

A G E N D A

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TEL 503-797-1700 FAX 503-797-1797



METRO

MEETING: REGIONAL SOLID WASTE ADVISORY COMMITTEE (SWAC)

DATE: Thursday, September 27, 2007

TIME: 10:00 a.m. to Noon

PLACE: Council Chambers, 600 NE Grand Avenue, Portland

10 mins. I. Call to Order Kathryn Harrington

*Introductions/announcements
Approval of minutes**

5 mins. II. Council Update Kathryn Harrington

5 mins. III. Citizen Communications for Non-agenda Items..... Kathryn Harrington

5 mins. III. Solid Waste & Recycling Director's Update..... Mike Hoglund

**20 mins. IV. Reducing Emissions Impacts from Collection Vehicles:
A Regional Approach** Jim Watkins

Information and discussion item: *At the request of local governments and DEQ, Metro convened approximately 25 interested participants in a series of meetings to develop a Diesel Emission Retrofit Program for solid waste collection vehicles in the region. At the July SWAC meeting, the proposed program was outlined. Information presented included the amount and types of emissions from our collection fleet, available retrofit technologies, goals for a proposed regional program, and a program implementation plan. The implementation plan recommended that Metro fund the retrofit portion of the program, with local governments responsible for developing an accelerated vehicle replacement program for older vehicles. For this meeting, based on information requests from the committee, Metro staff will: provide additional information of the rate impact of accelerating vehicle replacement, and comment on what percentage of the region's particulate matter (PM) emissions are from collection vehicles. SWAC will be asked to identify any additional information needed for the October meeting that would facilitate a recommendation to the Metro Council.*

**55 mins. V. The Regional Solid Waste Management Plan
(RSWMP) Update*** Janet Matthews

Action item: *With the conclusion of the final round of public outreach on the draft Plan, SWAC is now being asked to recommend approval of the revised document to Metro Council. This agenda item will provide members with a reminder of significant direction provided by the Plan, highlight several revisions to the Plan, and offer an opportunity to discuss any outstanding issues before the membership vote.*

*Denotes material included in the meeting packet

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

**Chair: Councilor Kathryn Harrington
(503-797-1553)**

**Staff: Janet Matthews
(503-797-1826)**

**Committee Clerk: Gina Cubbon
(503-797-1645)**

Proposed SWAC Agenda Items
October - December 2007

October 25	November 29	December 27
Multi-family recycling (information)	Sustainable operations work plan (information, discussion)	No December meeting
Disaster debris management (information, discussion)	Transport contract evaluation criteria (information, discussion)	
Diesel retrofit (action)	Wet waste allocation (information, discussion)	

Key to Agenda Designations

Information item: New information provided to or exchanged among SWAC members.

Discussion item: Comments/questions/exchange of views sought from SWAC members in response to presentation. Discussion items are usually related to plans, policies, programs, or practices.

Final discussion item: Remaining comments/questions/exchange of views sought from SWAC members. A Final Discussion agenda item will usually precede a requested SWAC vote by one month.

Action item: Requested SWAC vote to recommend plan, program or policy to Council.

ATTACHMENT
SWAC Agenda Item I
September 27, 2007

Regional Solid Waste Advisory Committee (SWAC)
July 27, 2007 Meeting Summary



METRO

600 NE Grand Ave.
Portland, OR 97232-2736

MINUTES OF THE METRO SOLID WASTE AND RECYCLING COMMITTEE (SWAC) MEETING
Metro Regional Center, Council Chambers
Thursday, July 26, 2007

Members / Alternates Present:

Councilor Kathryn Harrington	Audrey O'Brien	Dave Garten
Mike Hoglund	Anita Largent	JoAnn Herrigel
Glenn Zimmerman	Bruce Walker	Mike Miller
Paul Edwards	Susan Ziolko	Adam Winston
Janet Malloch	Ray Phelps	Theresa Koppang
Mike Leichner	Lori Stole	

Guests and Metro staff:

Courtney Dale	Wendy Fisher	Easton Cross
Segeni Mungai	Larry Harvey	Karen Feher
Steve Kraten	Jim Watkins	Mike Dewey
Roy Brower	Chuck Geyer	Lee Barrett
Matt Tracy	Michelle Bellia	Gina Cubbon

I. Call to Order and Announcements.....Councilor Kathryn Harrington

- Councilor Harrington opened the meeting at 10:03 a.m.
- Multnomah County citizen representative Dave Garten announced that he's putting together a tour of Oregon's only bio-diesel plant, SeSequential Pacific Biofuels (Mr. Garten is CEO of SeSequential). He'll get more information to the group as the plans develop.
- Approval of minutes: Bruce Walker moved to accept the minutes as written; Mr. Garten seconded the motion. With one abstention and no nays, the motion passed.

II. Council Update.....Councilor Kathryn Harrington

- Councilor Harrington reported that the July 12 Council meeting included a public hearing of the Enhanced Dry Waste Recovery Program (EDWRP). The project spurred "extensive testimony," she said. A set of amendments was introduced at the meeting, including removal of a surcharge contained in the original version. Council voted to postpone action on the amendment package until August 2. Final vote will likely be August 16.
- Options for the Business Recycling Program were reviewed by Council and at a recent MPAC meeting. At MPAC, the presentation suffered by being late in the agenda; those members who stayed took a straw poll. Results favored a business standards approach over mandates.
- Council is exploring financial measures to support conservation education and regional parks maintenance. There is no actual project proposal yet, but if one is drawn up, it may result in a ballot measure.

III. Citizen Communications for Non-agenda ItemsCouncilor Kathryn Harrington

The Councilor introduced this new agenda item, which has been very helpful on other committees. No items were raised.

IV. Solid Waste & Recycling Director’s Update.....Mike Hogle

- Mike Hogle handed out a sheet illustrating the FY 2007-2008 rates (attached). The new rates become effective September 1. A letter will be going out to haulers.
- An informational bulletin was developed for haulers with the help of Oregon Refuse & Recycling’s Dave White. The piece (attached) outlines material recovery facility (MRF) rules and standards for those interested in running such an operation. The sheet will also be sent to local government solid waste authorities, Mr. Hogle said.
- There will be no SWAC meeting in August; November and December’s meetings will be on a different Thursday because of the Christmas holiday and room availability problems. November 29, December 6 and December 13 are under consideration.
- The public comment period for the Regional Solid Waste Management Plan (RSWMP) closes on August 3. Responses will be published sometime in the Fall.
- Member Wade Lange has resigned from the Committee because of work / time constraints. Mr. Hogle asked that the record show Mr. Lange’s ideas and perspective have always been very appreciated by staff. Mr. Lange has suggested a replacement, who will be contacted and considered.

V. Metro’s Illegal Dumping and Enforcement Program.....Roy Brower

Regulatory Affairs Division Manager Roy Brower gave a PowerPoint overview, including several of what he referred to as “dirty pictures” – photos of illegal dumpsites (presentation attached). The program, he explained, began in 1993 and the Ordinance formally adopted in 1994. The program employs both Metro and local law enforcement staff. (Two additional deputies work primarily on flow control matters.)

Nearly all dumpsite investigations and cleanup are on public property; staff won’t usually become involved in private property matters, though they will occasionally help landowners find the culprit and assist in prosecution. While 1,500 tons of illegally-disposed trash has been recovered since the program’s inception (an average of eight incidents a day last year), and \$369,000 in fines levied, Mr. Brower reported that less than 20% of those fines have been collected. People who dump illegally, he noted, “tend to not pay their fines.” While such dumpsites (and people) will always exist, the program has helped keep large and chronic dumping in check. Unfortunately, dumping on farm and forest land increases as the region becomes more densely populated.

Each dumpsite is photographed, scanned for evidence, and then low-risk inmates are used to clear the area (through an intergovernmental agreement). Surveillance equipment has had mixed success because of technical problems (failed batteries, and interference from wildlife, for example). Citizens can report illegal dumping issues through Metro Recycling Information, the Metro website, or by contacting Regulatory Affairs staff. Crews also re-check areas that have chronic incidents.

The program is not equipped to handle hazardous waste, but will work on such sites enough to be able to turn them over to the EPA and DEQ. The program also helps clean up transient camps if requested. Plans are underway for a clear branding for the program and expansion of education and outreach (particularly to neighborhood groups).

The City of Milwaukie's JoAnn Herrigel commented that it would be very helpful if Metro could help inform neighborhood groups about what is under whose jurisdiction.

VI. Reducing Emissions Impacts from Collection Vehicles: A Regional Approach.....Jim Watkins

Jim Watkins, Manager of the Engineering & Environmental Services Division, was up next with a PowerPoint presentation (attached) describing Metro's involvement with a workgroup of local government and solid waste industry representatives who looked at the issue of retrofitting garbage and recycling collection vehicles with diesel particulate filters. The group met three times and developed a draft program.

The issue of health impacts from commercial vehicle emissions is important. While the risk of cancer from emissions is expected to decrease with new, improved vehicles, fitting existing rolling stock with particulate filters can make a significant difference now. Mr. Watkins showed estimates for emission reduction over a five-year period for various retrofit options. The overall fleet is old and many trucks may not be suitable for retrofitting, in which case a replacement program may be necessary.

The workgroup recommended that Metro be responsible for implementation of a retrofitting program, and that local governments require participation. The total program is estimated at just under \$7 million; first year maintenance is included in that estimate. Financing options suggested by the workgroup included increasing the Regional System Fee for a period of three years (since the program would benefit all residents), and/or local governments adjusting their rates to help with retrofitting and replacement of those vehicles unsuitable for retrofitting. Funding the program through the RSF would be the most equitable way because lowering vehicle emissions benefits the entire region, and because the fleets vary widely. If the RSF was used, Metro could contract with a provider who would then bill Metro directly.

Next step: Briefing Metro Council. Both SWAC and the Council will review the issue in the Fall.

Questions / comments:

- Have alternative fuels been looked into? Yes, Mr. Watkins said, and the group made sure that any retrofits implemented would work with biodiesel. Audrey O'Brien of DEQ added that alternative fuels are being looked at nationally, so retrofitting is simply a way to further reduce emissions from the technological side. The highest priority reductions are being looked at first.
- What percentage of the region's air pollution would be reduced? Ms. O'Brien offered to look for those figures.
- Why retrofit at all, when replacement would reduce emissions more, Allied Waste's Ray Phelps queried. He suggested not raising the Regional System Fee (RSF), but letting local governments work with the rates to pay for new vehicles. Mike Leichner agreed that new vehicles would make sense and reduce emissions twice as much as retrofits.
- Vehicle replacement would be tricky and expensive, Waste Management's Adam Winston cautioned. It's unrealistic to think all haulers can replace all their older vehicles. A broader discussion is needed; garbage trucks aren't a primary cause of emissions.
- The City of Portland is actively looking at cost versus results. No matter that garbage trucks are a small percentage of the problem; there are significant benefits to the region, Bruce Walker stressed. He would like to see Metro move ahead with retrofitting while the issue of new vehicles is considered.
- Ms. Herrigel asked that options be presented for several scenarios, such as small haulers who can't afford to replace their vehicles.

More next steps: Staff will present expanded funding information at a future SWAC meeting, and will work with local governments about replacement possibilities.

VII. Other Business and Adjourn..... Councilor Harrington

Councilor Harrington reminded the group that there would be no meeting in August. September agenda items are listed on the back of this meeting's agenda.

The Councilor adjourned the meeting at 11:34 a.m..

Prepared by:

Gina Cubbon
Administrative Secretary
Metro Solid Waste & Recycling Department

gbc
Attachments: Disposal Charges as of September 1, 2007
MRF Informational Bulletin
Illegal Dumping Program
Diesel Retrofit Workgroup Results

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Queue

Disposal Charges at Metro Transfer Stations

FY 07-08 Rates Effective September 1, 2007 - August 31, 2008

The disposal charge for mixed solid waste at Metro transfer stations is comprised of two parts: a fixed charge (“transaction fee”) for each use of the transfer station, and a variable charge (“tip fee”) based on the amount of solid waste delivered for disposal in each transaction. The components of these fees recover costs of the various programs and services described below.

	<u>Through August 2007</u>	<u>FY 07-08</u>	<u>Change</u>
Transaction Fee	\$8.50/\$3.00	\$8.50/\$3.00	- 0 -
<i>Recovers the cost of scalehouse operations, billing, finance charges, and related fixed costs of the transfer stations. Users of the automated scales pay a reduced amount of scalehouse costs.</i>			
Metro Tip Fee (by component)			
<i>Tonnage Charge</i>			
<i>Recovers the cost of transfer, transport & disposal (primarily, the BFI/Allied, CSU, fuel and OWS contracts); a portion of Metro station management costs, depreciation, and the other costs of transfer station disposal services.</i>	\$46.20	\$47.09	\$0.89
<i>Fees & Taxes</i>			
Regional System Fee			
<i>Recovers the costs of Metro’s regional services and programs, excluding the costs of disposal services. See NOTES on back.</i>	13.57	14.08	0.51
Metro Excise Tax	8.35	8.23	(0.12)
<i>Contributes toward Metro general government costs, regional parks, tourism development.</i>			
DEQ Fees	1.24	1.24	- 0 -
<i>Promotion fee, orphan site fund, etc. collected on behalf of Oregon State Department of Environmental Quality.</i>			
Community Enhancement Fee	0.50	0.50	- 0 -
<i>Collected on behalf of communities in which the transfer stations are located.</i>			
	\$23.66	\$24.05	\$0.39
Subtotal, Fees & Taxes			
Total, Metro Tip Fee	\$69.86	\$71.14	\$1.28
Minimum Load Charge	\$17 <i>(up to 240#)</i>	\$17 <i>(up to 240#)</i>	- 0 -

——— See also NOTES on reverse ———

Notes:

Metro's transaction fee and tip fee are charged to Metro transfer station users only. Other facilities may charge different rates.

The Regional System Fee and Metro Excise Tax are charged on all solid waste that is generated in the region, regardless of the disposal site.

DEQ imposes its fees (totaling \$1.24) on waste delivered to all DEQ-permitted disposal sites. The host fee (community enhancement), currently 50¢ per ton at Metro's transfer stations, is a local option.

Loads that weigh 240 pounds (0.12 tons) or less are charged a flat rate of \$17 (\$8.50 tonnage charge + \$8.50 transaction fee.)

The Regional System Fee recovers the cost of waste reduction, hazardous waste, illegal dumpsite monitoring & cleanup, enforcement, latex paint recycling, Recycling Information Center call center, etc. It excludes costs of solid waste disposal operations.

Different rates are available on other wastes, including yard debris, wood waste, tires (on and off rim), and appliances. Source-separated recyclable material (such as cardboard, newsprint, scrap paper, metals, and other materials) and hazardous wastes are generally accepted at no charge. Call Metro's Recycling Information Center at 503-234-3000 for current information.



Metro Regulated Material Recovery & Reloading Activities A Solid Waste Hauler Informational Bulletin

July 2007

Recently, a number of solid waste haulers have contacted Metro's Solid Waste & Recycling Department with an interest in conducting other regulated solid waste activities – such as operating a Material Recovery Facility (“MRF”) or a reload facility. Some haulers that collect mixed dry waste, like construction and demolition debris, or provide drop-box services have indicated such an interest. The purpose of this informational bulletin is to help answer some questions that have arisen.

MATERIAL RECOVERY FACILITIES

What kind of MRFs are licensed by Metro?

Metro recognizes two types of MRFs. One type is currently exempt from having to obtain a Metro license, while the other type requires a Metro license to operate. Both types of MRFs are subject to Metro inspections to verify their regulatory status.

- “Clean” MRF – This type of facility exclusively receives source-separated recyclable material (e.g. residential curbside and source-separated commingled recyclables). A clean MRF is not required to obtain a Metro license. (Refer to Metro Code Section 5.01.040(a)(3))

- “Dirty” MRF – This type of facility receives mixed dry waste and recovers recyclable material from the mixed waste through processing, picking and sorting out recyclables. A dirty MRF must have a Metro license to operate. (Refer to Metro Code Section 5.01.045(a)(1))

Can I pick through my drop boxes and salvage recyclable materials like metal and wood without a Metro MRF license?

No. This type of activity is only allowed if you have applied for and received a Metro license to operate a MRF. If you collect construction debris, demolition debris or other “dry waste” in drop boxes, and pick through it to salvage recyclable materials like metal and wood, you are conducting material recovery activities and must obtain a Metro license. Otherwise, the collected materials should be delivered to a Metro-authorized facility that recovers materials from mixed dry waste. There are several such facilities in the Metro region that are authorized to accept mixed dry waste. For the nearest facility and directions, contact the Metro Recycling Information Center at (503) 234-3000.

RELOADING

Reloading is the activity of consolidating loads of solid waste into larger containers or vehicles for more efficient transportation to a recovery facility or a transfer station but not directly to a landfill or disposal site. Some types of reload activities are required to have a Metro license to operate.

What kind of reloading is licensed by Metro?

Metro recognizes two types of waste reloading operations that may be conducted by a hauler. One type is currently exempt from having to obtain a Metro license, while the other type is required to obtain a Metro license. All reloads are subject to Metro inspections to verify their regulatory status.

- “Exempt” reload – This type of operation does not need a Metro license if the hauler holds a city or county franchise and reloads only solid waste loads collected from its franchised collection area (if collecting from more than one franchise area, then the areas must be contiguous). In addition, all reloaded waste must be delivered to a Metro-authorized MRF or transfer station. (Refer to Metro Code Section 5.01.040(a)(7))
- Regulated reload – All other reloading activities that do not meet the conditions of an exempt reload, including yard debris reloading and mixed dry waste reloading, require a Metro license to operate. (Refer to Metro Code Section 5.01.045(a)(3) and (4))

Are certain hauling activities regulated by Metro?

Metro does not regulate the collection of solid waste and source-separated recyclable materials, or become involved in franchising haulers or setting rates. Cities and counties regulate the collection of solid waste and source-separated recyclable material.

Metro does, however, regulate certain solid waste activities conducted inside the Metro region including waste reloading, transfer stations, and MRFs that recover recyclables from mixed loads of dry waste. Metro attempts to draw a regulatory line between collection activities that do not require a license and solid waste processing activities that do require a license. Haulers should also be aware that certain activities may also require city or county land use approval, and may require a solid waste permit from the Oregon Department of Environmental Quality (DEQ).

How can I get more information?

Be aware that Metro has adopted new facility operating standards for a dirty MRF and dry waste reloads. These standards require such a facility to meet a number of operating requirements that include locating inside an enclosed building and on an impervious surface, such as asphalt or concrete.

For more Metro information on reloading, material recovery and Metro solid waste facility regulations, please contact Bill Metzler, Senior Solid Waste Planner at (503) 797-1666. You may also visit the Metro web site at www.metro-region.org. Note that the DEQ may also require permits for certain activities regardless of Metro’s requirements. At the DEQ, please contact Amanda Romero for more information at (503) 229-5353.

Metro's Illegal Disposal & Enforcement Program

Program Goals

- Quick & efficient cleanup
- Prevent chronic dumping
- Investigate & prosecute
- Coordinate



Program Background

- Started in 1993
- Illegal dumping ordinance in 1994 (Chapter 5.09)
- \$500,000/year program
- Current staff = 4.00 FTE

Program Background

- Public property cleanups.
- Investigation of dumping.
- Assist local jurisdictions.
- Focus in Multnomah & Clackamas Counties, Portland & Beaverton.



NE 185th & Marine Drive,
Portland (Multnomah County)

Program Milestones

- 12,000 dumps cleaned since 1993 (~1,000/year)
- 1,548 tons of waste removed since 1993
- \$369,000 in fines since 1994



5916 SE 85th, Portland,
(Multnomah County)



Work Crew Rig

Dumps Cleaned Up In 2007



**NE Cully & Columbia Blvd. , Portland
(Multnomah County)**



**SE Palmquist – between Fleming & Hogan, Portland
(Multnomah County)**



**N. Portland Road & Old Marine Drive, Portland
(Multnomah County)**



**6640 NE Portland Blvd., Portland
(Multnomah County)**



**11620 SE Capps Road, Clackamas
(Clackamas County)**



**SE Mather Road by Railroad Tracks
(Clackamas County)**



**SW Grabhorn & Farmington Road, Aloha
(Washington County)**

Dumps Cleaned Up In July 2007



**N. Swift and Columbia Boulevard, Portland
(Multnomah County)**



**NE 203rd and Sandy, Portland
(Multnomah County)**



**N. Swift Court, Portland
(Multnomah County)**



**SE 72nd and Duke, Portland
(Multnomah County)**



**6956 N. Montana, Portland
(Multnomah County)**



**9501 N. Swift, Portland
(Multnomah County)**



Public/Private Property Investigations

**Sunrise Water Authority, Clackamas
(Clackamas County)**



Public/Private Property Investigations

**11601 SW Teal, Beaverton
(Washington County)**

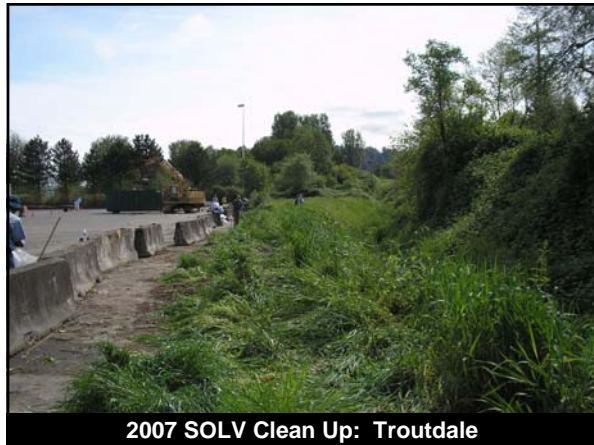


Public/Private Property Investigations

**1300 NE 68th, Portland
(Multnomah County)**



**Transient Camp Grand Avenue Bridge Portland,
(near Metro)**



- ### Program Trends
- Dumping is persistent
 - Size of dumps are smaller
 - Large dumps eliminated
 - Quick response keeps large and chronic dumping under control
 - Dumping on farm & forest land is increasing
 - Dumping done by criminal/socially irresponsible or non-English speaking population unaware of disposal options

- ### Program Direction
- Establish clear identity/brand for program
 - Expand education/outreach to local code/law enforcement and neighborhood groups
 - Add new dumping investigator (Tigard PD)
 - Surveillance video equipment has had mixed success – future use under evaluation

- ### Program Direction (cont.)
- Evaluate use of “real-time” geographic information to better pinpoint and identify dumping trends
 - MCSO internal issues could disrupt personnel
 - Metro will encourage Washington County to participate in regional program

Program Contact Information

Recycling Information Center:

(503) 234-3000

Barb Leslie:

(503) 797-1835

Web Address:

www.metro-region.org

(click on "*report illegal dumping*" under the Garbage, recycling and waste prevention section and follow instructions.)

Regional Diesel Retrofit Program

Regional Solid Waste Advisory Committee

July 26, 2007

Presenter: Jim Watkins

Desired Outcome

Regional
Diesel Retrofit
Program

SWAC understanding of:

- Emissions related health issues
- Emission reduction technologies
- Strategy for emission reduction in Metro region
- Finance options
- Next steps

Agenda

Regional
Diesel Retrofit
Program

- Item 1: Background
- Item 2: Current Emission Inventory
- Item 3: Program Overview and Goals
- Item 4: Discussion

Why is Metro Involved?

Regional
Diesel Retrofit
Program

- Local governments and DEQ requested Metro assistance
- Haulers cross local governmental boundaries
- Metro has technical expertise
- Meets Council goals for environmental health and smart government
- Supports RSWMP sustainability goal of reducing greenhouse gases/ diesel emissions
- State's Toxics Reduction Program has targeted diesel PM reductions in the region

Regional approach needed to maximize diesel reductions.

Project Summary

Regional
Diesel Retrofit
Program

- Metro Hired Consulting firm Emissions Advantage to formulate reduction plan
- Major steps in plan development
 - Inventory collection vehicles (~1000)
 - Estimate pollutant volumes/types
 - Convene workgroup
 - Develop retrofit options and rank effectiveness
 - Develop goals
 - Draft program plan

Estimate pollutant volumes/types and inventory collection vehicles (\pm 1,000).

Air Quality Challenges – Health Impacts

Regional
Diesel Retrofit
Program

- Diesel pollutants of greatest concern are Particulate matter (PM), including fine particles, toxic pollutants, and oxides of nitrogen (NOx)
 - PM – linked to asthma and respiratory problems
 - NOx – linked to respiratory infection, decreased pulmonary function.
 - NOx combined with volatile organic compounds (VOCs) form ground-level ozone (smog)

Air Quality Challenges – Health Impacts (cont.)

Regional
Diesel Retrofit
Program

Oregon DEQ

- Has estimated the cancer risk posed by diesel PM in Oregon at 17 in one million in 2002, decreasing to 8 in one million by 2017
- Has established a goal to reduce the cancer risk to 1 in one million by 2017; diesel emissions reductions will help to meet that goal
- Estimates the health costs at \$109,000 per ton of PM, and \$11,000 per ton of NOx

Vehicle Inventory Summary Statistics

Regional
Diesel Retrofit
Program

- Estimated $\pm 1,000$ vehicles
- Estimated total annual 15.4 million vmt
- Range of annual vmt 3,000 to over 20,000/vehicle
- Estimated 260 vehicles - 15 years old or more (26% of combined fleet)
- Reported fuel economy range 2.2 to 5 mpg/vehicle
- Average vehicle speed 1.4 to 30 mph

Estimated Emission Inventory Distribution

Regional Diesel Retrofit Program

FLEET TOTALS			
Est. Emission Inventory - T/Year			
VOC	CO	NOx	PM
23.6	113.8	329.5	34.9

CONTRIBUTION TO CITY OF PORTLAND			
Est. Emission Inventory - T/Year			
VOC	CO	NOx	PM
12.0	58.1	163.0	17.6
50.6%	51.0%	49.5%	50.3%

CONTRIBUTION TO CLACKAMAS COUNTY			
Est. Emission Inventory - T/Year			
VOC	CO	NOx	PM
3.9	18.5	56.1	5.9
16.5%	16.2%	17.0%	16.9%

CONTRIBUTION TO MULTNOMAH COUNTY			
Est. Emission Inventory - T/Year			
VOC	CO	NOx	PM
1.7	8.1	21.8	2.4
7.2%	7.1%	6.6%	6.8%

CONTRIBUTION TO WASHINGTON COUNTY			
Est. Emission Inventory - T/Year			
VOC	CO	NOx	PM
6.0	28.8	87.1	8.9
25.3%	25.3%	26.4%	25.5%

City of Portland comprises ½ of emission inventory.

BASELINE 5 YEAR INVENTORY

	VOC	CO	NOx	PM
Baseline - 1,000 vehicles (tons)	113.30	542.60	1586.30	162.80

TOTAL PROGRAM 5 YEAR EMISSIONS REDUCTIONS

PERCENT REDUCTIONS FROM BASELINE

RETROFIT OPTION	ESTIMATED NO. OF AFFECTED VEHICLES	VOC REDUCTIONS	CO REDUCTIONS	NOx REDUCTIONS	PM REDUCTIONS
REPLACE VEHICLES OLDER THAN 15 Yrs	470	31.9%	25.8%	35.4%	41.2%
DPF	322	25.2%	24.2%	0.0%	24.9%
DOC+CCV	129	6.7%	4.3%	0.0%	4.1%
DOC	86	3.5%	2.9%	0.0%	1.9%
ECM REPROGRAM	157	0.0%	0.0%	3.4%	0.0%
TOTAL MAXIMUM REDUCTIONS		67.3%	57.2%	38.8%	72.1%

Program will utilize most effective emission reduction strategy feasible for each vehicle.

Program Goals

Regional
Diesel Retrofit
Program

1. Maximum feasible reductions of PM, including ultra-fine particles (with reductions in NOx emissions also being important and highly desirable)
2. Maximum certainty of continued use of EPA- or CARB-verified product implementation to achieve air quality objectives
3. Program that can be funded through existing funding/financing mechanisms
4. Maximum participation from all fleets

Program strives to reduce maximum volume of priority pollutants using certified technologies.

Emission Reduction Strategy

Regional
Diesel Retrofit
Program

- Encourage accelerated vehicle retirement for vehicles over 15 years old
- Installation of retrofit technologies
 - Diesel Particulate Filters
 - Diesel Oxidation Catalyst (with crankcase recirculation where possible)
- Engine reprogramming where possible

Program uses most effective emission reduction strategy or technology feasible for each vehicle.

Recommended Responsibilities

Regional Diesel Retrofit Program

- Metro: Implementation of Retrofit Program
 - Through a third party: arranges product vendors, product installation, and testing
- Local Governments will require participation
 - Encourage vehicle replacement through rates

Metro would be responsible for the retrofit portion of the emission reduction program, including funding, while local governments encourage participation of fleets.

Cost Estimate for Mix of Retrofit Products

Regional Diesel Retrofit Program

Retrofit Option		Unit Cost	Total
Replace vehicles older than 15 years	470	N/A	N/A
DPF	413	\$13,000	\$5,374,200
DOC+CCV	166	\$3,000	\$498,000
DOC	110	\$1,500	\$165,000
ECM Reprogram	157	\$250	\$39,250
Total Est. Product, Installation and 1st Yr Maint Cost			\$6,076,450
Estimated admin and Project Mgmt Costs (over 3 year			\$900,000
Total Est Program Cost			\$6,976,450

Financing Options

Regional
Diesel Retrofit
Program

1. Increase regional system fee (approximately \$1.65/ton for 3 years)
2. Vehicle replacement: Local Governments adjust through rate-setting process
3. Grants (e.g., congestion mitigation/air quality)

Question: Which funding mechanism seems most appropriate?

Next Steps

Regional
Diesel Retrofit
Program

- Metro staff briefs Metro Council
- Update funding options
- Council/SWAC review and presentation (fall)

Desired Outcome

Regional
Diesel Retrofit
Program

SWAC understanding of:

- Emissions related health issues
- Emission reduction technologies
- Strategy for emission reduction in Metro region
- Finance options
- Next steps

ATTACHMENT

SWAC Agenda Item V

September 27, 2007

**Responsiveness Report
Regional Solid Waste Management Plan (RSWMP)**

RESPONSIVENESS REPORT

Regional Solid Waste Management Plan Update: Final Phase of Public Involvement

In the summer of 2007, Metro conducted a final public comment period on the updated Regional Solid Waste Management Plan (RSWMP). RSWMP incorporated the Interim Waste Reduction Plan, which received extensive public comment before being approved by the Oregon Department of Environmental Quality and the Metro Council in 2006.

Opportunities to comment on the complete RSWMP were publicized through emails to an interested parties list, and through advertisements placed in The Oregonian and in all of the newspapers within the Community Newspaper network. In addition, the public comment opportunity was noticed on Metro's website, and in several Metro Councilor newsletters.

Summary of public comment

During this final phase of public and stakeholder involvement, a total of 22 people commented on the Plan. Many comments supported a variety of changes to the Portland collection system rather than dealing specifically with RSWMP contents. Comments relevant to the Plan did not require significant Plan changes.

Comments included:

- a desire to have more materials added to curbside recycling, especially plastics
- concerns about excessive and non-recyclable packaging
- support for changes to the curbside collection system
- suggestions that the plan include other numeric goals beyond the 2009 waste reduction goal of 64%
- questions about Plan enforcement
- suggestions that the Plan's sustainability focus be strengthened
- support for the Plan's direction and focus on sustainability
- recognition of the Plan's importance in meeting state goals and statutes

Staff response

Metro staff reviewed all comments. Responses to those comments directly relevant to the Plan are contained in this report. This responsiveness report and a link to the final draft of RSWMP were posted on Metro's website.

Council adoption

The Metro Council is expected to consider the RSWMP for adoption in the fall of 2007. A public hearing will be held at that time, providing the final opportunity for public comment on the Plan.

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Public comment on the draft RSWMP update

What we heard	How we responded
Plan Vision, Goals and Policies	
Why is the Plan so focused on a short-term goal of 64 percent waste reduction by 2009?	The 64 percent goal is a benchmark adopted in state law. RSWMP is, in large measure, designed to help achieve this goal. The Plan anticipates that the goal will not be achieved by 2009, largely due to shortfalls in commercial sector material recovery.
It should be made clear that the Plan's waste reduction goal only gets us to 2009. Need to establish a longer-term goal, with activities and benchmarks.	As detailed in chapter 5, amendments will be proposed for the RSWMP within the next two years to incorporate new benchmark material recovery goals. Other measures of performance in resource conservation may be proposed as well.
The Plan should step back and talk about why sustainability is important.	The Plan assumes readers have a basic understanding of sustainability. To further that understanding, however, the Plan defines sustainability ("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 . . ."). The importance of sustainability is illustrated through the Plan's focus on resource conservation and pollution prevention (chapter 4) and system operations (chapter 5).
Put the 12 policies, 13 goals and 68 objectives in one place, maybe an appendix.	The final Plan will include a table in the appendix that lists the policies, goals and objectives.
A sustainable practice should be viewed as an opportunity that one should be encouraged to evaluate, not as just an alternative to consider.	Policy 3.0 will be revised in response to this comment as follows. 3.0 <u>Evaluating Opportunities for Sustainability</u> - alternatives evaluation <u>Opportunities for increasing the sustainability of alternatives identified for</u> business practices or programs will be evaluated based on: a) technological feasibility; b) economic comparison to current practice or conditions; and c) net environmental benefits.
Strengthen the vision by adding a statement that the region will work toward zero waste.	The vision as stated is generally agreed to by the Plan's diverse stakeholders. Zero waste is a concept valued by stakeholders who believe it can fundamentally reshape how we look at "waste;" other stakeholders consider zero waste an unattainable ideal. We believe both groups of stakeholders can agree that a real strength of the RSWMP vision lies in its commitment to working toward a sustainable future.
Even though cost is a driver in shared responsibility, it shouldn't be the only one. Resource conservation is an important concept to include in the shared responsibility value.	Resource conservation leads the Regional Values section of the Plan. The shared responsibility value is meant to reflect a desire to "share the load," e.g., shift at least some costs of end-of-life product management from ratepayers to manufacturers and retailers.
Quantity of waste generated should be a primary benchmark.	Metro will be working with the Oregon Department of Environmental Quality (DEQ) to identify additional strategies to reduce waste generation and measure progress. The DEQ recently completed a study that identified areas where waste generation was increasing (e.g., the building industry) and proposed preliminary strategies to address the increases.

Program Areas	
More materials should be recyclable and more recyclables should be collected curbside.	The Plan supports adding new materials as markets allow. Metro and the region's local governments continually monitor the markets for recyclable materials. Local governments add materials to curbside programs when markets are stable.
Multi-family education efforts need to include working relationships between, the residents, local government and recycling company.	The Plan provides direction for improving multi-family recycling efforts, including emphasis on tenant education and creating a uniform program throughout the region.
There should be more convenient disposal options for hazardous waste.	The collection opportunities that Metro provides are among the most convenient of any program nationally. Two permanent facilities are open six days a week, 9 a.m. to 4 p.m., year-round. In addition, Metro provides weekend collection events March through November.
More efforts should be made to reduce packaging. For example: a tax on non-recyclable packaging or requiring businesses to use more sustainable packaging;	Metro and the DEQ have developed resource materials to help businesses reduce packaging: http://www.deq.state.or.us/lq/sw/packaging/index.htm . These materials are supported through the Plan's business recycling programs. Packaging will also continue to be a focus of the strategic discussion on waste generation discussed earlier. Finally, packaging can be expected to be part of the discussions on priorities for product stewardship initiatives.
Product stewardship is a new section and the plans are quite general. Shouldn't the Plan anticipate more specificity in time?	Plans to implement the product stewardship objectives will be developed in more detail over time. The Plan commits to coordinating the development of these implementation plans through work groups and reports to SWAC and Metro Council.
Oregon should implement RoHS for electronics. (RoHS is the European Union's directive on reducing the use of toxic materials in electronic products).	Oregon's new e-waste recycling bill (HB2626) does not include a RoHS-type provision. Technical issues (e.g., which chemicals and products to cover), and concerns about each state passing different versions, make adopting such provisions at a state level difficult.
Are education efforts just ongoing, or will new tactics will be added?	Ongoing adult and school education programs are built on the concept of targeting specific audiences. New tactics will be added to ensure programs continue to effectively reach their target audiences.
What about more market development efforts for plastics, especially Styrofoam? Efforts could include grants or support through mentoring and networking.	Previous regional market development programs have offered grants and loans to developing enterprises. These programs were discontinued, as they proved ineffective at a regional level. Ongoing efforts to help plastic markets will include forums on standardizing materials collected curbside; the expanded bottle bill, which will make more valuable plastic material available; and listing credible material recycling enterprises on the Metro Recycling Hotline.
Sustainable Operations	
Will Metro refuse to approve a solid waste facility if it is not in compliance with LEED standards?	The sustainable operations objective 5.2 reads: " <i>Require</i> new solid waste facility construction to meet LEED or equivalent program standards." Metro Council will consider this objective in reviewing new facility applications in the future.

<p>Is Metro seeking new authority to implement some of these objectives regarding employee health and safety, training and quality work life?</p>	<p>No. Metro will work with its public and private sector partners to prioritize, implement, and report progress on achieving the Plan's sustainable operations objectives.</p>
<p>Reconsider the wording of several of goals in the Sustainable Operations chapter because, with verbs like "reduce" rather than "eliminate" they are "green" goals not "sustainability" goals.</p>	<p>Goal statements do call for reduction and mitigation of certain emissions and wastes, rather than complete elimination. The path to complete elimination of disposed waste, greenhouse gases, diesel particulate emissions, and stormwater run-off will be incremental. Making steady progress toward sustainable operations over the 10-year life of RSWMP is the intended result.</p>
<p>Other</p>	
<p>The Plan doesn't make clear what a private sector service providers' responsibilities are.</p>	<p>The responsibilities of private sector service providers under this Plan are identified in chapters 2 and 6, e.g., ". . . continue developing and expanding recycling and recovery services, as well as engaging in efforts to achieve sustainable operations."</p>
<p>The term "tri-county region" is used on occasion, rather than metro region. Why?</p>	<p>The "tri-county region" references the Clackamas, Multnomah and Washington counties watershed as identified in ORS 459 and 459A. The term "Metro region" is used when referring to the Metro boundary, which encompasses most, but not all, of the tri-county region.</p>
<p>In Appendix B on Regional Disaster Debris Management, it states "Over 100 recycling and composting companies operate in the region." There are far less identified in Appendix E.</p>	<p>The large number of facilities referred to in Appendix B include not just the licensed and franchised facilities in Appendix E, but also the more numerous companies that take only source separated materials (e.g., wood, metal, concrete) and are not regulated by Metro.</p>
<p>It's important that all local governments who regulate collection be informed of Plan impacts on their authority to design and administer their local programs.</p>	<p>Agreed. Metro informs local governments about the impacts of the Plan through various channels, including: monthly meetings of the area's solid waste directors; local government recycling coordinator meetings; and the Regional Solid Waste Advisory Committee. Local government staff who are involved in these groups also have a responsibility to communicate to their elected officials. Local governments in the region need to be aware of ORS 459.095, the state statute that requires ordinances, orders, regulations or contracts to be consistent with the RSWMP. The Plan's few limitations on local governments' "authority to design and administer their local programs" are meant to ensure that progress in residential recycling is maintained. However, the Plan is flexible. Local alternatives to the Plan's residential recycling service standard can be proposed. Metro reviews and approves these alternatives if they perform at the same or higher level than the regional service standard practice.</p>
<p>How will this document be enforced?</p>	<p>The Plan focuses on cooperation and coordination among stakeholders to achieve its goals and objectives, rather than describing specific mechanisms that could be used to enforce the Plan. Metro Code can be amended to include specific plan enforcement provisions as necessary.</p>