



**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, October 25, 2007

**Members / Alternates Present:**

Councilor Kathryn Harrington	Audrey O'Brien	Dave White
Mike Hoglund	Matt Korot	JoAnn Herrigel
Glenn Zimmerman	Bruce Walker	Mike Miller
Paul Edwards	Anita Largent	Jeff Murray
Janet Malloch	Ray Phelps	Theresa Koppang
Mike Leichner	Lori Stole	Tom Badrick
Rick Winterhalter	Dean Kampfer	Steve Schwab

**Guests and Metro staff:**

Janet Matthews	Tim Bergam	Kevin Downing
Steve Kraten	Larry Harvey	Nancy Cardwill
Wendy Fisher	Roy Brower	Andrew Johnson
Scott Klag	Jennifer Erickson	Tom Gardiner
Segeni Mungai	Chuck Geyer	Tom Chaimov
Julie Cash	Jim Watkins	Gina Cubbon
Lee Barrett		

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

- Councilor Harrington convened the meeting at 10:01 a.m.
- Approval of minutes: No changes were made to the September 2007 minutes, and they were unanimously approved by the members present.

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

- District 2's Councilor Brian Newman recently resigned his position to take become Director of Campus Planning & Development at OHSU. Applications have been accepted for his Council seat, which will be filled after public debate.
- Council is currently in discussion concerning the "headquarters hotel" for the Oregon Convention Center.
- Councilor Harrington will be unable to attend the November SWAC meeting; Mike Hoglund will chair in her absence.

**III. Citizen Communications for Non-agenda Items .....Councilor Kathryn Harrington**

None.

**IV. Solid Waste & Recycling Director's Update..... Mike Hoglund**

- Metro's new website has launched; the domain name is unchanged for now, but will switch over to a shorter, more user-friendly name in the coming weeks. Numerous improvements have been made to make the site much easier to navigate.
- A full update on the business recycling program will be presented at the November SWAC meeting. Staff has presented the program to Council and MPAC; they are currently working with the Business Recycling Workgroup to discover how ready local governments will be for implementation. Council will be discussing the program at its November 13 work session.
- The moratorium on wet waste transfer stations and new wet waste Non-system Licenses (NSLs) will be extended until December 31, 2008 in order to provide time to complete the wet waste allocation project and self-haul study. All wet waste NSLs are being extended for one year without changes in the meantime. Current caps may be readjusted prior to the end of the moratorium.
- Several enforcement actions have taken place since the last report, Mr. Hoglund said. WRI exceeded their tonnage limit at Coffin Butte Landfill by 342 tons in 2006 (no fine). PLC III has been fined \$1,000 for missing the deadline to have all its mixed roofing debris removed. Council reduced the penalties owed by USA General Contractors (flow control violations) to \$37,500, but is requiring that they pay approximately \$50,000 for excise taxes and penalties, as well. PLC II has exceeded its limit for how much tonnage can be onsite (no penalty). Best Buy in Town has been found to not adequately screen loads for unauthorized waste (no penalty).
- Metro has approved PLC III's request to begin operations as a MRF; the facility currently accepts mixed waste.
- American Compost has notified Metro that it will cease operations and no longer accept yard debris from the public, effective November 15.

**V. Update on Multi-family Recycling Strategies..... Jennifer Erickson**

Jennifer Erickson (Waste Reduction & Outreach Division) presented the group with the latest information on Metro's Multi-family Recycling Program. 30% of the region's residents live in multi-family abodes, and many move between jurisdictions. Because these jurisdictions have individual recycling systems, this can be confusing to both residents and property management companies, Ms. Erickson said. The goal of the Program is to create a more consistent system throughout the region, while preserving the recycling programs of individual jurisdictions. Education and outreach are key, and most property managers surveyed have been very interested and supportive.

Ms. Erickson referenced the tables and PowerPoint handouts included in the agenda packet, and summarized the information contained there. Approximately 90% of telephone and door-to-door survey respondents said they recycle regularly. However, there was confusion about how the system works where they live, pointing to a need for more education. Those multi-family residences that had the best recycling systems had all been helped by their local jurisdiction.

Key recommendations (as shown in the agenda packet) include promoting Metro's Recycling Information and website through local outreach materials and updating information as quickly and often as possible. Together, Metro and local governments will create standardized presentations for contractors, resident associations, etc. The City of Beaverton has begun a program in which residents use a durable red-bag system for recyclables. If Beaverton's program successfully increases recycling, Metro will develop a similar pilot program.

The transition to a two-sort bin system in many areas will help standardize collection as well, Ms. Erickson noted. For now, the main focus is on education and outreach (working with property managers first, then residents). A system will be developed to track multi-family residential recycling data uniformly throughout the

region. Concluding, Ms. Erickson offered to send discs of the latest report to anyone interested, since the hardcopy, she demonstrated, is nearly two-inches thick.

#### Questions/comments

- WRI/Allied's Ray Phelps asked what the expectations will be for the hauling community. Ms. Erickson replied that the biggest change will be the two-sort system, which is already well underway in many areas.
- ORRA's Dave White suggested that haulers and property managers be added to the Recycling Work Group. The group, Ms. Erickson explained, are purely a planning group made up of representatives of local jurisdictions. They are the liaisons with their haulers.
- Dean Kampfer of Waste Management said that while he supports the idea of a consistent system in the region, how will it be possible for all the smaller jurisdictions to be included? Most already use the same system as their cooperative larger jurisdiction. In fact, Ms. Erickson noted, it was local governments who asked for help with multi-family recycling.

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

Kevin Downing of the Oregon DEQ began this, the third (and final) in a series of SWAC presentations on the subject. Using a PowerPoint presentation (attached), he explained the Oregon Clean Diesel Initiative. The most dangerous particulates, he pointed out, are linked to an increased risk of cancer, respiratory ailments and other illnesses. Concentrations in the Metro region are fairly typical of large, urban areas. Metro's proposed retrofit / replacement program for collection vehicles would accelerate the reduction of these pollutants, rather than just waiting for the older fleets to slowly be replaced with newer, lower-emission models.

Retrofitted trucks can run as cleanly as natural gas, Mr. Downing continued, and the return on the economics is realized in nine months, according to studies. Instituting the program would result in about \$100 million in public benefit over a five-year period. In addition, legislation recently passed by the House includes a tax credit (pass-through) program for companies. The bill had strong support across the board. In 2011, a change in the NOX standards will further improve air quality. A number of interesting ideas are on the horizon while making it possible to continue using diesel engines, he said.

Next, Engineering & Environmental Services Division Manager Jim Watkins presented information about Metro's proposed program for retrofitting and replacing collection vehicles (presentation attached). Showing an example of rate impacts, Mr. Watkins reiterated the goals of the program and the strategies recommended by staff to achieve them. Of the funding options discussed, staff recommends increasing the Regional System Fee (RSF) for a period of three years. While this will pay for retrofitting appropriate vehicles, if local governments could fund accelerated replacement of the oldest vehicles, the program would have its greatest impact on the environment and the public. Local governments could fund the replacements through rate-setting and tax credits.

Mr. Watkins laid out three possible recommendations that SWAC could forward to the Metro Council:

1. Diesel Retrofit and Accelerated Collection Vehicle Replacement Program
2. Retrofit Program only (leaving collection vehicle replacement up to individual companies)
3. Status quo (do nothing)

Staff, he reported, recommends #1, wherein Metro would lead retrofitting through the RSF and local governments would do their part to help replace the oldest vehicles.

Questions/comments:

- JoAnn Herrigel of the City of Milwaukie asked how the additional RSF would be allocated. A contract would be executed with a filter contractor for the amount to be spent for the filters, installation, and maintenance, Mr. Watkins explained. After the three year contract (based on cost estimates), the increase would sunset.
- Mr. Phelps pointed out that without the combination of retrofitting and replacement, not much would be achieved for money. More emphasis should be made on replacing vehicles.
- Retrofitting has more bang for the buck, Mr. Kampfer countered, so with new technology coming in just a few years, why not wait on the replacement piece?
- Mr. White commented that there is a lot of competition for local governments' money. How would the project be made financially fair regionwide?
- If all local governments participated, Matt Korot of the City of Gresham said, it would solve that equity problem. However, it's difficult to make a commitment prior to discussion with local elected officials. Mr. Korot did feel his jurisdiction would be supportive.
- Janet Malloch (Blue Heron Paper) wondered how much impact the projected success of various recycling / recovery programs (such as EDWRP) would have on Metro revenue for this program. She also pointed out that facilities such as BHP and others that haul materials to be disposed would be paying into the program solely to the benefit of curbside collection vehicles.
- The City of Portland's Bruce Walker said that his jurisdiction has announced to its haulers that some components of Option #1 will be implemented. The coordination that Metro supplies, he said, is an approach the City supports.

Mr. Kampfer moved to recommend Options #2 (retrofit only), with a "strong suggestion" that local governments support replacing older vehicles. Far West Fiber's Jeff Murray seconded the motion.

In the ensuing discussion, Mr. Hoglund reminded the group that SWAC's recommendation to Council does not ensure the program will go forward, but does ensure further discussion by Council. Steve Schwab of Sunset Garbage suggested using Reserve Funds before increasing the RSF.

The final vote on Mr. Kampfer's motion was:

Yea: 11

Nay: 1 (Paul Edwards, preferring Option #1)

Abstentions: 4 (Koppang, Malloch, Phelps, Leichner)

**VII. Disaster Debris Operations Plan.....Scott Klag**

Waste Reduction & Outreach Division's Scott Klag filled the group in on the status of the RSWMP Disaster Debris Operations Plan (PowerPoint attached). The work group decided that development of processing sites should be the first priority. The objectives of this part of the Plan, therefore, will be to identify sites, and establish pre-arrangements with landowners. Also in development is how to ensure tracking of debris materials for the fiscal management end, and procedures for how and when to implement the Plan during a disaster. Mr. Klag expanded on each of these objectives.

The next steps will be to build a preliminary list of sites throughout the region, engaging local stakeholders in that process.

Questions / comments:

- Councilor Harrington asked what types of disaster categories have been considered for the Plan. Mr. Klag answered that because local governments have, thus far, handled smaller events such as wind storms and floods very well, the group focused on large-scale events such as earthquakes.
- Are private and public solid waste facilities being considered? The Plan calls for disaster debris to be handled separately while the existing solid waste system gets back to normal as quickly as possible.
- Doesn't each jurisdiction / county already have such plans? No; each are in different stages of planning. Therefore, Metro's coordination in disaster debris planning has been extremely helpful when considering a major disaster that would affect all or large portions of the region.
- Audrey O'Brien of the DEQ added that her agency has seen local governments become very creative in small disasters, but an advance plan on a regional level is imperative.

**VIII. Disposal Transport RFP..... Mike Hoglund**

Because of time constraints, this item was postponed to a future SWAC meeting.

**IX. Other Business and Adjourn..... Councilor Harrington**

Councilor Harrington adjourned the proceedings at 12:05 a.m.

Prepared by:

Gina Cubbon  
Administrative Secretary  
Metro Solid Waste & Recycling Department

gbc

Attachments: Oregon Clean Diesel Initiative  
Metro Diesel Retrofit Program Presentation  
RSWMP Disaster Debris Operations Plan

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Queue





## Oregon Clean Diesel Initiative

- Burn Cleaner Fuel
- Burn Fuel Cleaner
- Burn Less Fuel



## Economics of Clean Diesel

Per vehicle:  
 Environmental/  
 Public health costs  
 – \$16,000

Filter costs  
 – \$10,000



## Dirty vs. Clean Diesel



CONVENTIONAL

RETROFITTED

Real time measurements of particulate matter pollution inside a car "chasing" a diesel refuse truck before and after retrofitting.

Courtesy of Clean Air Task Force



## Waste Haulers – Partners for Healthy Air Quality



## Oregon Clean Diesel Initiative



## Clean Diesel Legislation - HB 2172

- Support for engine upgrades
  - Grant and loan program
  - Tax Credit, with pass-through
  - School district support when competing for federal grants
- Support for new engine purchases
  - Extension of Truck Engine Tax Credit
- Partnering with Oregon Trucking Associations, ORRA, Associated General Contractors, American Lung Assoc, OEC



## Bio Fuel Legislation - HB 2210

- Fuel Standard, triggered by production capacity
  - 10% ethanol 40 million gpy
  - 2% biodiesel 5 million gpy
  - 5% biodiesel 15 million gpy
- Tax Incentives
  - User
    - B99, \$0.50 per gallon up to \$200 per vehicle per year



## Oregon Clean Diesel Initiative

- Reducing diesel PM emissions has multiple benefits:
- Cancer risk
  - Cardiovascular disease
  - Other toxics, e.g., formaldehyde
  - Asthma induction and incidence
  - Global warming
  - Visibility, regional haze
  - PM<sub>2.5</sub> attainment



# Regional Diesel Retrofit Program

Regional Solid Waste Advisory Committee  
October 25, 2007

Presenters: Jim Watkins, Metro  
Kevin Downing, DEQ

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## Desired Outcomes

Regional  
Diesel Retrofit  
Program

- SWAC understanding of
  - State's diesel emission reduction strategy
  - 2007 Oregon legislation/potential state funding
  - Example of program impacts on commercial collection
- SWAC recommendation to Metro Council

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## Rate Impact on Businesses: An Example from Gresham

Regional  
Diesel Retrofit  
Program

- Four companies provide commercial & drop box collection in Gresham from a pool of 99 trucks
- Trucks operate across jurisdictions
  - 80% of operations *not* in Gresham
- “Normal” replacement: about 1 net truck per year
- An accelerated policy would mean replacement of 9 additional trucks over 3 years
- Rates would increase 4-7%
  - 4-5% for drop box service
  - 6-7% for commercial service

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## Program Goals

Regional  
Diesel Retrofit  
Program

Developed by Retrofit Workgroup

1. Maximum feasible reductions of PM, including ultra-fine particles (with reductions in NOx emissions)
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.

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## Recommended Emission Reduction Retrofit 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
- Engine reprogramming where possible

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

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### Five Year Reduction Amounts by Program Component

	VOC	CO	NOx	PM	
Baseline - 1,000 vehicles (tons)	113.30	542.60	1586.30	162.80	
<b>TOTAL PROGRAM 5 YEAR EMISSIONS REDUCTIONS</b>					
<b>PERCENT REDUCTIONS FROM BASELINE</b>					
RETROFIT OPTION	ESTIMATED NO. OF AFFECTED VEHICLES	VOC REDUCTIONS	CO REDUCTIONS	NOx REDUCTIONS	PM REDUCTIONS
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		35.5%	31.4%	3.4%	30.9%

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

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## Recommended Retrofit 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 in the retrofit program

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

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## Retrofit Program Financing Options

Regional  
Diesel Retrofit  
Program

1. Increase regional system fee (approximately \$1.65/ton for 3 years)
2. Use SW&R reserves (~\$7 million)
3. Local governments fund through rates (\$0.12/month at the can/commercial \$1.65/ton)
4. Grants (e.g., congestion mitigation/air quality from state and federal programs)

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# Staff Recommended Retrofit Financing

Regional  
Diesel Retrofit  
Program

1. Increase regional system fee  
(approximately \$1.65/ton for 3 years)

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**Five Year Reduction Amounts by Program Component**

	VOC	CO	NOx	PM	
Baseline - 1,000 vehicles (tons)	113.30	542.60	1586.30	162.80	
<b>TOTAL PROGRAM 5 YEAR EMISSIONS REDUCTIONS</b>					
<b>PERCENT REDUCTIONS FROM BASELINE</b>					
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%
<b>Total Maximum Reductions</b>		<b>67.3%</b>	<b>57.2%</b>	<b>38.8%</b>	<b>72.1%</b>

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

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## Accelerated Replacement Financing Options

Regional Diesel Retrofit Program

1. Local governments fund through rate setting process
  - Residential example: \$0.71/month
  - Commercial example: Rates would increase 4-7%
2. Tax credits

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## Possible SWAC Recommendations

Regional Diesel Retrofit Program

- Option #1 - Diesel Retrofit and Accelerated Replacement Program
  - Metro leads retrofit; BAT; RSF financed
  - Local governments accelerate replacement (rate increases)
  - Implementation condition: Retrofit available to Local governments with accelerated replacement
- Option #2 - Retrofit Program Only
  - No requirement for > vehicle replacement rate
- Option #3 - Do nothing

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## Staff Recommendation

Regional  
Diesel Retrofit  
Program

- Option #1 - Implement Diesel Retrofit Program elements as proposed by Work Group
  - Metro leads retrofit of vehicles with BAT financed by increase in RSF
  - Local governments accelerate vehicle replacement through rate increases
  - Implementation condition: Retrofit program available only to local governments with replacement program

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## Next Steps

Regional  
Diesel Retrofit  
Program

- SWAC makes recommendation
- Metro Council consideration (October 2007 – May 2008)
- Begin Implementation

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# Debris Processing Sites Contract

Presentation to SWAC

Scott Klag

October 25, 2007

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## Today's Outcomes

- ◆ Understand project purpose and scope
- ◆ Awareness of opportunities to assist project

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# Project Origins

Regional  
Disaster Debris  
Management Plan

- ◆ RSWMP Update includes DDM Policy Plan
- ◆ RSWMP DDM Plan calls for operations plan
- ◆ Regional working group made processing sites a priority

This project is part of overall DDM effort.

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# Project Objectives

Regional  
Disaster Debris  
Management Plan

- ◆ Identify sites
  - temporary storage & processing of debris
- ◆ Establish prearrangements
  - to equip and operate the sites
- ◆ Ensure tracking of materials
  - procedures in accord with FEMA guidelines
- ◆ Procedures for system startup
  - intergovernmental agreements

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# 1. Identify Sites

- ◆ Debris estimation
- ◆ Site requirements
  - Size, location, land use
  - Coordinate with DEQ
  - Draft agreements

SWAC members can assist with identifying sites.

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# 2. Site Operations

- ◆ Equipment and staffing needs
- ◆ Site operation plans
  - Health and safety
  - Markets for recovered materials
- ◆ Procedures for pre-positioned contracts
  - Vendor lists, draft contracts

Being prepared with contracts will be very beneficial.

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### 3. Fiscal Management System

Regional  
Disaster Debris  
Management Plan

- ◆ Tracking system
  - contractor FEMA experience
- ◆ Load tickets & contractor payments

Ensure usefulness of system for local governments.

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### 4. System Start Up

Regional  
Disaster Debris  
Management Plan

- ◆ Intergovernmental agreements
- ◆ Conditions to “trigger” Metro involvement

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# Project Status and Next Steps

Regional  
Disaster Debris  
Management Plan

- ◆ Establishing preliminary list of sites
- ◆ Outreach to local stakeholders
  - Review preliminary list
  - Identify additional potential sites

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