

A G E N D A



METRO

MEETING: **REGIONAL SOLID WASTE ADVISORY COMMITTEE (SWAC)**

DATE: Thursday, October 27, 2005

TIME: 10:00 a.m. – 11:55 a.m.

PLACE: Rooms 370A/B, Metro Regional Center, 600 NE Grand Avenue, Portland

NOTE: Rate Policy Committee will meet at 12:15 today following SWAC in Room 370A

5 mins. I. Call to Order and Announcements Rod Park

*Introductions and Announcements
Approval of Minutes**

10 mins. II. Solid Waste & Recycling Director’s Update..... Mike Hoglund

25 mins. III. Nature in Neighborhoods & Solid Waste Stacey Triplett

After eight years of study and public involvement, the Metro Council unanimously passed the Nature in Neighborhoods ordinance in September. The ordinance amends Metro's Regional Framework Plan to protect the highest value streamside habitat with regulations, while allowing for protection of other valuable habitat with a combination of incentives and voluntary efforts. The ordinance is designed to help local communities meet the requirements of Statewide Planning Goal 5: Open Spaces, Scenic and Historic Areas, and Natural Resources, and will be implemented by cities through their local Goal 5 plans. This presentation will inform SWAC members of the solid waste connections in the Nature in Neighborhoods program components.

35 mins. IV. Draft Interim Waste Reduction Plan* Matthews et al

SWAC is being asked to review and provide comment on the attached draft Interim Waste Reduction Plan (IWRP). Metro Council recently approved development of the IWRP to provide current direction for the region’s waste reduction programs, pending completion of the Disposal System Planning project and updating of the entire Regional Solid Waste Management Plan. Last month SWAC received a presentation summarizing updated strategies for the following sectors: residential, multi-family, business, commercial organics, and construction and demolition debris. This month SWAC will be asked to discuss and comment on the remaining sections: education services, hazardous waste, and product stewardship.

35 mins. V. Oversight of Clean MRFs* Walker/Hoglund

In September, SWAC member Bruce Walker from the City of Portland requested a SWAC review of whether or not clean MRFs should be regulated, based on a recent DEQ enforcement action taken against a clean MRF in the region over the landfilling of certain source-separated recyclables. The purpose of this agenda item is to identify action steps that could prevent source-separated recyclables from being disposed in the future, and mitigate the need for regulation.

5 mins. VI. Other Business & Adjourn..... Rod Park

**Material for this agenda item is attached.*

All times listed on this agenda are approximate. Items may not be considered in the exact order listed.

Chair: Councilor Rod Park (797-1547) Staff: Janet Matthews (797-1826) Committee Clerk: Susan Moore (797-1643)



METRO

600 NE Grand Ave.
Portland, OR 97232-2736

MEETING SUMMARY
Solid Waste Advisory Committee
Metro Regional Center, Room 370A/B
September 22, 2005

Members / Alternates Present:

Councilor Rod Park, Chair	Robert L. Weeks	Eric Merrill
David White	Dean Kampfer	Ray Phelps
JoAnn Herrigel	Anita Largent	Rick Winterhalter
Lori Stole	Dave Garten	Bruce Walker
Mike Hoglund	Wendy Fisher	Jeff Murray
Paul Edwards	Mike Miller	Glenn Zimmerman
Tom Badrick	Loretta Pickerell	Vince Gilbert

Guests and Metro staff:

Janet Matthews	Audrey O'Brien	Lee Barrett
Steve Apotheker	Leslie Kochan	Meg Lynch
Kathryn Schutte	Pat Vernon	Easton Cross
Roy Brower	Bryce Jacobson	Lynnette Mathisen
Robin Hawley	Baron Browning	Barb Leslie

I. Call to Order and Announcements.....Councilor Park

- Councilor Rod Park opened the meeting and bypassed introductions to get through the agenda as quickly as possible. The Councilor announced the formation of a SWAC Subcommittee on Rate Policies as discussed at the last SWAC meeting; and distributed a list of proposed members. Member confirmation is needed quickly to ensure that the work can be completed by March, in time for the next Rate Review Committee.
- Robin Hawley of SW&R Waste Reduction announced new Recycling Fact Sheets. The five updated sheets (Economy, Paper, Glass, Plastic, and Energy), are in response to requests from local government representatives and recycling specialists who work with businesses. They will be instrumental in helping to answer businesses' questions about what happens to recyclable materials and the benefits of recycling.
- Ms. Hawley also presented the group with two fliers from a partnership with the Building Owners and Managers Association (BOMA) in the region. These are for property managers to give to their tenants to educate them about recycling services available in the region. The fliers also announce two workshops in October about recycling regulations in the region. The workshops are open to everyone, not just BOMA members.

II. Solid Waste & Recycling Director's Update Mike Hogle

- Mr. Hogle told the Committee that the Columbia Environmental transfer station application is on the Metro Council agenda this afternoon. Council is scheduled to make a decision at that time, but could withhold a final decision until the next meeting, he said.
- Regarding the DSP (disposal system planning) project, Mr. Hogle explained that the first phase will be consideration of the ownership of Metro's transfer stations. This phase is anticipated to be complete by Spring 2006. Five consultants have been interviewed for this system analysis component. The chosen consultant will be given three models to study – the current system (public/private), private ownership, and an all publicly-owned model. Additionally, an RFP and scope of work are being drafted for a 'Valuation Consultant' to look at the value of our transfer stations from both an appraisal point of view and a business point of view. The third area being worked on tackles legal questions about a number of issues, including the effect of ownership or non-ownership on Metro's contract with Waste Management.
- Mr. Hogle then provided a summary of the Department's facility and services information from the past fiscal year.

There were 582,000 tons delivered to Metro transfer stations in FY 2004-05, up 2% from the previous year. Recovered dry waste at Metro's stations was 16.3%, up 1% from the previous year.

377,000 total transactions were completed at the two Metro transfer stations in FY 2003-04 (109,000 credit and 268,000 cash transactions). Over 17,000 loads were taken to Columbia Ridge Landfill in Arlington, Oregon. In the same timeframe, nearly 43,000 customers were served at Metro's hazardous waste collection facilities; another 9,000 citizens were served at the neighborhood roundups.

Metro estimates its waste reduction programs translate into more than 100,000 tons of prevented waste. The recycled latex paint facility (MetroPaint) processed 243,000 gallons of paint and generated \$579,000 of revenue, up 7%. The number of callers to Metro's Recycling Information was down slightly, but was offset by an increase in hits on Metro's website. The Solid Waste & Recycling Department's education programs reach more than 57,000 people annually; last year nearly 20% of area students K-12 were reached. Over 20,000 construction industry recycling "Toolkits" were distributed. In addition, organics collection increased from 20 tons at the program's inception last Spring to over 800 tons in August. The Recycle at Work program distributed 10,000 desk-side recycling boxes to over 1,000 businesses.

Inspections of solid waste facilities were increased by the Regulatory Affairs Division from 369 in FY 2003-04 to 405 in FY 2004-05. Staff traveled as far as 160 miles out of the Metro region to conduct these inspections. The Division was also responsible for clean-up of 1,108 illegal dumpsites.

III. System Sustainability Goals Eric Merrill

SWAC member Eric Merrill presented the final recommendations of the SWAC Subcommittee on Sustainability Goals for the RSWMP update (attached). He reported that the Subcommittee had come to a consensus on all the recommendations. The group would like the full SWAC to approve

the recommendations and forward them to the Metro Council. The Subcommittee also feels that the recommendations should be applied to other RSWMP chapters, and then all chapters reviewed for consistency. Concluding his presentation, Mr. Merrill suggested that Metro consider a vehicle other than the RSWMP, with a longer range than 10 years, to look at other goals.

Comments from SWAC included:

- Make sure that the way Goal #5 is implemented helps bring more businesses to the region, not push them out of the region.
- To whom does this apply – to all solid waste facilities, regulated and clean MRFs? That needs to be made clearer.
- Are Metro and the cities going to regulate all facilities?
- Follow up on co-operative implementation – make sure there is money to do this (grant money and sustainability issues).
- Did the Subcommittee consider what happens in the next 5 to 10 years if the goals are implemented?

After some discussion, a vote was called to move the recommendations to the Metro Council. The majority agreed, with no objections and two abstentions.

At this point, Councilor Park asked for approval of the minutes from July. A motion to accept the minutes of the last meeting as written was passed.

IV. Draft Interim Waste Reduction PlanJanet Matthews and Lee Barrett

Ms. Matthews explained the origin of an interim waste reduction plan, and identified the ground to be covered as pages 16-21 of the draft plan, concerning regional waste reduction programs in the following sectors: Business generators, commercial organics generators, construction and demolition debris, and residential generators (single family and multi-family dwellings).

The meeting was turned over to Lee Barrett, SW&R's Waste Reduction & Outreach Division Manager. Mr. Barrett began with the residential sector, explaining that the goal for this sector is to recover 39,000 additional tons. "We want to improve both the quantity and quality of the materials collected at the curb by a number of methods," Mr. Barrett said. "First, by a more consistent outreach campaign for the residential sector, and continuing to monitor the clean MRFs – seeing the quality of the materials that come into them, seeing what kind of a job they are doing, [and] what difficulties they are having in processing the material." Additionally, Mr. Barrett continued, Metro hopes to find funds to support the facilities, and to have the infrastructure to support material processing.

Moving to multi-family, the biggest hurdle is outreach and education in a sector that continuously changes. An additional 8,000 tons are desired from this area, Mr. Barrett said. Programs that are consistent throughout the local jurisdictions would be a huge help. The biggest portion is anticipated to come from the business sector, with 78,000 additional tons needed. "We are going to be focusing on paper grades and containers from [businesses], to increase the quantity of material coming from this sector by increasing the outreach activities," Mr. Barrett explained. Metro Council increased direct assistance to businesses from \$400,000 to \$600,000 this fiscal year, to fund more visits to businesses, "to help them to improve the quantity and quality of material that is coming from this sector." The RSWMP Contingency Work Group felt that the business sector goal could not be reach with education and outreach alone, but that some sort of regulation would be needed as well, he said.

Moving on to construction and demolition debris (C&D), the goal is an additional 35,000 tons. A system that is uniform throughout the region would help ensure that this material gets recovered. The Contingency Work Group thought that in this sector, too, some sort of regulation may be needed in addition to outreach.

In conclusion, Mr. Barrett said that 10,000 additional tons are needed from commercial organics. The biggest hurdle has been to find a processor for the material, but that puzzle piece is now in place. The next step is to increase the quantity of material sent to that market.

The question was asked, “How are we going to measure these goals?” Mr. Barrett responded, “Right now, we measure in tonnage, by the reports that are given to us, but we have been given the instruction to look at other methods of measuring. We would like to measure other elements that we should be considering, if we could find a way to do it.”

Another question was, “It seems like we are really struggling to reach the last one, two, three, four percent. Think about it for a moment as a resident, typically if we go to any market and we reach a saturation level – typically, general outreach advertising does not work. Typically outreach would get focused on segments, to find out who is not buying, and why is Metro going to look at markets in a sub-set way?” Waste Reduction Supervisor Meg Lynch replied that a focus group is going to look at recycling patterns among residents – what they do and don’t recycle and why, with the goal of creating outreach that targets the real issues. Mr. Hoglund added said that the Departments plans to bring in a consultant with a marketing background, “to look at everything we have done and what will help us achieve further progress.”

Staff were asked why there isn’t a waste reduction goal beyond 2009. They responded that no further goal has as yet been adopted by either the State or Metro, but the RSWMP is a living document and the goals will definitely be revisited.

V. Other Business and Adjourn.....Councilor Park

The City of Portland’s Bruce Walker raised an issue about the disposal of source-separated recyclables by a clean MRF. He maintained that this matter has caused erosion of public confidence in the entire system: Haulers, local governments, Metro, privately-operated MRFs, private paper mills, and other industries. He asked how the public can be assured that recyclables set out at the curb, both residential and in the business place, are actually being recycled. Mr. Hoglund offered to create a work group to discuss the issue and make some recommendations. This item, he said, will be put on the October SWAC agenda.

Next meeting:
Thursday, October 27, 2005
Room 370 A/B

Bjl/gbc
Attachment
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SWAC Subcommittee - Sustainability Goals
 Report to SWAC
 July 28 and September 22, 2005

Sustainability Definition

The group adopted the State of Oregon definition: *“Sustainability” means using, developing and protecting resources in a manner that enables people to meet current needs and provides that future generations can also meet future needs, from the joint perspective of environmental, economic and community objectives.* [ORS 184.421 (4)]

Sustainability Framework

The decision-making framework for implementing sustainable practices was defined as follows: "The sustainable operation of the solid waste system considers economic, environmental and societal resources and is consistent with the Natural Step system conditions so that nature is not subject to systematically increasing:

1. Concentrations of substances from the Earth's crust,
2. Concentrations of substances produced by society, or
3. Degradation by physical means;
and in that system
4. Human needs are met worldwide."

Potential Goals and Objectives for the Solid Waste System

Goal 1: Reduce greenhouse gas and diesel particulate air emissions.
Objective 1.1: Implement plans for greater energy efficiency.
Objective 1.2: Utilize renewable energy sources.
Objective 1.3: Reduce direct emissions of greenhouse gases from landfills and other facilities.
Objective 1.4: Reduce diesel particulate emissions in existing trucks, barges and rolling stock through best available control technology.
Objective 1.5: Implement long-haul transportation and collection alternatives where feasible.
Goal 2: Reduce storm water run-off.
Objective 2.1: Implement storm water run-off mitigation plans.
Goal 3: Reduce natural resource use.
Objective 3.1: Implement resource efficiency audit recommendations.
Objective 3.2: Implement sustainable purchasing policies.
Objective 3.3: Reduce disposed waste.
Goal 4: Reduce use and discharge of toxic materials.
Objective 4.1: Implement toxics reduction and management plans.
Goal 5: Implement sustainability standards for facility construction and operation.
Objective 5.1: Implement sustainability standards for site selection.
Objective 5.2: Require new construction to meet the Leadership in Energy and Environmental Design (LEED) standards of the U.S. Green Building Council.
Objective 5.3: Provide incentives for existing facilities to meet LEED standards.

Goal 6: Adopt best practices for customer and employee health and safety.
Objective 6.1: Reduce injuries by automating operations where effective.
Objective 6.2: Implement health and safety plans that meet or exceed current minimum legal standards.

Goal 7: Provide training and education on implementing sustainable practices.
Objective 7.1: Train key regional waste industry employees, government waste reduction staff and political officials in The Natural Step.
Objective 7.2: Inform suppliers, contractors and customers of solid waste operations of the adoption of sustainability goals and practices.

Goal 8: Support a Quality Work Life
Objective 8.1: Pay living wage and benefits to all workers.
Objective 8.2: Promote community service.
Objective 8.3: Strive to employ a diverse work force.

Goal 9: Employ sustainability values in seeking vendors and contractors.
Objective 9.1: Request sustainability plans from potential vendors and contractors.
Objective 9.2: Assist vendors and contractors in achieving sustainable practices.
Objective 9.3: Support local vendors when feasible.

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Interim Waste Reduction Plan

Regional Solid Waste Management Plan Update Project

September 2005

DRAFT

www.metro-region.org

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Draft Interim Waste Reduction Plan
(for this agenda item only)

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Regional Program Focus Areas

Introduction

Achieving this Plan's vision of a sustainable community requires a cooperative effort and strong public support. Based on input from the community, industry and local government partners, this chapter outlines specific goals and objectives that will guide the direction of waste reduction programs over the next ten years. The objectives are intended to provide a path to achieve the region's adopted goals. The objectives will guide the annual work plans produced by Metro and local governments and identify areas of regional interest particularly in promotion and education - where regional coordination and cooperation are required for successful program efforts. The objectives are written to provide flexibility in annual program planning efforts and emphasize six elements:

- Expanding the opportunity to recycle
- Life-long learning
- Making connections between social and economic activities and the environment
- Targeting sectors where most recoverable tonnage remains
- Emphasizing the waste reduction hierarchy
- Coordination and cooperation

Providing the "opportunity to recycle" is the cornerstone of state and regional waste reduction policy. State law requires that the opportunity be provided and that residents and businesses be informed about them.

Education and outreach is critical to providing information to residents and businesses to encourage them to make environmentally responsible choices in their daily lives. At all stages of our lives, learning how our daily choices affect the environment and natural resources helps us understand our relationship to the environment and builds a personal commitment to making responsible choices. This Plan recognizes that different strategies are needed to reach people at different times in their lives. School programs need to be educational and engaging to children; information provided to busy adults must be easily accessible, practical and usable.

A comprehensive approach to environmental problems recognizes that the strength of our community and its economy are directly connected to the health of natural systems. The traditional three "R's" - reduce, reuse and recycle - are an essential part of the region's educational approach. Greater emphasis on the "reduction" approach may be the most effective way of conserving resources and protecting the environment.

Programs will focus on sectors where the most recoverable tonnage remains as it provides the most opportunity for increased recovery. Programs will be designed in the direction of recovery while adhering to the solid waste hierarchy of reduce, reuse, recycle, recover, compost, and landfill.

Programs will look beyond generator-based strategies and target the design and manufacturing of products.

Regional and local governments will need to work together to achieve the adopted goals and objectives. Coordination of efforts between those providing education and outreach services is important to avoid duplication of services and to reach the largest audiences. Coordination also can assist in addressing complex environmental problems that cannot be solved by one agency. For example, protection and restoration of streams and critical habitat is an important regional goal. Partnering between hazardous waste programs and water quality agencies can be an effective method of approaching this problem.

The goal and objectives described in this chapter are categorized into four sections: Waste Reduction, Education Services, Toxicity Reduction, and Product Stewardship. The combined objectives for these four areas are designed to achieve the region's goals.

Waste Reduction

Achieving the region's vision of a future where waste is viewed as an inefficient use of resources requires residents and businesses to adopt sustainable behaviors to reduce waste. Waste reduction practices aim to reduce the amount of waste generated and disposed using strategies such as waste prevention, reuse, recycling, composting or energy recovery. Over the past ten years, the region has made significant progress in reducing waste and achieved a 57 percent recovery rate in 2003. More can be done, however, and if all

recyclable material could be collected then the recovery rate could be increased to as much as 86 percent.

Waste Reduction Goal

Increase the sustainable use of natural resources by achieving the recovery rate of 64 percent by 2009 as defined by state statute.

Specific objectives describing how each sector (Single-Family, Multi-Family, Business, C&D and Commercial Organics) will contribute to this goal are described below. Each of these five sectors requires unique objectives to address the issues of waste reduction within the region. The creation of regionally coordinated plans with access to services by all is the foundation of each set of objectives.

Residential (Single-Family)

In 2003, the recycling rate in the residential sector was 49.6 percent. Following a substantial increase in curbside recycling rates upon introduction of commingled collection to curbside programs, increases to the recycling rate have recently tapered off. In order to stimulate additional participation and to ensure steady progress toward the waste reduction goal, the region has identified the following objectives:

- 1.0 *Conduct annual outreach campaigns that focus on waste prevention, toxics reduction and/or increasing the quantity and quality of recycling setouts.*
Public education and outreach are the primary tools to promote wider participation in recycling programs. Regular campaigns focusing on increasing participation in waste reduction activities and improving the quantity and quality of materials set out for recycling will help achieve the region's waste reduction goal. Regional campaigns are cooperative in nature and use a clear and consistent message across the region.
- 2.0 *Identify and implement service provision changes and incentives to increase recycling.*
Aside from education and outreach, incentives in the form of monetary savings or convenience also encourage residents to participate in waste reduction and recycling programs. Currently, collection rates are structured to provide some

degree of savings with increased recycling and reduced solid waste (e.g., mini-can rates, monthly collection, etc.). Further research needs to be conducted on a cooperative regionwide basis to identify potential opportunities for additional incentives through the residential rate structure, service options or other means.

- 3.0 *Expand curbside service by adding new materials as markets and systems allow.*
The region's residents continue to demand more opportunities to recycle additional materials at the curb. Markets for recycled materials can be volatile and it is vital to ensure that any new materials have sustainable and sound markets before they are added to curbside collection. All material additions will need to be carefully reviewed for current and potential market trends as well as the physical and economic feasibility of collection and processing.
- 4.0 *Increase efforts to improve the quantity and quality of residential curbside recycling setouts.*
In order to maintain healthy and sustainable markets for recyclables collected curbside, outreach targeted at increasing the quantity and quality of recycling setouts will be conducted on a regular basis. Residents should be given the information necessary to understand the importance of reducing contamination, the larger-scale impacts that improper setouts have on the recycling system, and the importance of quality on the end-products made from their recyclables.
- 5.0 *Identify and evaluate new collection technologies on a cooperative regionwide basis for implementation.*
With emerging solid waste collection technologies, it is important to evaluate new collection techniques and options that may increase efficiencies and recycling rates. Research on new collection options will be conducted on a cooperative regionwide basis.
- 6.0 *Promote and educate residents about home composting and appropriate on-site management of yard debris and food waste.*
Composting and on-site management is the least expensive and most environmentally

sound option for handling yard debris and food scraps. Half of the region's residents participate in this activity and divert more than 50,000 tons of organics annually. The focus for future activities in this area will be on providing technical support for current composters and developing more cost-effective home compost bin promotions that target interested residents.

- 7.0 *Develop residential organics collection programs once stable regional processing capacity is in place and if financial feasible.* While home composting of vegetative food waste and yard debris is the preferred management method, the region will also examine the economic and technical feasibility of implementing curbside collection of residential food wastes.

Implementation

Detailed program planning and implementation of these objectives will be coordinated through the Local Government Recycling Coordinators group, which includes local governments, Metro and Oregon Department of Environmental Quality staff. Implementation plans will be presented for review to the Regional Solid Waste Advisory Committee annually.

Multi-Family

Recycling services to residents living in apartments (multi-family units) also contribute to regional recovery levels. Multi-family households include residential dwellings of five or more units. These households, which range from suburban garden apartments to high-rise buildings in dense urban areas, present a number of challenges and opportunities for recycling. While technically these are defined as residential dwellings, most multi-family buildings share common garbage and recycling areas and are serviced as commercial accounts by garbage haulers. Providing effective education and outreach to this fluid community in a consistent manner to increase the quality and quantity of recycling is the goal of the following objectives:

- 1.0 *Implement a consistent program suited to the needs of multi-family housing.* The region will cooperatively develop a program tailored to the needs of multi-family housing. The program will provide a consistent message throughout the region.

- 2.0 *Provide regional education and outreach targeting multi-family housing.*

Education is vital to increasing participation in multi-family recycling programs. Outreach materials will be designed to address the barriers and benefits of recycling in a multi-family setting and will be adapted to a variety of conditions and collection systems.

- 3.0 *Identify and evaluate new collection technologies for implementation on a cooperative regionwide basis.*

Multi-family recycling presents many unique challenges. Emerging collection technologies will be evaluated on a cooperative regionwide basis to identify potential opportunities to enhance and improve collection.

Implementation

Implementation of these objectives will be coordinated through the Multi-Family Waste Reduction Work Group. This Work Group will present its implementation plans for review to the Regional Solid Waste Advisory Committee annually.

Business

Regional efforts to recover business waste are coordinated through the Business Waste Reduction Initiative. The initiative aims to develop and implement programs to meet the 2009 recovery goal and encourage behavior change in the business sector. Immediate emphasis is on recovery with long-term emphasis given to waste prevention and buying recycled products.

The following objectives are designed to provide an integrated framework that supports businesses in their efforts to improve their recycling programs, initiate waste prevention practices, increase their purchases of recycled-content products and incorporate sustainable practices into their operations. In this context, sustainable practice refers to changes that are made to address the impact of a business's daily and on-going operations on the environment. Some sustainable practices addressed in this initiative include whether a business has a Green Team, reviews their operational practices to reduce waste, establishes internal and external environmental policies, and identifies packaging minimization strategies.

The following objectives will assist the region in reaching the 2009 recovery goal:

- 1.0 *Provide businesses with annual education and technical assistance programs focused on waste reduction and sustainable practices.*

The business community has indicated in a variety of forums that one-on-one tailored education and assistance is a preferred approach to increase recycling rates. By offering a comprehensive education and technical assistance program to businesses, the region addresses the needs of businesses that want to start or improve their waste reduction programs. It also focuses attention on a waste stream that generates a large percentage of the region's waste.

- 2.0 *Develop information and resource materials that demonstrate the benefits of waste reduction and sustainable practices to support the assistance program.*

Information and resources, such as fact sheets, recycling containers, decals and Internet tools, provide additional tools to help businesses to participate in the assistance program and improve their waste reduction practices.

- 3.0 *Conduct annual regional outreach campaigns to increase participation in the business assistance program and to promote recycling opportunities and sustainable business practices.*

Regional outreach campaigns are one of the most effective methods for increasing business participation in waste reduction programs and sustainable practices. Outreach campaigns are critical to the success of the business assistance program because they generate individual business interest and broadly promote a waste reduction activity to a large portion of the business sector.

- 4.0 *Implement waste reduction and sustainable practices at government facilities.*

Government facilities make up a large portion of the business waste stream in the region. Focusing on government facilities shows a commitment to serve as a model for the business community.

- 5.0 *Identify opportunities for increasing recovery including service provision options and incentives for recycling.*

Incentives in the form of monetary savings or convenience also encourage businesses to participate in waste reduction programs. Currently, collection rates and service standards are set by some, but not all, jurisdictions. Further research needs to be conducted on a cooperative regionwide basis to identify potential opportunities for additional incentives through commercial rate structures, service standards or other means.

- 6.0 *Periodically review end-markets to assess cost-effectiveness, material quality and capacity.*

Conducting periodic market studies and reviewing end-markets to ascertain the viability of recycling traditional and hard-to-recycle materials can help provide businesses with the most up-to-date information. Many businesses generate materials that historically have had a low opportunity for recycling. It is important to keep abreast of new markets that can make use of materials generated by businesses.

- 7.0 *Identify and evaluate recycling regulations to increase recovery in the business sector.*

Many municipalities around the country (including the City of Portland and Seattle) have passed laws that either require items to be recycled or that ban them from landfill disposal. This approach should be examined to determine implementation feasibility and impact on waste reduction.

Implementation

Implementation of these objectives will be coordinated by Metro through the intergovernmental Business Recovery Work Group. The Work Group will present its implementation plans for review to the Regional Solid Waste Advisory Committee annually. The plans will detail annual programs, costs, and roles and responsibilities. Local governments and Metro will be jointly responsible for the implementation of these plans.

Construction and Demolition

Programs targeting the construction industry are coordinated through the Construction and Demolition Waste Reduction Initiative. Regional efforts follow a three-pronged approach to managing construction and demolition debris. The first prong emphasizes waste prevention, salvage and reuse. Practices and programs focusing on prevention and reuse are among the most important because they are typically the lowest cost and

most effective methods of managing construction and demolition debris. Salvage and deconstruction practices are one of the few tools available to effectively reduce construction and demolition debris. The second prong focuses on developing effective construction and demolition debris recycling and processing programs for the debris that is not a candidate for deconstruction and salvage. The third prong emphasizes the need to maintain and support viable and diverse markets for used building materials and the recyclable materials found in C&D debris. Based on prior research, the primary targets for increased recovery of construction and demolition debris include:

- New commercial under \$3 million
- Commercial remodel/tenant improvement
- Complete and selective building demolition
- Residential remodeling (performed by licensed contractors)

The following objectives are designed to provide an integrated framework that supports the construction industry in their efforts to develop sustainable practices promoting environmental protection and resource conservation. The following objectives will also assist the region in meeting the 2009 recovery goal:

1.0 *Develop a regionwide system to ensure that recoverable construction and demolition debris is salvaged for reuse or recycled.*

The region's construction industry currently enjoys a full range of waste reduction options and choices including salvage and reuse, source separated recycling, post-collection recovery, and disposal. It is unlikely that waste reduction goals will be achieved for the construction and demolition sector, however, because low-cost disposal is still available at two landfills. The region will address this problem by working with stakeholders to develop a program to ensure that recoverable construction and demolition debris is either recycled on-site or put through a post-collection recovery program before disposal.

2.0 *Provide the construction industry with annual outreach, education and technical assistance programs that demonstrate the benefits of green building including building material reuse and recycling.*

The construction industry is generally supportive of reuse and recycling, but often lacks information and assistance on reuse and recycling opportunities.

Maintaining an ongoing outreach, education and technical assistance program helps builders make more informed decisions about managing their waste. Green building is a growing enterprise and it is important to work cooperatively with local green building programs to promote reuse and recycling.

3.0 *Support the development of and access to viable end-product markets for construction and demolition materials.*

Conduct periodic market studies to assess the viability and diversity of local salvage markets or markets for materials typically found in construction and demolition waste. If markets appear weakened, then technical, monetary or research assistance may be provided to strengthen, maintain and diversify markets for construction and demolition materials.

4.0 *Include sustainable practices and products in the development, construction, renovation and operation of government buildings, facilities and lands.*

Construction, renovation and maintenance of government buildings and facilities represents a large portion of the construction activity in the region. These projects result in significant quantities of construction and demolition debris and present an opportunity to serve as models for businesses in the region by maximizing the reuse and recycling of construction and demolition debris.

Implementation

Implementation of these objectives will be coordinated through the Construction and Demolition Waste Reduction Initiative and intergovernmental work group. The Work Group will present its implementation plans for review to the Regional Solid Waste Advisory Committee annually. The plans will detail annual programs, costs, and roles and responsibilities. Local governments and Metro will be jointly responsible for the implementation of these plans.

Commercial Organics

Regional efforts to recover commercially-generated food waste are coordinated through the Organics Waste Reduction Initiative. The region follows a two-track approach to organic waste management. The first track emphasizes waste prevention, donation to food banks and diversion to uses such as animal feed when appropriate. This is considered to be a least-cost

approach as these are the highest and best uses for food and remove the need to manage it as a waste product. The second track focuses on implementation of a collection and processing system to recover organic waste that cannot be diverted to higher-end uses. Regional efforts target large organics-rich businesses and industries including:

- Large retail grocery stores
- Large restaurants
- Hotels
- Institutional cafeterias
- Produce wholesale warehouses
- Food processors

The following objectives are designed to provide an integrated framework that supports the development of sustainable practices promoting environmental protection and resource conservation in businesses generating organic wastes:

- 1.0 *Provide focused outreach and education programs for targeted businesses to support and increase organic waste prevention, donation and diversion practices.*
Donation is the highest end-use for surplus food, and an established system to collect and redistribute donated food exists in the region. Emphasizing food donation also helps to address the problems of hunger in the region and the state. Oregon ranks among the highest in the nation for the incidence of hunger and food insecurity.
- 2.0 *Enhance access to organics recovery services throughout the region.*
Organic waste that cannot be diverted to higher-end uses may be collected for composting. The region will focus on increasing composting opportunities available to businesses and every effort will be made to utilize existing infrastructure and tailor generator and collection programs to fit within existing operations and regulatory systems.
- 3.0 *Periodically review the viability of end-product markets and assist with market development efforts.*
Conducting periodic market studies to assess the viability of local compost markets is an important activity. If market trends indicate a weakening in demand, Metro and others can assist regional compost facilities with market

development as needed to strengthen and maintain the marketability of compost and solid amendment products made from organic materials diverted from the landfill.

- 4.0 *Work to ensure that compost products are specified for use in government projects.*
Metro and local governments will coordinate with other government agencies to incorporate the standard use of compost products for landscaping, soil conditioning and erosion control on publicly-funded projects.
- 5.0 *Implement organic waste recovery programs at government facilities where feasible.*
Metro and local government facilities that generate significant quantities of organic waste will serve as models for businesses in the region by adopting organics recovery programs.

Implementation

Implementation of these objectives will be coordinated through the Organics Recovery Initiative and intergovernmental work group. The Work Group will present its implementation plans for review to the Regional Solid Waste Advisory Committee annually. The plans will detail annual programs, costs, and roles and responsibilities. Local governments and Metro will be jointly responsible for the implementation of these plans.

Education Services

Achieving the region's vision of a sustainable community requires strong public support. Regional education and outreach efforts help build this support by supplying the information that residents and businesses need to make environmentally responsible choices in their daily lives. Education and outreach efforts also build and reinforce the resource conservation and environmental protection ethics that are essential to creating a sustainable community.

Thus, the goal of education services, within the context of this Plan, is:

Education Services Goal

Increase the adoption of sustainable behaviors by households and businesses through increased knowledge, motivation and commitment.

Information Services

Within our region, there are a large number of providers of disposal, recycling and other waste reduction services. A variety of different types of organizations - local governments, private businesses and non-profit agencies - provide these services. Providing residents and businesses with easily accessible and accurate referral to these services is critical to reaching regional waste reduction goals. Objectives for information services include:

- 1.0 *Provide a regional information clearinghouse and referral service.*
Maintaining communication with residents and businesses about waste reduction programs and services offered within the region is essential to help them make environmentally responsible choices.
- 2.0 *Develop and provide information services for residents and businesses that are targeted to specific waste streams, materials or generators.*
Information services are more effective when they address specific needs and use methods that match how generators receive information and respond to waste reduction initiatives.

Implementation

Metro and local governments will work cooperatively to develop and distribute education materials for households and businesses. Metro will research and provide technical assistance on the most effective methods to educate households and businesses on waste reduction options. Local governments, haulers, and Metro will coordinate the implementation of these education programs. Implementation of these objectives will be coordinated through the intergovernmental work groups that develop implementation plans for residents and businesses.

School Education

Life-long learning about the value of resource conservation and the importance of protecting the environment can begin with children in elementary and secondary schools. The guiding approach is to develop curriculums and programs that are appropriate for each age group and cumulatively help build an environmental stewardship ethic. Specific objectives to bring about this result are described below:

- 1.0 *Develop and provide education programs that help teachers incorporate resource conservation concepts, including waste prevention, into their*

teaching

Today's teachers have a multitude of demands on their time and resources. Providing teachers with assistance on curriculums and programs helps teachers meet their needs while simultaneously assisting the region in meeting its waste reduction goals.

- 2.0 *Work with schools and teachers to increase support for regional solid waste programs and create opportunities for partnerships.*
Schools are vital institutions within our community. Working and partnering with schools provides an opportunity to educate the next generation about resource conservation programs. Schools are also large resource users and waste generators in themselves and need to be active participants in waste reduction programs.
- 3.0 *Develop and provide programs at the elementary level that establish fundamental concepts of resource conservation and environmental awareness through an active learning experience.*
Elementary aged students are often eager to learn about ways they can help make the world a better place. Providing age-appropriate information and concepts about resource conservation that encourage awareness and participation will build a strong foundation for life-long sustainable behaviors.
- 4.0 *Develop and provide programs at the secondary level (middle schools and high schools) that will extend concepts established at the elementary level and prepare students for making responsible environmental choices in everyday adult life.*
By middle and high school, students can begin to make connections between their daily choices and behaviors and how they impact the environment. By providing opportunities to learn that encourage their critical thinking skills, students can gain an appreciation for and a sense of stewardship for the environment that will hopefully carry over into adulthood.

Implementation

Metro and local governments will continue to provide school waste reduction education programs. Metro and local governments will provide technical assistance with school recycling programs and will coordinate the development and distribution of education materials to meet local needs. Implementation of these objectives

will be coordinated with waste reduction workgroups and the Regional Solid Waste Advisory Committee.

Toxicity Reduction

Homeowners use a variety of products in their daily life, some of which pose risks to human health and the environment during use, storage and disposal. Examples of these risks include: fires or child poisonings resulting from improper storage; injuries to disposal system workers (haulers, transfer station or landfill workers); contamination of streams and fish from runoff of lawn and garden care products; and pollution of streams or groundwater from improper disposal of auto products such as used oil or antifreeze. To help prevent these types of occurrences, the goal of toxicity reduction is to:

Toxicity Reduction Goal

Reduce the use and improper disposal of products generating hazardous waste in order to protect the environment and human health.

Historically, the region's approach to dealing with the problem has been to provide alternative disposal options for the public through collection facilities and events. Collection programs are costly to operate, however, and waste volumes continue to increase while only a portion of the total waste generated each year comes into the collection program. Hence, in recent years there has been increasing emphasis on preventing the generation of household hazardous waste.

Reducing hazardous waste generation may be addressed through educating the public or through a product stewardship approach. Product stewardship looks to manufacturers to make, retailers to sell, and consumers to buy products that generate less hazardous waste. A fuller explanation of the product stewardship approach is found in the Product Stewardship section later in this chapter.

Hazardous Waste Reduction

Changing the way people use products in their home is a very challenging undertaking. The large number of households in the region, wide array of products, and competing messages from manufacturers and retailers

all pose barriers to encouraging residents to change their behavior.

Traditional education techniques such as informational brochures can be ineffective in getting people to change long-standing behavior. Because of this, regional education and outreach efforts have looked at new methods to get to residents to engage in more environmentally sustainable behavior. The objectives for achieving hazardous waste reduction are as follows:

- 1.0 *Provide hazardous waste education programs that are geared toward behavior change.*
A growing body of research suggests that there are ways to tailor education messages to more effectively bring about changes in behavior that can benefit public health and the environment. Applying techniques such as Community-Based Social Marketing will help ensure effective education programs. Programs should include learning about and targeting specific audiences that use hazardous products, identifying what barriers there may be to changing these behaviors, and overcoming these barriers. Education on hazardous products in the home should also be a part of Metro's school age education program.
- 2.0 *Provide hazardous waste reduction messages and information to all customers bringing waste to household hazardous waste collection sites.*
A large number of the region's residents are already taking one step by bringing their leftover hazardous products to the collection sites. This audience is likely to be receptive to information about the hazards of those products and less toxic alternatives.
- 3.0 *Coordinate hazardous waste education efforts with related efforts conducted by government agencies and community groups in the region and in other areas.*
Along with the hazardous waste reduction efforts conducted by Metro, a number of other organizations in the region are involved in similar efforts, such as water and air quality agencies, and stream habitat and water quality programs. Coordination eliminates duplication of efforts and can help solve problems that are too complex for any one group to address. Coordinating with hazardous waste education efforts in other areas helps keep regional

education providers informed of the latest research and the successes of approaches that others have tried.

- 4.0 *Provide programs that focus on those products whose toxic and hazardous characteristics pose the greatest risks to human health and the environment, or which are very costly to properly dispose or recycle.*

With limited resources available for hazardous waste reduction efforts, it is important to focus on types of waste that have the greatest health, environmental, and financial impacts. A continued focus on pesticides is consistent with these priorities, for instance. As more understanding is gained on the health and environmental impacts of other waste types, waste reduction messages should focus on those that are found to be the most problematic.

- 5.0 *Research and develop measurement tools for generation, impacts and reduction of hazardous waste when this can be accomplished at a reasonable cost.*

In order to meet the goal of reducing the environmental and health impacts of leftover hazardous products, it is important to fully characterize these impacts. However, there is limited information available on many important aspects of household hazardous waste use and disposal. When it can be done at a reasonable cost, the region should acquire quantitative information on factors such as: purchasing, generation, and disposal practices; repeat users; specific environmental and health impacts; consumer attitudes and behaviors; and effectiveness of behavior change programs.

Hazardous Waste Collection

Even with substantial effort invested in preventing the generation of hazardous products, there will still be a need to manage and properly dispose of substantial volumes of waste products. The region aims to provide convenient, safe, efficient environmentally sound collection and disposal services for hazardous waste that cannot be reduced through prevention and education. Hazardous waste collection objectives include:

- 1.0 *Maximize the efficiency of public collection operations and continually search for the most cost-effective methods.*

In order to maximize the amount of waste properly managed with limited financial resources, collection programs must operate in an efficient manner. Program operators should continually be identifying ways to reduce expenditures for materials, labor and disposal contractors, while maintaining high standards for environmental protection, worker health and safety, and customer service.

- 2.0 *Manage collected waste in accordance with the hazardous waste hierarchy: reduce, reuse, recycle, energy recovery, treatment, incineration, and landfill.*

The hazardous waste hierarchy differs from the solid waste hierarchy, because composting is not an option for hazardous waste. In addition, the options of treatment and incineration (without energy recovery) are available for hazardous waste, and for certain types of waste these are the most environmentally sound option. This hierarchy should be used when procuring contractors to provide ultimate disposal of household hazardous wastes collected, in order to maximize the environmental soundness of the disposal methods selected.

- 3.0 *Operate collection services with a high priority placed on worker health and safety.*

Wastes brought in to household hazardous waste collection centers can pose a wide variety of risks to the workers handling them. It is important to have a comprehensive health and safety program in place in order to properly protect these workers.

- 4.0 *Coordinate collection programs with waste reduction and product stewardship efforts.*

When waste reduction efforts target particular wastes due to toxicity or cost concerns, collection programs should be available for disposal of the targeted waste. In some cases Metro should not undertake collection, however, but should pursue product stewardship solutions. In other cases the convenience of Metro's collection efforts may need to be increased, when this is consistent with waste reduction goals and can be done in a cost-effective manner.

5.0 *Utilize solid waste facilities efficiently and effectively for the delivery of collection services.* Existing solid waste facilities that serve the public should be utilized as collection points for household hazardous waste, as many household hazardous waste customers will know their location and may want to take advantage of a single facility where they can bring household hazardous waste, trash and recyclables. In some cases, these facilities may serve as the site of permanent collection depots, in others they may serve only as occasional sites as a part of a schedule of temporary events.

6.0 *Offer a Conditionally Exempt Generator (CEG) program to manage waste from small businesses.*

While Federal and state laws allow small businesses that are classified as Conditionally Exempt Generators (CEGs) to dispose of their hazardous waste in the trash, Metro discourages this practice. As part of the effort to keep this waste from the solid waste system, Metro operates a disposal program that provides a convenient, economical way for these generators to properly dispose of their wastes.

7.0 *Conduct waste screening programs at solid waste facilities to minimize the amount of hazardous waste disposed of with solid waste.* In spite of the availability of household and CEG collection programs, some hazardous waste is still put into the trash. Effective screening programs will be used at solid waste facilities to keep this hazardous waste from the landfill.

8.0 *Implement bans on disposal of specific hazardous products as needed to address public health and environmental concerns.* Some localities around the country have passed laws to ban the disposal of select or all hazardous products. When disposal of specific products poses a known risk to public health or the environment in the region, disposal bans should be implemented.

Product Stewardship

Over the past decade, local governments and the state have been faced with rising waste quantities, strong

competition for limited fiscal resources, and a growing amount of expensive and difficult-to-recycle products. These problems resist traditional solid waste management methods focused primarily on improving end-of-life management through better recycling and disposal programs. Product stewardship has emerged as a way to help deal with these problems:

Product Stewardship means that whoever designs, produces, sells or uses a product shares the responsibility for minimizing the product's environmental impact throughout all stages of the product's life cycle. The greatest responsibility lies with whoever has the most ability to affect the overall environmental impacts of the product.

The concept behind product stewardship is to look across the entire life cycle of a product and have the party that can do the most to reduce a product's environmental impacts take on that responsibility. "Products" in this sense are defined to include durable goods, nondurable goods and packaging. The idea focuses on changing the system of product responsibility from resting primarily on governments to having others – consumers, retailers and manufacturers – share in reducing the product's life cycle impacts. The goal of regional product stewardship activities is to:

Product Stewardship Goal

Shift the responsibility to manufacturers, distributors and retailers for ensuring that products are designed to be nontoxic and recyclable, and incorporate the cost of managing their end-of-life in the product's price.

The burden on government will be eased when manufacturers design, businesses distribute and sell, and consumers purchase, products that have fewer toxics and are more durable, reusable and recyclable. Product stewardship shifts responsibilities "upstream" from government to product retailers, distributors and manufacturers. These parties also take greater responsibility for ensuring products are collected, recycled and that markets exist for the recovered materials. If there are costs to recycle or dispose of a product, consumers should pay them in the product's original price. This could be achieved by methods including a visible fee (e.g., an advance recycling fee) or

by the manufacturer internalizing such costs (e.g., automobile pollution and safety requirements). Objectives to achieve product stewardship are detailed below:

- 1.0 *Identify priorities for product stewardship activities by evaluating products based on the significance of environmental impact (e.g., resource value, toxicity), current barriers to recycling, and current financial burdens on Metro and local governments for existing recovery programs.*
The region will target their resources on product stewardship activities that will have the greatest impact on decreasing the local burden. For example, hazardous household products that require the region to have a special and costly collection program are likely candidates. The region will coordinate with others at state, regional and national levels also seeking to set product priorities.
- 2.0 *Implement, within the region, industry-wide product stewardship agreements or individual company stewardship programs.*
Product stewardship agreements require the support of local and state governments to ensure the programs are effectively implemented. A number of national industry stewardship programs are currently in place and progress is being made in others. Local efforts can assist these programs by promoting product take-back opportunities and other activities. Local support for these programs will encourage other product manufacturers and retailers to consider the product stewardship approach.
- 3.0 *Provide education to public and private sector consumers about product stewardship and, in particular, their role in purchasing environmentally preferable products (EPP).*
Product stewardship encourages changes in thinking and behavior from a consumption and use perspective toward waste minimization and sustainable production. Educating public and private consumers about the environmental impacts of their purchases and encouraging them to consider these impacts when making purchasing and disposal decisions promotes such change. Businesses, institutions and governments provide direct support to

stewardship programs when they purchase products that are part of such programs. Governments have a special opportunity to show leadership by adopting policies that support EPP.

- 4.0 *Work at the local, regional, state or national level to develop and implement policies, such as recycled-content requirements, deposits, disposal bans and advance recycling fees, that encourage product stewardship programs.*
Local, regional, state and national policies can provide the necessary incentives or legislative foundation required to make product stewardship programs efficient, effective and sustainable. For example, establishing clear regulations and ensuring a level playing field between and among businesses are important to the success of product stewardship programs.

Plan Implementation

Introduction

This chapter of the Plan describes the process for implementation and revisions. The emphasis is on regional cooperation and consensus-building among cities, counties, Metro, DEQ, the solid waste industry and citizens.

This Plan describes waste reduction practices that will enable the region to meet its goals and objectives. Key factors guiding implementation and performance include:

- Ensuring coordination and cooperation among governments and the private sector;
- Allowing flexibility in developing solutions;
- Monitoring and evaluating the implementation of strategies and programs;
- Measuring performance with a system of benchmarks and targets; and
- Implementing a process for corrective action and plan revision.

Plan Implementation

The purpose of the implementation program is to ensure that the objectives are achieved. Implementation will require the following types of coordination efforts:

Metro/Local Government Annual Work Plans

Annual work plans are the primary means by which Metro and local governments plan for the programs, projects and activities that implement the goals and objectives in this Plan. These work plans will be developed on annual basis by the regional work groups described below.

Regional Work Groups

Work groups involving Metro, local governments, DEQ and the private sector will continue to study regional problems and recommend program implementation techniques. These work groups play an important role

in ensuring implementation of the Plan. They may also assist in evaluating programs and recommending revisions to the Plan.

Local Government Implementation Efforts

Once annual work plans are developed, local government staff will work with elected officials, citizen advisory groups and waste haulers to manage collection franchises and set service rates to achieve annual work plan goals and objectives.

Private Sector Effort

The private sector will continue to develop and expand recycling and recovery services including drop-off centers, material recovery facilities and collection services.

Metro Implementation Efforts

Metro will conduct demonstration projects, special studies, and other research designed to remove barriers to implementing specific recommended or alternative strategies and programs.

Metro is responsible for coordinating implementation efforts and ensuring that all such efforts:

- Maintain consistency with the Plan's vision, direction and objectives as well as with the State of Oregon's Integrated Resource and Solid Waste Management Plan;
- Demonstrate how Metro, local governments and the private sector will each contribute to achieving the Plan's waste reduction efforts;
- Implement effective programs adapted to local conditions;
- Remove barriers to recommended practices or develop effective alternatives; and
- Agree on the implementation schedule for objectives

Future Plan Revisions

This Interim Waste Reduction Plan is not intended to continue as an independent document, but will be integrated into the RSWMP in 2006. As part of the RSWMP, the waste reduction plans will undergo periodic review and amendment as needed, with major updates expected every ten years.

Table 1. Goals and Objectives for the Interim Waste Reduction Plan

Waste Reduction. *Goal: Increase the sustainable use of natural resources by achieving the recovery rate of 64 percent by 2009 as defined by state statute.*

Residential

- 1.0 Conduct annual outreach campaigns that focus on waste prevention, toxics reduction and/or increasing the quantity and quality of recycling setouts.
- 2.0 Identify and implement service provision changes and incentives to increase recycling.
- 3.0 Expand curbside service by adding new materials as markets and systems allow.
- 4.0 Increase efforts to improve the quantity and quality of residential curbside recycling setouts.
- 5.0 Identify and evaluate new collection technologies on a cooperative regionwide basis for implementation.
- 6.0 Promote and educate residents about home composting and appropriate on-site management of yard debris and food waste.
- 7.0 Develop residential organics collection programs once stable regional processing capacity is in place and if financially feasible.

Multi-Family

- 1.0 Implement a consistent program suited to the needs of multi-family housing.
- 2.0 Provide regional education and outreach targeting multi-family housing.
- 3.0 Identify and evaluate new collection technologies for implementation on a cooperative regionwide basis.

Business

- 1.0 Provide businesses with annual outreach, education and technical assistance programs focused on waste reduction and sustainable practices.
- 2.0 Develop information and resource materials that demonstrate the benefits of waste reduction and sustainable practices to support the assistance program.
- 3.0 Conduct annual regional outreach campaigns to increase participation in the business assistance program and to promote recycling opportunities and sustainable business practices.
- 4.0 Implement waste reduction and sustainable practices at government facilities.
- 5.0 Identify opportunities for increasing recovery including service provision options and incentives for recycling.
- 6.0 Periodically review end-markets to assess cost-effectiveness, material quality and capacity.
- 7.0 Identify and evaluate recycling regulations to increase recovery in the business sector.

Construction and Demolition

- 1.0 Develop a regionwide system to ensure that recoverable construction and demolition debris is salvaged for reuse or recycled.
- 2.0 Provide the construction industry with annual outreach, education and technical assistance programs that demonstrate the benefits of green building including building material reuse and recycling.
- 3.0 Support the development of and access to viable end-product markets for construction and demolition materials.
- 4.0 Include sustainable practices and products in the development, construction, renovation and operation of government buildings, facilities and lands.

Commercial Organics

- 1.0 Provide focused outreach and education programs for targeted businesses to support and increase organic waste prevention, donation and diversion practices.
- 2.0 Enhance access to organics recovery services throughout the region.
- 3.0 Periodically review the viability of end-product markets and assist with market development efforts.
- 4.0 Work to ensure that compost products are specified for use in government projects.
- 5.0 Implement organic waste recovery programs at government facilities where feasible.

Education Services. *Goal: Increase the adoption of sustainable behaviors by households and businesses through increased knowledge, motivation and commitment.*

Information Services

- 1.0 Provide a regional information clearinghouse and referral service.
- 2.0 Develop and provide information services for residents and businesses that are targeted to specific waste streams, materials or generators.

School Education

- 1.0 Develop and provide education programs that help teachers incorporate resource conservation concepts, including waste prevention, into their teaching.
- 2.0 Work with schools and teachers to increase support for regional solid waste programs and create opportunities for partnerships.
- 3.0 Develop and provide programs at the elementary level that establish fundamental concepts of resource conservation and environmental awareness through an active learning experience.
- 4.0 Develop and provide programs at the secondary level (middle schools and high schools) that will extend concepts established at the elementary level and prepare students for making responsible environmental choices in everyday adult life.

Toxicity Reduction. *Goal: Reduce the use and improper disposal of products generating hazardous waste in order to protect the environment and human health.*

Hazardous Waste Reduction

- 1.0 Provide hazardous waste education programs that are geared toward behavior change.
- 2.0 Provide hazardous waste reduction messages and information to all customers bringing waste into household hazardous waste collection sites.
- 3.0 Coordinate hazardous waste education efforts with related efforts conducted by government agencies and community groups in the region and other areas.
- 4.0 Provide programs that focus on those products whose toxic and hazardous characteristics pose the greatest risks to human health and the environment, or which are very costly to properly dispose or recycle.
- 5.0 Research and develop measurement tools for generation, impacts and reduction of hazardous waste when this can be accomplished at a reasonable cost.

Hazardous Waste Collection

- 1.0 Maximize the efficiency of public collection operations and continually search for the most cost-effective methods.
- 2.0 Manage collected waste in accordance with the hazardous waste hierarchy: reduce, reuse, recycle, energy recovery, treatment, incineration, landfill.
- 3.0 Operate collection services with a high priority placed on worker health and safety.
- 4.0 Coordinate collection programs with waste reduction and product stewardship efforts.
- 5.0 Utilize solid waste facilities efficiently and effectively for the delivery of collection services.
- 6.0 Offer a Conditionally Exempt Generator (CEG) program to manage waste from small businesses.
- 7.0 Conduct waste screening programs at solid waste facilities to minimize the amount of hazardous waste disposed with solid waste.
- 8.0 Implement bans on disposal of specific hazardous products as needed to address public health and environmental concerns.

Product Stewardship. *Goal: Shift the responsibility to manufacturers, distributors and retailers for ensuring products are designed to be nontoxic and recyclable, and incorporate the cost of managing their end-of-life in the product's price.*

- 1.0 Identify priorities for product stewardship activities by evaluating products based on the significance of environmental impact (i.e. resource value, toxicity), current barriers to recycling and current financial burden on Metro and local governments to recover.
- 2.0 Implement, within the region, industry-wide product stewardship agreements or individual company stewardship programs.
- 3.0 Provide education to public and private sector consumers about product stewardship and their role in purchasing environmentally preferable products.
- 4.0 Work at the local, regional, state or national level to develop and implement policies, such as recycled-content requirements, deposits, disposal bans and advance recycling fees that encourage product stewardship programs.

Attachment for Agenda Item V

Preventing Disposal of Source-separated Recyclables

What are the possible solutions?

A. Solutions must be implemented system-wide. It is not merely a question of whether the Clean MRFs should be regulated. Solutions should be focused in four areas:

1. Public Education/Outreach
2. Hauler Inspection program
3. Public/private partnerships, particularly in sharing information and data
4. Clean MRF reviews, inspection

B. Regulation of Clean MRFs at this point is not necessarily the answer. However, some specific ideas include:

- Local governments, Metro, and Haulers: Help MRFs avoid increased costs by stepping up education and outreach to generators to reduce prohibitives and contaminants.
- MRFs and Metro: Maintain voluntary sorting/sampling arrangement in which Metro staff monitors material received and processed for markets by clean MRFs.
- Metro and MRFs: Continue required annual inspections at MRFs performed by Metro regulatory affairs staff.
- MRFs and Loc. Govts: Establish an informal feedback loop between MRFs and local governments to identify and rectify material quality problems from certain geographic areas.
- Local governments and Haulers: Add language to hauler franchises that haulers take commingled recycling loads only to facilities that allow the local government or its designated agent to periodically inspect delivered loads.
- Local governments and MRFs: Before local governments add any new materials to curbside collection programs, discuss/determine operational cost implications with MRFs.
- Local governments, Metro, solid waste industry: Deliver consistent message and information that curbside recyclables are indeed being recycled.