

METRO REGIONAL CENTER  
RENOVATION PROJECT

*SECOND QUARTER REPORT*

SEPTEMBER 5, 1992 through DECEMBER 5, 1992

Submitted by

Metropolitan Service District  
Solid Waste Department

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On-Site Coordinator

*Printed on Recycled Paper*

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## METRO HEADQUARTERS BUILDING RENOVATION PROJECT

### SECOND QUARTER REPORT

The Scope of Work for the EPA grant is divided into four quarters. The second quarter includes September 5, 1992 through December 5, 1992. Tasks completed during the second quarter are as follows:

- < Continued weekly meetings with subcontractors at site
- < Continued Resourceful Renovation Committee meetings twice monthly.
- < Continued monitoring and documenting waste removed from site
- < Met with new subcontractors prior to job start
- < Worked with Public Affairs to:
  - update exterior signage
  - photograph interior and exterior of building
  - develop materials necessary for trade show presentations
- < Assisted with Metro Council and staff site tours
- < Collected model How-To Guides from EPA and DEQ
- < Corresponded with Association of Bay Area Governments regarding presentation at Anaheim, California
- < AOR (September 11-13) -- Met with Lauris Davies of EPA to discuss outline for How-To Guide and a project time line
- < Assisted Joanna Karl with presentation about the Renovation to Alternatives group meeting (September 24)
- < Worked with Pat Varley to document recycled materials procurement (to be included in the How-To Guide and slide show)
- < Met with landscape designer, Grimms, and McFarlanes to facilitate blended soil and compost acquisition.
- < Delivered soil samples for testing
- < Explored options for the use of green glass at the new building
- < Submitted quarterly summary (December 5)

## **Public Affairs**

In September Metro executed a contract with Marc Scarpaci productions to video tape interviews with contractors on-site. During a 10-hour shoot, 11 interviews were recorded with contractors working on the Resourceful Renovation. Six questions were distributed to each of the interviewees in advance. (*Attachment #1*)

The contractors were initially skeptical about talking on camera, but they felt positive about the information they were able to share and this outweighed their skepticism. This produced 2-1/2 hours of raw footage.

In December, Metro's Public Affairs Department sent out the Scope of Work for additional interviews and footage. This contract will incorporate the original film footage as well as video footage provided by the demolition contractor and suppliers of some of the recycled products used on-site. (*Attachment #2*)

This project has generated interest among contractors nationally. In November, Metro received a copy of an article from *The Subcontractor* magazine. It gave an overview of the Metro building project and showcased several aspects of it. (*Attachment #3*)

Metro's Executive Management has expressed support for the Resourceful building ideas being developed in conjunction with the renovation. This is an opportunity for the regional solid waste management authority to promote BEST management practices in consumption, buy recycled, and management of materials leaving Metro's construction site.

## **Buy Recycled**

In past months the Solid Waste Department has communicated regularly with all parties involved with the use of recycled paint at the new Metro building. Recycled paint was one of the requested alternate bids executed last September. (*Attachment in 1st quarter report*)

Staff has acted as a communication link between the collection site, the processor, the paint contractor, and Metro Project Managers to oversee quality, supply and demand. In calculating which paint coats were to be recycled, staff was sensitive to best use and in search of the highest quality finish available. For these reasons, the 100% recycled paint was used in most of the building as a primer coat only. A 50/50 recycled paint will be applied to managers offices and work spaces on a request basis only. (*Attachment #4*) This decision was made because of additional sealants available in virgin paint which resists blemishing. Recycled paint is a mix of paints and may not contain enough finish paint to have durability comparable to 100% virgin paint. (*Attachment #5.*)

The list of additional recycled materials to be incorporated in this project is nearly complete. (*Attachment #6*) To-date, 12 materials are planned for use in this project. Seven were incorporated without a price premium.

Metro has allocated \$35,000 into a price preference fund for Buy Recycled at the new building. Metro Market Development staff has corresponded with consultants and manufacturers to assist management staff in the Metro Regional Facilities Department identify project recycled materials appropriate for use. Some materials have been incompatible with the project's timing and aesthetics. The remaining dollars in this fund may be used to build an attractive permanent display for the building lobby highlighting the recycled products used in the Resourceful Renovation.

Market Development staff still hopes to incorporate additional recycled products into the building as future purchases are made. In the coming years, benches and playground equipment will be purchased. These products are currently available with a significant recycled content.

### **Landscaping**

Metro staff investigated, as part of the resourceful renovation project, landscaping and irrigation options for this building. To conserve water, some additional native plants were selected and a drip irrigation demonstration project is being investigated. Drip irrigation may not be selected, due to potential loss of plant warranties and increased maintenance costs.

Solid Waste staff has also taken an interest in the soils and soil amendments to be used in the Plaza planters and beds around the building. Local processors produce several materials from yard waste that may be incorporated into Metro's landscape.

The Plaza planters had specified a light-weight soil, Pro-grow #9. This soil is made of 30% peat moss from Canada, 20% pumice and 50% bark. A local product from Grimms fuel made of 20% yard debris compost, 10% pumice and 70% bark was tested by Metro for quality. These tests proved it an acceptable product. Locally produced, light-weight soil containing yard debris compost will be used in the Plaza planters. It will be lighter in weight than the mix originally specified.

The next product to be acquired is fill dirt for the area outside the day care center and the large area on the south side of the building. It is possible that another local processor, McFarlanes Bark, will be able to provide this product. They are the company specified to provide the 2" of compost top dressing in planters around the building.

Metro staff has long supported area processors who keep yard waste from our landfills. This is another opportunity for market development and to promote yard debris compost products as superior and price competitive.

## Construction Site Recycling

The general contractor, Hoffman Construction, has continued to support construction site recycling and reuse. The site proudly displays two signs announcing tons reused and recycled. To-date, 737.11 tons have been reused and recycled. The signs will be updated again in January.

Each Monday morning the subcontractors meet for one hour in the Hoffman office to discuss the construction schedule and subcontractor coordination. The subcontractors discuss individual needs and coordinate time and space factors with each other. Additional coordination meetings are scheduled during this meeting. Sheetrockers often need to coordinate with the mechanical engineers and the painters need to coordinate with the ironworkers, etc. Building clean-up is the last topic discussed at this meeting. Hoffman directs clean-up planning. The job foreman dictates which areas are to be cleaned and by whom. For example, he may determine that sheetrock is a problem on the third floor and direct the sheetrock subcontractor to designate 3 men for 8-hours to eliminate all sheetrock debris. The average weekly crew consists of 6 to 9 construction workers supervised by Hoffman Construction. Five subcontractors regularly designate people for a day when requested. They include, Pen-Nor Plumbing, PCI Sheetrock, Western Partitions, West Vent Mechanical, and Grasle Electric. Hoffman also provides a collection center for all materials except sheetrock. The two sheetrock subcontractors deliver their material to the same drywall recycler, one by truck and the other by commercial drop box. Source separation of recyclables requires a large collection area which this construction project has always made available.

The collection center for this project includes the following:

Drywall	30 yd. container
Drywall	12 yd. truck
Rubble	10 yd. box
Wood	30 yd. box
Solid Waste	30 yd box
Metal	10 yd box
Cardboard	5 yd cage

These seven containers are on-site at all times. Hoffman communicates with the commercial drop box company regarding container needs and pays all transportation and disposal costs. Hoffman does receive a small rebate for metal which offsets the cost of the metal box. The rubble is being accepted at no-charge at Metro's closed landfill as beneficial fill or for a small fee at an area pit. Wood continues to go to Bredl Saw to become hogged fuel. The cardboard cage has been paid for monthly through Metro's Solid Waste Budget. Metro has also paid to rent twelve 90-gallon roller carts for use on-site. All construction workers are encouraged to use these roller carts for collection and transportation to the collection center of source separated materials and mixed waste. Past practices were to fill cardboard boxes with mixed waste and recyclables and backhaul the material to a dumpster at the construction office. By providing and promoting convenient source separation of cardboard and rubble, this site has become an example for other construction sites. Behaviors have been changed and money has been saved. Additionally, wood and metal are piled and transported to the on-site dumpsters, saving traditional disposal costs.

The labor expenses to coordinate and handle these materials is greater than traditional practices of mixing all materials into one drop box to be landfilled. However, with landfill tipping fees of \$45.00 to \$75.00 in this region, recycling is cost effective. A 5-ton box of wood is transported to the wood processor for the same cost as transporting mixed waste to a transfer station, yet the disposal cost for the separated wood is \$20 versus \$225 to \$375 for mixed waste.

Weekly clean-ups and construction site recycling will continue through the 3rd quarter of the EPA Grant. Metro will continue to collect data on materials collected, collection costs and disposal costs. The project continues to demonstrate the cost savings resulting from efficient management of construction site waste.

<b>METRO RESOURCEFUL RENOVATION</b>		
WASTE MANAGEMENT FACTS		
Disposition of materials taken from site		
<b>Materials</b>	<b>Quantity (tons)</b>	<b>Processing Disposal Facility</b>
Rubble	6,289.6	St. Johns Landfill, Area pits
Metals	370.5	Scrap Metal Recyclers
Clean Wood	94.0	Bredl Saw
Mixed Solid Waste	164.7	Metro Transfer Stations
Salvage and Reuse	205.7	Salvagers, Thrifts, On-site reuse
Sheetrock	64.7	Gypsum Wallboard Recycling
Cardboard	1.4	Hauler
<b>TOTAL</b>	<b>7,212 tons generated</b>	<b>737.1 tons Reuse and Recycling</b>

(See Attachment #7)

## Project Summary

During the past few months every inch of this building has been under construction. The interior walls have been sheetrocked and are being painted. The entire perimeter has been reconstructed including new sidewalks . Access and storage were limited during this quarter.

The general contractor continues to allot time and space for source-separation of materials. At times, the site could not accommodate any drop boxes because of construction. During those times, the general contractor designated interior and exterior areas to pile waste and recycling materials until the drop box company could again have access to the site.

Project summary as of December 5, 1992:

- √ 150 persons per day working on-site
- √ 96,000 man hours on-site
- √ 737.11 tons reused and recycled
- √ 7,212 tons generated on-site

Current Issues:

- √ Drip Irrigation
- √ Buy Recycled
- √ Recycled Interior Paint
- √ Construction site recycling



METRO

May 21, 1993

Lauris Davies, HW-107  
U.S. E.P.A.  
Region 10  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Lauris:

I need to apologize for not sending you a copy of the Second Quarter Report on the Resourceful Renovation Project. It was an oversight on my part. It was an especially busy time with the move and the How to Guide.

We anticipate sending you a draft of the How To Guide next week for your review. I should send the final Fourth Quarter report the following week as my employment with Metro will terminate June 5th. I will compile all four reports into one "complete" documentation of the Resourceful Renovation.

Metro will distribute 30 copies to libraries and professional organizations. The final video footage was shot Saturday May 15th. The video will be available before the NARC Conference here in Portland on June 22, 1993. I think you'll like the video much better than a slide show. I expect it to be excellent.

It has been a very full year and as much as I regret leaving Metro, I am anxious for a summer with my boys.

Thank you for this opportunity.

Sincerely,

Pat Merkle  
On-Site Coordinator

PM:clk

cc: ✓ Jim Goddard, Senior Solid Waste Planner/Construction Coordinator  
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