

METRO

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January 14, 1992

Lauris Davies
Environmental Protection Agency
Solid Waste Program
1200 Sixth Avenue, M/S/HW-072
Seattle, WA 98101

Dear Lauris:

It was good to see you last week. Enjoyed the meeting and look forward to continuation of the market roundtable.

Enclosed is a proposal outlining the project that one of my staff, Pamela Kambur, has described to you over the phone. We are excited by your interest and we're confident that the project meets your agency's goals to encourage innovative waste reduction demonstration projects.

Planning waste reduction features and systems for the new Metro headquarters building is well underway. The budget outlined on page three is proposed in the agency's Fiscal Year 1992-93 budget and will not be confirmed until late June and will not be available until July 1, 1992. Since salvage and initial demolition are scheduled to begin in February and last throughout the Spring, the timing of EPA's assistance is crucial to the success of the project.

Although the private contractor and architect have expressed interest in waste reduction efforts and will participate to a limited extent on their own, the full project we have outlined in the proposal will not be possible without additional funding. During your review period over the next month, members of the Waste Reduction Division will be able to document the contractor's initial efforts. We will be prepared to start a new staff member on March 1st upon your final approval.

Please feel free to contact me with any questions or concerns about the proposal. I'm looking forward to working with you and your staff on this exciting waste reduction model.

Sincerely,



Debbie Gorham
Waste Reduction Manager

DG:jc

Enclosure
cc: Bob Martin, Solid Waste Director

A Proposal for EPA Funding of a Demonstration Project:

Construction Site Salvage, Materials Procurement and Collection Design -- A Model of Commercial Building Recycling Projects

submitted by

The Metropolitan Service District (Metro)
2000 S.W. First Avenue
Portland, OR 97214

Introduction

Metro, the regional government in the greater Portland metropolitan area, is undertaking a project to design, build, occupy and promote a model for waste reduction in commercial buildings. The project involves extensive renovation of a former Sears retail store in order to relocate Metro's office headquarters. In keeping with Metro's role as coordinator of solid waste planning and recycling information for the metropolitan region, the new headquarters facility will demonstrate the state-of-the-art in waste reduction.

The demonstration project consists of three primary components:

1. Salvage, reuse and recycling of construction/demolition debris;
2. Procurement of building materials with recycled content to encourage market development for recycled products; and
3. Design and implementation of state-of-the-art, commercial recycling collection and waste reduction systems.

Each of these components represent areas in the field of waste reduction that need additional research and demonstration. This is one of the first commercial projects in the nation to utilize such a broad, integrated approach to waste reduction. This project is an excellent opportunity to demonstrate and create new standards for source reduction, reuse, recycling and market development. By documenting the construction process and promoting the success of the finished facility, this model will be replicable by other governments and private businesses across the nation.

Rationale for Demonstration Project

Construction/demolition debris comprises approximately 17% of the wastestream currently disposed in the Metro region. In addition to the reusable hardware and fixtures often available, materials such as drywall, cardboard, asphalt, plastics and metals can be readily recycled if properly separated at the construction site. Educating contractors about how to source separate materials and about the considerable savings brought about by avoiding disposal fees will help the region reduce the amount of construction/ demolition waste landfilled. In addition, reuse can be encouraged by providing an opportunity for salvage workers to go through a facility prior to demolition.

Market development for recycled building materials is crucial in order to "close the recycling loop". In the process of revising Metro's "Buy Recycled Index", an inventory of recycled building materials has been undertaken. Materials with recycled content include: paint, partitions (including bathroom stalls), ceiling and ceramic tiles, carpeting and carpet underlays, and countertop and wood trim. Metro's approach to increasing demand for recycled building materials is to target information to construction contractors, developers and architects in the form of handbooks, videos and workshops. As demand for these products increases, the cost of recycled materials will become more competitive with virgin materials. Metro is proposing a 5% price preference during this construction project to stimulate market development for building materials. This is consistent with the current policy of providing a price preference for recycled paper products and compost products.

In order for building tenants to continue the emphasis on waste reduction activities after renovation, care must be taken during the construction phase to incorporate collection and waste reduction designs. Materials commonly disposed in the commercial wastestream include various grades of paper, cardboard, glass bottles, cans and food wastes. State-of-the-art recycling chutes for transmitting office paper between floors are being considered, along with fire-resistant metal containers for centralized collection of all recyclable materials. A loading dock for convenient hauler access is included in the building design. Source reduction and reuse can be encouraged by providing reusable cups for all employees. A dishwasher is included in the designs for convenient daily cleaning. Worm composting of employee lunch remains and coffee grounds is also under consideration. Metro's In-House Recycling Committee is actively promoting waste reduction within the agency.

Intended Outcomes of Demonstration Project

Metro's overall project goal is to create a model building that demonstrates successful construction/demolition recycling, use of recycled building materials, installation of efficient systems for in-house recovery of recyclables and implementation of innovative waste reduction policies.

Specific objectives include:

1. Documentation of each step in the design and construction process including:
 - 1.1 Development of a written "how to" manual for contractors and developers listing specific types of materials recycled (quantity and savings due to avoided costs of disposal)
 - 1.2. Production of an educational slide-show highlighting key elements of the renovation process and subsequent waste reduction activities.
2. Development of on-site and trade show workshops for contractors, architects and developers for each of the three program elements (construction site salvage and recycling, materials procurement and collection/waste reduction system design).
3. Development of informational brochures and permanent informational signage that summarize the project for visitors to the building and other commercial building owners.

Scope of Work and 12 Month Timeline

First Quarter

- March, April, May
- Select on-site Waste Reduction Project Coordinator and a contractor to provide video documentation
 - Design measurable waste reduction targets and develop evaluation methodology including a comprehensive waste audit during four phases of the construction process
 - Assist construction contractor with design and implementation of on-site separation system for demolition and construction recycling
 - Coordinate activities of salvage workers with contractor's schedule to maximize salvage potential
 - Keep detailed records of types of materials and quantities recovered
 - Assist architect with design of features to encourage waste reduction and efficient recycling systems
 - Assist architect with integration of recycled content materials into building specifications
 - Continue research on state-of-the-art collection and waste reduction systems for commercial buildings

Second Quarter

- June, July, August
- Administer Metro's 5% price preference during materials procurement
 - Keep records of costs when comparing recycled content to virgin content
 - Continue documentation from First Quarter
 - Conduct workshops for contractors and developers

Third Quarter

- Sept., October, Novemb.
- Develop manual summarizing all steps in the renovation, procurement and waste reduction system design process
 - Conduct 2nd series of workshops
 - Develop promotional media campaign

Fourth Quarter

- December, Jan, February
- Complete all research and evaluation components
 - Complete on-site manual and distribute a minimum of 300 copies to contractors throughout the region
 - Complete documentation and distribute a minimum of 30 copies to libraries and professional organizations throughout the region
 - Complete and make available 5000 informational brochures for visitors to the building (such as self-guided tours) and other commercial building owners (such as summaries of project phases)
 - Assist with Metro employee orientations prior to occupying the building in February
 - Submit final report to EPA.

Estimated Project Budget

<u>Line Items</u>	<u>Distribution of Cost Sharing</u>		
	E.P.A.	Metro	Subtotal
<u>1. Personnel</u>			
.50 FTE			
On-Site Prj. Coord.	\$16,000	-0-	\$16,000
.10 FTE			
Senior Engineer	-0-	\$3,500	3,500
.05 FTE			
Public Affairs Spec.	-0-	\$1,700	1,700
<u>2. Printing</u>			
Manual	6,000	-0-	6,000
Brochures	-0-	5,000	5,000
& Display Racks	-0-	3,000	3,000
Informational Signage	-0-	8,000	8,000
<u>3. Contracts</u>			
Slide-Show			
Production	8,000	15,000	23,000
On-Site Waste Audits	-0-	10,000	10,000
<u>4. Workshops</u>	-0-	2,500	2,500
<u>5. Trade Show Booths</u>	-0-	2,500	2,500
<u>6. 5% Price Preference</u>			
for Recycled Content	-0-	35,000	35,000
<u>7. Overhead</u> (Phone, FAX, Secretarial Support, Postage, Copying, etc)	-0-	5,000	5,000
Totals	\$30,000	\$91,200	\$121,200