

METRO

2000 SW First Avenue
Portland, OR 97201-5398
(503) 221-1646
Fax 241-7417

File Copy

March 2, 1992

Ms. Lauris Davies
Environmental Protection Agency, Region X
Solid Waste Program
1200 Sixth Avenue, M/HW-072
Seattle, Washington 98101

Lauris
Dear Ms. ~~Davies~~:

Enclosed is Metro's official application for an EPA grant to help fund a commercial construction site recycling project at the Metro Headquarters building. The federal assistance forms have been signed by our authorized representative and the proposal is complete. Please note that Metro's financial contribution is based on our proposed FY 92-93 budget. The Metro Council will not formally approve and adopt that budget until early May. We are hopeful, however, that funds for this project will be approved.

If you have any questions on our proposal or would like additional information, please let me know. I appreciate EPA's support of this valuable project, and look forward to getting started as soon as possible.

Sincerely,

Debbie

Debbie Gorham
Waste Reduction Manager

DG:jc

Enclosure

cc: Bob Martin, Solid Waste Director

Executive Officer
Rena Cusma

Metro Council

Tanya Collier
Presiding Officer
District 9

Jim Gardner
Deputy Presiding
Officer
District 3

Susan McLain
District 1

Lawrence Bauer
District 2

Richard Devlin
District 4

Tom Delardin
District 5

George Van Bergen
District 6

Ruth McFarland
District 7

Judy Wyers
District 8

Roger Buchanan
District 10

David Knowles
District 11

Sandi Hansen
District 12

APPLICATION FOR FEDERAL ASSISTANCE

OMB Approval No. 0348-0043

1. TYPE OF SUBMISSION: Application <input type="checkbox"/> Construction <input checked="" type="checkbox"/> Non-Construction		2. DATE SUBMITTED February 24, 1992		Applicant Identifier	
Preapplication <input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction		3. DATE RECEIVED BY STATE		State Application Identifier	
		4. DATE RECEIVED BY FEDERAL AGENCY		Federal Identifier	

5. APPLICANT INFORMATION	
Legal Name: Metropolitan Service District	Organizational Unit: Solid Waste Department
Address (give city, county, state, and zip code): 2000 SW First Avenue Portland, OR 97201-5398	Name and telephone number of the person to be contacted on matters involving this application (give area code): Leigh Zimmerman (503) 221-1646

6. EMPLOYER IDENTIFICATION NUMBER (EIN): 9 3 - 0 6 3 6 3 1 1		7. TYPE OF APPLICANT: (enter appropriate letter in box) <input checked="" type="checkbox"/> G	
8. TYPE OF APPLICATION: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision If Revision, enter appropriate letter(s) in box(es): <input type="checkbox"/> A. Increase Award <input type="checkbox"/> B. Decrease Award <input type="checkbox"/> C. Increase Duration <input type="checkbox"/> D. Decrease Duration Other (specify):		A. State B. County C. Municipal D. Township E. Interstate F. Intermunicipal G. Special District H. Independent School Dist. I. State Controlled Institution of Higher Learning J. Private University K. Indian Tribe L. Individual M. Profit Organization N. Other (Specify):	

9. NAME OF FEDERAL AGENCY: Environmental Protection Agency	
---	--

10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: 6 6 . 8 0 8		11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT: Commercial Construction Site Recycling Project - Model Program	
12. AREAS AFFECTED BY PROJECT (cities, counties, states, etc.): Portland Oregon Metropolitan area: Clackamas, Multnomah & Washington Counties			

13. PROPOSED PROJECT: Start Date: 4/15/92 Ending Date: 3/31/93		14. CONGRESSIONAL DISTRICTS OF: a. Applicant: District 1, 3 & 5 b. Project: District 3	
--	--	--	--

15. ESTIMATED FUNDING:		16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?	
a. Federal	\$ 30,000 .00	a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON: DATE _____	
b. Applicant	\$ 77,700 .00	b. NO. <input type="checkbox"/> PROGRAM IS NOT COVERED BY E.O. 12372	
c. State	\$.00	<input type="checkbox"/> OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW	
d. Local	\$.00		
e. Other	\$.00		
f. Program Income	\$.00	17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?	
g. TOTAL	\$ 107,700 .00	<input type="checkbox"/> Yes If "Yes," attach an explanation. <input checked="" type="checkbox"/> No	

18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED		
a. Typed Name of Authorized Representative Rena Cusma	b. Title Executive Officer	c. Telephone number (503) 221-1646
d. Signature of Authorized Representative 		e. Date Signed 3-4-92

INSTRUCTIONS FOR THE SF 424

This is a standard form used by applicants as a required facesheet for preapplications and applications submitted for Federal assistance. It will be used by Federal agencies to obtain applicant certification that States which have established a review and comment procedure in response to Executive Order 12372 and have selected the program to be included in their process, have been given an opportunity to review the applicant's submission.

- | Item: | Entrv: |
|--|---|
| <ol style="list-style-type: none"> 1. Self-explanatory. 2. Date application submitted to Federal agency (or State if applicable) & applicant's control number (if applicable). 3. State use only (if applicable). 4. If this application is to continue or revise an existing award, enter present Federal identifier number. If for a new project, leave blank. 5. Legal name of applicant, name of primary, organizational unit which will undertake the assistance activity, complete address of the applicant, and name and telephone number of the person to contact on matters related to this application. 6. Enter Employer Identification Number (EIN) as assigned by the Internal Revenue Service. 7. Enter the appropriate letter in the space provided. 8. Check appropriate box and enter appropriate letter(s) in the space(s) provided: <ul style="list-style-type: none"> — "New" means a new assistance award. — "Continuation" means an extension for an additional funding/budget period for a project with a projected completion date. — "Revision" means any change in the Federal Government's financial obligation or contingent liability from an existing obligation. 9. Name of Federal agency from which assistance is being requested with this application. 10. Use the Catalog of Federal Domestic Assistance number and title of the program under which assistance is requested. 11. Enter a brief descriptive title of the project. If more than one program is involved, you should append an explanation on a separate sheet. If appropriate (e.g., construction or real property projects), attach a map showing project location. For preapplications, use a separate sheet to provide a summary description of this project. | <ol style="list-style-type: none"> 12. List only the largest political entities affected (e.g., State, counties, cities). 13. Self-explanatory. 14. List the applicant's Congressional District and any District(s) affected by the program or project. 15. Amount requested or to be contributed during the first funding/budget period by each contributor. Value of in-kind contributions should be included on appropriate lines as applicable. If the action will result in a dollar change to an existing award, indicate <u>only</u> the amount of the change. For decreases, enclose the amounts in parentheses. If both basic and supplemental amounts are included, show breakdown on an attached sheet. For multiple program funding, use totals and show breakdown using same categories as item 15. 16. Applicants should contact the State Single Point of Contact (SPOC) for Federal Executive Order 12372 to determine whether the application is subject to the State intergovernmental review process. 17. This question applies to the applicant organization, not the person who signs as the authorized representative. Categories of debt include delinquent audit disallowances, loans and taxes. 18. To be signed by the authorized representative of the applicant. A copy of the governing body's authorization for you to sign this application as official representative must be on file in the applicant's office. (Certain Federal agencies may require that this authorization be submitted as part of the application.) |

SECTION C - NON-FEDERAL RESOURCES

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS
8. Commercial Construction Site Recycling Project - Model Program	\$ 77,700	\$	\$	\$ 77,700
9.				
10.				
11.				
12. TOTALS (sum of lines 8 and 11)	\$ 77,700	\$	\$	\$ 77,700

SECTION D - FORECASTED CASH NEEDS

13. Federal	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
	\$ 30,000	\$	\$ 15,000	\$	\$ 15,000
14. NonFederal	77,700	19,425	19,425	19,425	19,425
15. TOTAL (sum of lines 13 and 14)	\$ 107,700	\$ 19,425	\$ 34,425	\$ 19,425	\$ 34,425

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program	FUTURE FUNDING PERIODS (Years)			
	(b) First	(c) Second	(d) Third	(e) Fourth
16.	\$	\$	\$	\$
17.				
18.				
19.				
20. TOTALS (sum of lines 16 -19)	\$	\$	\$	\$

SECTION F - OTHER BUDGET INFORMATION

(Attach additional Sheets if Necessary)

21. Direct Charges:	22. Indirect Charges:
23. Remarks	

BUDGET INFORMATION — Non-Construction Programs

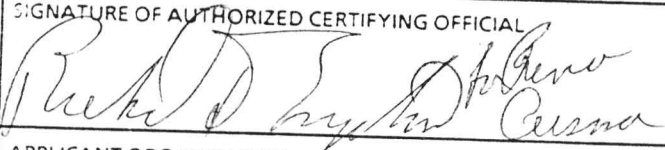
SECTION A — BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Construction Site Recycling Project, Model Program	66-808	\$	\$	\$ 30,000	\$ 77,700	\$ 107,700
2.						
3.						
4.						
5. TOTALS		\$	\$	\$ 30,000	\$ 77,700	\$ 107,700

SECTION B — BUDGET CATEGORIES

6 Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1)	(2)	(3)	(4)	
a. Personnel	\$ 16,000	\$ 5,200	\$	\$	\$ 21,200
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual Video or slide show & waste audits	8,000	17,000			25,000
g. Construction					
h. Other Promotion materials, printing, 5% price preference	6,000	50,500			56,500
i. Total Direct Charges (sum of 6a - 6h)	30,000	72,700			102,700
j. Indirect Charges		5,000			
k. TOTALS (sum of 6i and 6j)	\$ 30,000	\$ 77,700	\$	\$	\$ 107,700
7. Program Income	\$	\$	\$	\$	\$

10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§ 1451 et seq.); (f) conformity of Federal actions to State (Clear Air) Implementation Plans under Section 176(c) of the Clear Air Act of 1955, as amended (42 U.S.C. § 7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended, (P.L. 93-205).
12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§ 1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469a-1 et seq.).
14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. 2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§ 4801 et seq.) which prohibits the use of lead based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act of 1984.
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL 		TITLE Executive Officer
APPLICANT ORGANIZATION Metropolitan Service District		DATE SUBMITTED February 17, 1992

ASSURANCES — NON-CONSTRUCTION PROGRAMS

Note: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States, and if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§ 4728-4763) relating to prescribed standards for merit systems for programs funded under one of the nineteen statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§ 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§ 6101-6107), which prohibits discrimination on the basis of age;
- (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§ 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. § 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply with the provisions of the Hatch Act (5 U.S.C. §§ 1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§ 276a to 276a-7), the Copeland Act (40 U.S.C. § 276c and 18 U.S.C. §§ 874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 327-333), regarding labor standards for federally assisted construction subagreements.

Drug-free Work Place

The recipient certifies that it will provide a drug-free workplace by:

- (1) publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the recipient's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (2) establishing a drug-free awareness program to inform employees about---
 - (A) the dangers of drug abuse in the workplace;
 - (B) the recipient's policy of maintaining a drug-free workplace;
 - (C) any available drug counseling, rehabilitation, and employee assistance programs; and
 - (D) the penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (3) making it a requirement that each employee to be engaged in the performance of the project be given a copy of the statement required by paragraph (1);
- (4) notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the award, the employee will---
 - (A) abide by the terms of the statement; and
 - (B) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction;
- (5) notifying the Award Official within ten days after receiving notice under subparagraph (4)(B) from an employee or otherwise receiving actual notice of such conviction;
- (6) taking one of the following actions, within 30 days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted---
 - (A) taking appropriate personnel action against such an employee, up to and including termination; or
 - (B) requiring such employee to participate satisfactorily in a drug abuse assistance program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (7) making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (1), (2), (3), (4), (5), and (6).


The recipient shall insert in the space provided below the site(s) for the performance of work done in connection with the specific award.


Place of Performance (street address, city, county, State, zip code)

Metropolitan Service District

2000 S.W. First Avenue

Portland, OR 97201-5398


(Authorized Representative)


(Date)



PROCUREMENT SYSTEM CERTIFICATION

Form Approved
OMB No. 2000-0453
Approval expires 10-31-87

APPLICANT'S NAME

Metropolitan Service District

ASSISTANCE APPLICATION NUMBER

APPLICANT'S ADDRESS

2000 S.W. First Avenue
Portland, OR 97201-5398

SECTION I — INSTRUCTIONS

The applicant must complete and submit a copy of this form with each application for EPA Assistance. If the applicant has certified its procurement system to EPA within the past 2 years and the system has not been substantially revised, complete Part A in Section II, then sign and date the form. If the system has not been certified within the past 2 years, complete Part B, then sign and date the form.

SECTION II — CERTIFICATION

A. I affirm that the applicant has within the past 2 years certified to EPA that its procurement system complies with 40 CFR Part 33 and that the system meets the requirements in 40 CFR Part 33. The date of the applicant's latest certification is:

MONTH/YEAR

B. Based upon my evaluation of the applicant's procurement system, I, as authorized representative of the applicant: *(Check one of the following:)*

- ☒ 1. **CERTIFY** that the applicant's procurement system will meet all of the requirements of 40 CFR Part 33 before undertaking any procurement action with EPA assistance

Please furnish citations to applicable procurement ordinances and regulations

Refer to grant application for summary of program and work plan.

- ☐ 2. **DO NOT CERTIFY THE APPLICANT'S PROCUREMENT SYSTEM.** The applicant agrees to follow the requirements of 40 CFR Part 33, including the procedures in Appendix A, and allow EPA preaward review of proposed procurement actions that will use EPA assistance.

TYPED NAME AND TITLE

Rena Cusma
Executive Officer

SIGNATURE

DATE

3-11-92



EPA Project Control Number

United States Environmental Protection Agency
Washington, DC 20460

Certification Regarding Debarment, Suspension, and Other Responsibility Matters

The prospective participant certifies to the best of its knowledge and belief that it and its principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

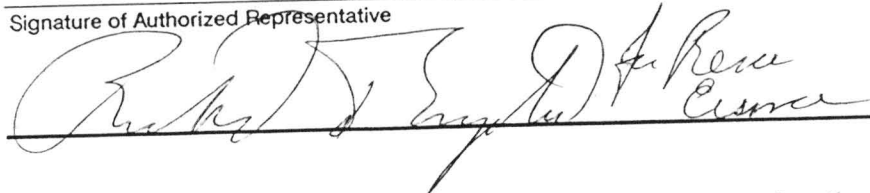
I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

Typed Name & Title of Authorized Representative

Rena Cusma, Executive Officer, Metropolitan Service District

Signature of Authorized Representative

Date



3-4-92

☐ I am unable to certify to the above statements. My explanation is attached.

A PROPOSAL FOR EPA FUNDING OF A DEMONSTRATION PROJECT:

**A MODEL FOR COMMERCIAL BUILDING RECYCLING:
CONSTRUCTION SITE SALVAGE, MATERIALS PROCUREMENT
AND COLLECTION DESIGN**

submitted by
Metropolitan Service District (Metro)
2000 S.W. First Avenue
Portland, OR 97201-5398
(503) 221-1646 FAX (503) 273-5586

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
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 can be replicated 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 wood, drywall, cardboard, asphalt, 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 provide 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 for this project are listed below:

Salvage and demolition/construction recycling

- Identify barriers that prevent salvage of reusable building materials and methods to overcome them. Perform salvage operations without impacting the contractor's schedule.
- Investigate recycling alternatives for the demolition and construction materials generated by the project. Identify recyclers for all of the materials and the associated cost.
- Include waste management planning in construction bid packages to encourage the subcontractor to consider the recycling and disposal options during the pre-project planning phase.
- Develop an integrated construction site waste management system that includes both self haul and centralized recycling, training of subcontractors about the system, and accountability for appropriate handling of recyclables and waste.
- Audit and document the quantities and types of materials generated throughout the project.
- Distribute information to designers and builders on facilities that recycle demolition/construction materials.

Buy Recycled

- Research and catalog the range of construction materials that have recycled content. Target specific areas of the project to highlight the materials.
- Assist the architect in the specification and procurement of recycled materials. Audit the price differential, quantities, and special considerations for each material.
- Develop the system for evaluating and remitting the 5% price differential for recycled materials.

Recycling Collection System

- Evaluate and select a state of the art office recycling system that will serve as a model for other projects. Include appropriate space allocations and facilities for the system.
- Incorporate waste reduction aspects in the interior design of the building, such as dishwashers to clean reusable durables.

Entire project

- Solicit feedback about the problems and success for all parties involved. Critique the project with recommended changes for future projects.
- Summarize the details of the project in a comprehensive manual that includes a summary of each aspect of the project, problems and solutions, programs developed, quantities, costs, schedules, information developed, feedback, and lessons learned.
- Develop a "how to" guide that highlights the successful aspects of the project as well as the lessons learned. This guide will develop a generic program that can be applied elsewhere by governments, private industry, designers, builders and owners.
- Produce on-site informational signage and a pamphlet explaining the project for visitors.
- Document the project in slide shows or a video.
- Site visits and workshops will be used to promote the project, raise industry and community awareness about the project as it proceeds and demonstrate techniques as they are used in the process.
- Highlight the project at Metro trade show booths and displays .

EPA GRANT CONTRIBUTION

The \$30,000 requested from the EPA will assist Metro in carrying out this project by providing funds for the salary of the on-site coordinator and for some of the costs of preparing the "how-to" manual, video, and/or slide shows. These tasks and expenses are described in the Scope of Work and under the Project Budget that follow. At the end of the project, Metro will submit copies of the manual, slide show/video, full technical documentation and an evaluation of the project's success to the EPA.

SCOPE OF WORK AND 12 MONTH TIMELINE

First Quarter

April, May, June

- Select on-site Waste Reduction Project Coordinator and a contractor to provide video or slide documentation.
- Design measurable waste reduction targets and develop evaluation methodology including a comprehensive waste audit during the construction process.
- Assist construction contractor with design and implementation of on-site separation system for demolition and construction recycling.
- 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.
- Assist subcontractors in developing and implementing waste management plans.

Second Quarter

July, August, September-

- 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.
- Maintain records of recycling and disposal.
- Conduct waste audits and waste characterization studies.

Third Quarter

October, November,
December

- Develop manual summarizing all steps in the renovation, procurement and waste reduction system design process.
- Conduct second series of workshops.
- Develop promotional information.
- Document use of recycled materials, include benefits, costs, and quality.

Fourth Quarter

January, February,
March 1993

- Complete all research and evaluation components.
- Complete a "how-to" manual and distribute a minimum of 300 copies to contractors throughout the region.
- Complete full technical 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 and other commercial building owners.
- Assist with Metro employee orientations prior to occupying the building in February.
- Submit final report to EPA.

PROJECT TEAM

Jim Goddard, Senior Solid Waste Planner for Metro in Waste Reduction, will manage this project. In addition to working on salvage and demolition/construction program development and implementation, Mr. Goddard works on special waste facilities procurement. He has a background in mechanical engineering and eight years experience in project management including 1.5 years in solid waste.

Other Metro staff involved in this project are Patricia Varley, Associate Solid Waste Planner, Market Development; Genya Arnold, Assistant Solid Waste Planner, Commercial Recycling; and Andy Sloop, Solid Waste Intern, Market Development.

ESTIMATED PROJECT BUDGET

<u>Line Items</u>	E.P.A.	<u>Distribution of Cost Sharing</u>	
		Metro	Subtotal
1. <u>Personnel</u>			
.50 FTE On-Site Project Coordinator	\$16,000	-0-	\$16,000
.10 FTE Senior Engineer	-0-	\$3,500	3,500
.05 FTE Public Affairs Specialist	-0-	\$1,700	1,700
2. <u>Printing</u>			
"How-to" manual - 300 copies, and technical report - 30 copies	6,000	-0-	6,000
Brochures	-0-	2,500	2,500
Display racks and informational signage	-0-	1,500	1,500
3. <u>Contracts</u>			
Slide-show or video production	8,000	15,000	23,000
On-site waste audits	-0-	10,000	10,000
4. <u>Training & Site Visits</u>	-0-	2,500	2,500
5. <u>Trade Show Booths</u>	-0-	1,000	1,000
6. <u>5% Price Preference for Recycled Content</u>	-0-	35,000	35,000
7. <u>Overhead</u> (Phone, FAX, secretarial support, postage, copying, etc)	-0-	5,000	5,000
Totals	\$30,000	\$77,700	\$107,700

zimm/ searspln.doc