when combined, form an integrated strategy. General public input would will be welcome at any time, however, the conferences would be weighted toward technical and economical feasibility of alternatives. Full public input would be assured by Metro Council processes leading to adoption of a strategy and an update of the Regional Solid Waste Management Plan.

ANTICIPATED OUTCOME: The benefits of this approach are likely to be an organic waste management strategy which:

- a. avoids the "full stop" situation we now face as a result of one business encountering financial difficulties.
- b. avoids the risk of a "full stop" condition associated with dependence on a single technology.
- c. assures a role for small, local businesses which currently exist.
- d. may provide new opportunity for local businesses.
- e. assures the views of local solid waste industry are represented in the adopted strategy.
- f. promotes economic and technical feasibility by investigation of diverse alternatives.
- g. affords opportunity to manufacture the highest possible quality of soil products, and still recycle the maximum amount of organic waste.
- h. emphasizes the best interests of the Region's solid waste rate payer.

RR:ay ADVON1.DOC April 21, 1993

METRO SOLID WASTE ADVISORY COMMITTEE BRIEFING

#### Long-Term Metro Solid Waste Rate Plan

#### April 22, 1992 Metro Solid Waste Advisory Committee

#### **Discussion Materials**

- 1. Problem statement and basic assumptions that will guide the analysis.
- 2. Revenue tonnage to the year 2000 if per capita waste generation remains constant and the region achieves a waste reduction level of 60% (chart and tables).
- 3. Metro costs and tip fee allocations given the above tonnage forecast (table).
- 4. Summary of conceptual alternatives:
  - · Broaden Rate Base
  - Stabilize Tonnage Base
  - Rate Restructuring
  - Diversify Rate Base
- 5. Budget assumptions.

#### **Problem Statement**

Revenue for fixed and variable costs are currently derived from per ton fees at disposal sites. Despite population growth, the tonnage base that pays fees is declining as recycling, waste reduction, and illegal disposal increase. As a result, the Metro tip fee will continue to increase. It will become increasingly difficult to implement Metro policies related to rate stability and waste reduction.

#### **Guiding Assumptions**

- 1. Elimination of costs that are not directly related to the transfer, transport, and disposal of waste will not prevent tip fee increases given the current rate structure.
- 2. Objective is to stabilize funding source for "fixed" costs by re-allocation of costs.
- 3. Relevant policies stated in the Regional Solid Waste Management Plan will remain in effect. These are:

Policy 11.0 The solid waste system shall be developed to achieve stable, equitable and predictable solid waste system costs and rates.

Policy 11.2 Metro shall provide financial support for source separation programs, to produce high-grade select loads and to carry out other waste reduction programs.

- 4. A single solution is not realistic. A variety of changes in the way Metro funds programs may be needed.
- Different parts of the waste stream may require different approaches. For example, what works for franchised residential waste may not work for self-haul commercial waste.
- 6. Metro solid waste fees will be consistent with the Metro Charter.

#### **Conceptual Options**

#### Concept #1. Broaden Rate Base

- Rates are levied over a broader solid waste tonnage base than that which arrives at Metro facilities for disposal.
- Included in the rate base would be tonnage that has been diverted from the disposal system due to public programs and subsidies.
- . The "System Management Fee" was an example of this concept.

#### Concept #2. Rate Restructuring

- Metro rates are restructured so as to cover fixed costs with tonnage-independent revenues.
- Fixed costs are funded through relatively stable sources, such as per-capita or peremployee fees.
- · Variable costs are covered by level-of-service charges (user fees).

#### Concept #3. Stabilize Rate Base

- Use regulatory and enforcement options to minimize tonnage "loss" thereby stabilizing the rate base.
- Examples would include enforcement of flow control and universal collection service.

#### Concept #4. Diversify Rate Base

- Some solid waste functions are funded from general sources, rather than systemspecific user charges.
- Principle is that programs with broad-based benefits should have broad-based public funding support.
- · Examples could include product (e.g. hazardous waste) or sales taxes.

#### **Rates Per Ton At Metro Facilities**

Assuming Constant Per Capita Waste Generation And 60% Waste Reduction By Fiscal Year 2000-2001

Budget Items	FY 1993-94	FY 1994-95	FY 1995-96	FY 1996-97	
Operations	\$56.70	\$63.21	\$66.86	\$70.74	
Transfers & Debt Service.	\$8.30	\$9.78	\$11.44	\$12.29	
Excise Tax & Fees	\$7.08	\$7.82	\$8.29	\$8.72	
Administration & RIC	\$6.61	\$7.23	\$8.00	\$8.85	
Other (incl. revenues)	(\$0.15)	\$0.91	\$1.10	\$1.20	
Total	\$78.54	\$88.95	\$95.69	\$101.80	
Budget Items	FY 1997-98	FY 1998-99	FY 1999-2000	FY 2000-2001	
Operations	\$75.11	\$79.48	\$83.84	\$88.21	
Transfers & Debt Service	\$13.12	\$13.95	\$14.78	\$15.61	
Excise Tax & Fees	\$9.17	\$9.61	\$10.06	\$10.50	

\$11.00

\$0.32

\$114.35

\$12.07

(\$0.13)

\$120.62

\$13.14

(\$0.57)

\$126.89

\$9.92

\$0.76

\$108.07

Administration & RIC

Other (incl. revenues)

Total

			Total Waste Generated In The Region		Revenue Waste	
			Per Capita		Per Capita	
Fiscal Year	Population	Recycling Rate	(pounds/person/day)	Tons	(pounds/person/day)	Tons
FY 1992-93	1,235,305	38.00%	7.2608	1,636,898	4.5017	1,014,876
FY 1993-94	1,247,374	40.75%	7.2608	1,652,890	4.3580	992,076
FY 1994-95	1,259,444	43.50%	7.2608	1,668,884	4.1234	947,746
FY 1995-96	1,271,514	46.25%	7.2608	1,684,878	3.8736	898,870
FY 1996-97	1,283,583	49.00%	7.2608	1,700,871	3.6416	853,062
FY 1997-98	1,295,653	51.75%	7.2608	1,716,865	3.5035	828,432
FY 1998-99	1,307,723	54.50%	7.2608	1,732,859	3.3038	788,493
FY 1999-20	1,319,792	57.25%	7.2608	1,748,851	3.1042	747,674
FY 2000-01	1,331,862	60.00%	7.2608	1,764,845	2.9594	719,323

## **Tonnage Projection Assuming Constant Per Capita Waste Generation**

Definitions:

Recycling Rate = Percent of tons generated which are not delivered to revenue paying facilities (does not include recycling within revenue paying facilities.)

Delivery Waste = Tons delivered to revenue paying facilities.

Revenue Waste = Delivery tons minus tons from outside Metro boundary and minus tons recovered at franchised, Non-Metro facilities.

Rates For Budget Items (Assumes 60% Waste Reduction By Fiscal Year 2000-2001)



#### **Budget Assumptions**

The budget line items and costs in the rate table to the year 2000 are based on the following assumptions. Some of these are currently under review.

- 1. A 4% annual CPI increase for materials and services including disposal/transportation and station operation contracts.
- 2. Personal Services' average increases are 4% COLA plus 4% merit per year (averages non-represented employee salaries with labor union agreement).
- 3. Annual capital purchases and improvements after FY 1993-94 = \$600,000
- 4. Annual contribution of \$1,600,000 to St. Johns Closure Account until FY 1996-97
- 5. Percent of contingency used each year = 25% of entire contingency fund available.
- 6. The MSW Compost Facility never reopens.
- 7. The Wilsonville Transfer Station opens July 1994 and, as of FY 1995-96 costs approximately \$4 Million per year and accounts for about \$4.50 of the rate.
- 8. Interest on interest-bearing accounts = 4% per year.

s:\share\pete\finance\swac0422.doc