BEFORE THE COUNCIL OF THE METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF AUTHORIZING A SOLE-SOURCE CONTRACT WITH CHARLES SAX, AIA TO CREATE A BOOKLET: Meet "MRF" An Introduction to Materials Recovery Facilities and Transfer Stations	))))))	RESOLUTION NO. 92-1608 Introduced by Rena Cusma, Executive Officer

WHEREAS, There will be a significant increase in the number of materials recovery facilities (MRFs) and transfer stations proposed in the decade; and

WHEREAS, Communities tend to resist the building of MRFs and transfer stations due to limited knowledge as to what these facilities are and what they do; and

WHEREAS, Charles Sax, AIA has already recognized the need and conceptualized a simple, cost effective way to create, design and author a booklet to educate the public about these facilities; and

WHEREAS, The Council of the Metropolitan Service District has a unique opportunity to receive a one-time grant from the US Environmental Protection Agency (EPA) to create that booklet, entitled *Meet 'MRF" an Introduction to Materials Recovery Facilities and Transfer Stations;* and

WHEREAS, This grant will fund the creation of a four-color booklet with text and illustrations explaining what MRFs and transfer stations are, what they do, and why they're critical links in the solid waste stream; and

WHEREAS, It is unlikely that this one-time exemption will encourage favoritism in the award of, or substantially diminish competition for public contracts, but instead serve as an expedient and effective means for substantial cost savings now and in the future; and

WHEREAS, This Resolution was submitted to the Executive Officer for consideration and was forwarded to the Council for approval; now, therefore,

BE IT RESOLVED,

The Metro Council as Contract Review Board hereby exempts the above described bid project from competitive bidding requirements and authorizes a sole-source contract with Charles Sax, AIA, pursuant to Chapter 2.04.060 of the Metro Code.

ADOPTED by the Council of the Metropolitan Service District this 14th day of May, 1992.

Jim Gardner, Presiding Officer

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EXHIBIT " A "

Contract No. _____

PERSONAL SERVICES AGREEMENT

THIS AGREEMENT is between the METROPOLITAN SERVICE DISTRICT, a municipal corporation organized under ORS Chapter 268, referred to herein as "Metro," located at 2000 S.W. First Avenue, Portland, OR 97201-5398, and Charles Sax , AIA, referred to herein as "Contractor," located at 320 S.W. Stark Street, Portland, Oregon 97204.

In exchange for the promises and other consideration set forth below, the parties agree as follows:

1. Duration. This personal services agreement shall be effective July 1, 1992, and shall remain in effect until and including November 1, 1992, unless terminated or extended as provided in this Agreement.

2. Scope of Work. Contractor shall provide all services and materials specified in the attached "Exhibit A -- Scope of Work," which is incorporated into this Agreement by reference. All services and materials shall be provided by Contractor in accordance with the Scope of Work, in a competent and professional manner. To the extent that the Scope of Work contains additional contract provisions or waives any provision in the body of this Agreement, the Scope of Work shall control.

3. Payment. Metro shall pay Contractor for services performed and materials delivered in the maximum sum of TWENTY-FIVE THOUSAND ONE HUNDRED AND OO/100THS DOLLARS ($25,100), in the manner and at the time specified in the Scope of Work.

4. Insurance.

a. Contractor shall purchase and maintain at the Contractor's expense, the following types of insurance, covering the Contractor, its employees, and agents:

(1) Broad form comprehensive general liability insurance covering personal injury and property damage, with automatic coverage for premises, operations, and product liability. The policy must be endorsed with contractual liability coverage; and

(2) Automobile bodily injury and property damage liability insurance.

b. Insurance coverage shall be a minimum of $500,000 per occurrence, $250,000 per person, and $50,000 property damage. If coverage is written with an annual aggregate limit, the aggregate limit shall not be less than $1,000,000.

c. Metro, its elected officials, departments, employees, and agents shall be named as

ADDITIONAL INSUREDS. Notice of any material change or policy cancellation shall be provided to Metro 30 days prior to the change or cancellation.

d. Contractor, its subcontractors, if any, and all employers working under this Agreement are subject employers under the Oregon Workers' Compensation Law and shall comply with ORS 656.017, which requires them to provide Workers' Compensation coverage for all their subject workers. Contractor shall provide Metro with certification of Workers' Compensation insurance including employer's liability.

e. If required by the Scope of Work, Contractor shall maintain for the duration of this Agreement professional liability insurance covering personal injury and property damage arising from errors, omissions, or malpractice. Coverage shall be in the minimum amount of $500,000. Contractor shall provide to Metro a certificate of this insurance, and 30 days' advance notice of material change or cancellation.

5. Indemnification. Contractor shall indemnify and hold Metro, its agents, employees and elected officials harmless from any and all claims, demands, damages, actions, losses and expenses, including attorney's fees, arising out of or in any way connected with its performance of this Agreement, with any patent infringement arising out of the use of Contractor's designs or other materials by Metro and for any claims or disputes involving subcontractors.

6. Maintenance of Records. Contractor shall maintain all of its records relating to the Scope of Work on a generally recognized accounting basis and allow Metro the opportunity to inspect and/or copy such records at a convenient place during normal business hours. All required records shall be maintained by Contractor for three years after Metro makes final payment and all other pending matters are closed.

7. Ownership of Documents. All documents of any nature including, but not limited to, reports, drawings, works of art and photographs, produced by Contractor pursuant to this Agreement are the property of Metro, and it is agreed by the parties that such documents are works made for hire. Contractor hereby conveys, transfers, and grants to Metro all rights of reproduction and the copyright to all such documents.

8. Project Information. Contractor shall share all project information and fully cooperate with Metro, informing Metro of all aspects of the project including actual or potential problems or defects. Contractor shall abstain from releasing any information or project news without the prior and specific written approval of Metro.

9. Independent Contractor Status. Contractor shall be an independent contractor for all purposes and shall be entitled only to the compensation provided for in this Agreement. Under no circumstances shall Contractor be considered an employee of Metro. Contractor shall provide all tools or equipment necessary to carry out this Agreement, and shall exercise complete control in achieving the results specified in the Scope of Work. Contractor is solely responsible for its

performance under this Agreement and the quality of its work; for obtaining and maintaining all licenses and certifications necessary to carry out this Agreement; for payment of any fees, taxes, royalties, or other expenses necessary to complete the work except as otherwise specified in the Scope of Work; and for meeting all other requirements of law in carrying out this Agreement. Contractor shall identify and certify tax status and identification number through execution of IRS form W-9 prior to submitting any request for payment to Metro.

10. Right to Withhold Payments. Metro shall have the right to withhold from payments due to Contractor such sums as necessary, in Metro's sole opinion, to protect Metro against any loss, damage, or claim which may result from Contractor's performance or failure to perform under this Agreement or the failure of Contractor to make proper payment to any suppliers or subcontractors.

11. State and Federal Law Constraints. Both parties shall comply with the public contracting provisions of ORS chapter 279, and the recycling provisions of ORS 279.545 - 279.650, to the extent those provisions apply to this Agreement. All such provisions required to be included in this Agreement are incorporated herein by reference. Contractor shall comply with all applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations including those of the Americans with Disabilities Act.

12. Assignment. This Agreement is binding on each party, its successors, assigns, and legal representatives and may not, under any circumstance, be assigned or transferred by either party.

13. Termination. This Agreement may be terminated by mutual consent of the parties. In addition, Metro may terminate this Agreement by giving Contractor five days prior written notice of intent to terminate, without waiving any claims or remedies it may have against Contractor. Termination shall not excuse payment for expenses properly incurred prior to notice of termination, but neither party shall be liable for indirect or consequential damages arising from termination under this section.

14. No Waiver of Claims. The failure to enforce any provision of this Agreement shall not constitute a waiver by Metro of that or any other provision.

15. Modification. This Agreement is the entire agreement between the parties, and may only be modified in writing, signed by both parties.

CONTRACTOR	METROPOLITAN SERVICE DISTRICT
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____

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SCOPE OF WORK
CHARLES SAX, AIA
Meet "MRF" An Introduction to Materials Recovery Facilities and Transfer Stations

The $35,000 requested from the EPA together with the $3,000 of Metro match funding will allow Metro to engage the originating consultant Charles Sax, AIA to write, edit, illustrate and aide in production coordination of the four color booklet entitled *Meet ""MRF" An Introduction Materials Recovery Facilities and Transfer Stations.* This project requires a sole source designation of the originating consultant by the Metro Council.

Distribution:
Grant funds will be used to print an estimated 1,500 booklets and to prepare two complete sets of camera ready art. Seven hundred and fifty booklets and one set of camera ready art will be sent to EPA/Washington D.C. Seven hundred and fifty booklets and the other set of camera ready art will remain at Metro. Either agency will be able to distribute sample quantities of the booklet and loan camera ready art to interested agencies, individuals and groups.

Two sets of templates designed for an 8 1/2" x 11" insert describing a local project will be provided. This will allow local agencies to conveniently and inexpensively promote a local projected.

General Notes:
Drafts of the document will be sent to individuals and organizations in industry and government for review and comment. The general public will be included in the review process.

Originating consultant will provide:
-Research
-Writing
-Editing
-Illustrations
-Review process
-Production coordination
-Project administration

Expenses:
Originating Consultants expenses are described in the Project Budget for a total cost of $25,100.

Time Frame:
The project will be completed four months following approval of the grant.

Payment:
For mutual consideration, the parties agree that compensation shall be made in the following manner.

-Metro will advance $15,000 to contractor as of July 1, 1992.
- Upon completion and delivery of project, Metro will make the final payment of $10,100 to contractor.

Metro: EPA Grant Proposal for MRF Booklet								
Project Budget Estimate 4.12.92								
	Item	Hourly rates				Extensions		
		75	60	50	40	$	$	$
Metro/Project Development								
	Proposal preparation /adm.		20	hrs at $30 = 600				
	Sub total						$600	
Metro/Graphic design								
	Meetings: Janice	6				450		
	Meetings: Sue			4		200		
	Graphic design			11		550		
	Production				24	960		
	Printing coordination				6	240		
	Sub total						$2,400	
Pre-printing costs								
	Color separations					3400		
	Computer output					950		
	Board mechanicals					50		
	Miscl production costs/comps					150		
	Reprographic					200		
	Sub total						$4,750	
Printing and shipping costs								
	1500 4C Self cover books					4800		
	Camera ready art					200		
	Packaging and shipping					150		
	Sub total						$5,150	
Originating Consultant								
	Research	24			16	2440		
	Writing	112				8400		
	Editing				24	960		
	17 Illustrations @ $500 avg ea					8500		
	Review process	16	8		8	2000		
	Production coordination	12		4		1100		
	Meetings and project admin	18		7		1700		
	Sub total						$25,100	
Total Grant Request								**$38,000**
	Deduct if 3 color printing instead of 4 color						**$4,000**	
	Total Metro in-kind services					$3,000	8%	

METROPOLITAN SERVICE DISTRICT
REQUEST FOR FEDERAL ASSISTANCE
FY 92

Grantee Agency:	Metropolitan Service District 2000 S.W. First Avenue, Portland, OR 97201 (503) 221-1646
Type of Agency:	The Metropolitan Service District (Metro) was created by the Oregon Legislature in 1977 and approved by the voters of Clackamas, Multnomah and Washington counties in 1978 as a directly elected regional government. Metro is governed by a 12-member Council elected by sub-districts in the region and an executive officer elected region wide. Metro serves over 1.2 million residents of the urban areas of the three counties.
Executive Officer:	Rena Cusma
Presiding Officer:	Jim Gardner, District #3
Department Head: Staff Contact:	Bob Martin, Solid Waste Director Katie Dowdall, Community Enhancement Coordinator
Originating Consultant:	Charles Sax, AIA, Sax Associates Architects, 320 S.W. Stark St., Portland, OR 97204
Funding Request:	Metro is seeking a one-time EPA grant of $38,000 to produce and publish a booklet *Meet "MRF" An Introduction to Materials Recovery Facilities and Transfer Stations.*

A PROPOSAL FOR EPA FUNDING OF A PUBLICATION PROJECT:

A BOOKLET TITLED
***Meet* "MRF"**
An Introduction to Materials Recovery Facilities
And Transfer Stations

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

FUNDING REQUEST

Metro seeks a one time grant of $38,000 to create a booklet entitled, *Meet "MRF" An Introduction to Materials Recovery Facilities and Transfer Stations.*

BACKGROUND

There will be a significant increase in the number of materials recovery facilities (MRFs) and transfer stations proposed in this decade. Because of citizen objections, many will not be built or will be significantly delayed, and almost all will be subjected to increased costs because of citizen objections. Community hostility kills projects, affects location, and lengthens the siting and approval process. It is the classic NIMBY phenomenon.

Governments and regulatory agencies respond accordingly. Anticipating negative responses, agencies attach special conditions to proposed facilities specifically aimed at defusing public objection. These specified site limitations, building elements, mechanical systems, and operating conditions, raise the costs of property acquisition, site development, building construction, and impose long term additional operating expenses — despite the fact that most of the conditions are stricter than those typically imposed on comparable industrial type facilities.

Every unbuilt facility slows solving one of the nation's significant environmental problems. Each site relocation, and protracted approval process, adds costs. The result is increasing disposal costs, and a net increase in the national cost of managing solid waste.

There is a simple explanation and an inexpensive solution. Communities resist these building types because the public has little knowledge of what these facilities are, and what they do. Fear of these unfamiliar building creates active resistance. This lack of understanding is the critical, unrecognized, reason for the difficulty in siting and approving these facilities. The solution is to educate the public about these facilities in a simple, cost effective way.

PROPOSAL

This grant will fund creation of an appropriately designed booklet, targeting a public audience, explaining what MRF's and transfer stations are and do. The document will provide the information necessary to affect public opinion. No one has yet perceived or addressed this issue. EPA has a unique opportunity to provide a simple solution with modest cost.

USERS AND USES

Anticipated users are: the public, regulatory agencies, state and local governments, advocacy groups, activists, developers, facility operators and community associations.

Agencies and developers can use the document as information handouts, and for community events, and facility tours. MRFs and transfer stations are a new class of public building attracting many visitors, especially school children . Schools will find the publication valuable for environmental/recycling education programs.

DISTRIBUTION

Grant funds will be used to print an estimated 1,500 booklets and to prepare two complete sets of camera ready art. Seven hundred and fifty booklets and one set of camera ready art will be sent to EPA/Washington D.C. Seven hundred and fifty booklets and the other set of camera ready art will remain at Metro. Either agency will be able to distribute sample quantities of the booklet and loan camera ready art to interested agencies, individuals and groups.

Two sets of templates designed for an 8 1/2" x 11" insert describing a local project will be provided. This will allow local agencies to conveniently and inexpensively promote a local project.

GENERAL NOTES

Drafts of the document will be sent to individuals and organizations in industry and government for review and comment. The general public will be included in the review process.

EPA GRANT CONTRIBUTION

The $35,000 requested from the EPA together with the $3,000 of Metro match funding will allow Metro to create this project, engage the originating consultant, print the document and provide the two sets of camera ready art. This project requires a sole source designation of the originating consultant by the Metro Council.

Expenses are described in the Scope of Work and under the Project Budget.

SCOPE OF WORK/TIME SCHEDULE

Metro shall undertake the program and perform all activities described in the Scope of Work. The project will be completed four months following approval of the grant.

Metro will provide:

- Graphic Design
- Graphic Mechanicals
- Graphic Design for the booklet
- Graphic Design for an 8 1/2" x 11" insert template
- Production Coordination
- Printing Coordination
  (The booklet will be identified as printed on recycled paper with soy base inks)
- Printing
  (Metro will take all reasonable measures to use a Disadvantaged Business Enterprise)
- Project Administration
- Grant writing
- Personal service agreement with originating consultant

Originating consultant will provide:

- Research
- Writing
- Editing
- Illustrations
- Review process
- Production coordination
- Project administration

Deliverables:

- 1,500 booklets, packaged and shipped from printer:
  750 to EPA/Washington D.C.
  750 to Metro
- Two sets of camera ready art
- Two templates for an 8 1/2" x 11" insert for local messages

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Project Budget Estimate 4.12.92								
	Item	Hourly rates				Extensions		
		75	60	50	40	$	$	$
Metro/Project Development								
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	Color separations					3400		
	Computer output					950		
	Board mechanicals					50		
	Misc! production costs/comps					150		
	Reprographic					200		
	Sub total						$4,750	
Printing and shipping costs								
	1500 4C Self cover books					4800		
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	Sub total						$25,100	
Total Grant Request								**$38,000**
	Deduct if 3 color printing instead of 4 color						$4,000	
	Total Metro in-kind services					$3,000	8%	

Sax Associates Architects • 320 S.W. Stark St. • Portland, OR 97204 • 503.248.1995

Meet "MRF" *An Introduction to Materials Recovery Facilities and Transfer Stations*

Outline of proposed document for EPA Revised: 2/17/92
Target audience: General public in non-technical language
Concept format: 16 pages @ 8-1/2" x 8-1/2" Three color printing

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Page 1 **Cover**

Meet "MRF" An Introduction to Materials Recovery Facilities and Transfer Stations

Illustrations:

Drawing of generic MRF used throughout the booklet.

Alternate: Aerial view of urban landscape with MRF in foreground and landfill in the distance.

Page 2 **Inside Front Cover**

Credits

Page 3 ***Introduction***

Why this publication was created.
How MRFs function as the new gateway to the landfill.

Illustration:

Aerial view of urban landscape with MRF in foreground and landfill in the distance.
Alternate: Drawing of generic MRF used throughout the booklet.

Page 4 ***What's a MRF?***

MRF defined generically.
Other designations and missions.
Transfer Stations defined.
Differences between MRFs and Transfer Stations.

Illustration:

Cutaway drawing of generic MRF used throughout the booklet.

Page 5 ***What Does a MRF Do?***

What happens in a MRF.
How MRFs and Transfer Stations fit in the disposal process:
Relationship to landfill, gateway concept, local and long haul disposal.
Alternate missions.

Illustration:

A typical "line.

Page 6 ***How do MRF Projects Get Started?***

Project origination, and sponsorship:
Public projects, private developers, public-private partnerships.
Project elements: waste stream characteristics, recovery goals,operating criteria.
input/output driven, throughput, curbside program integration.

Illustration:

A public meeting with maps on wall in background.

Page 7 ***How are Projects are Designed and Built?***

Development strategies: public, private, public/private.
Construction strategies: traditional, design/build, fast track.

Illustration:

A construction site with equipment and workers.
Alternate: An architect/engineer at a computer with the screen showing a plan or elevation.

Page 8 ***How are MRF Sites Selected?***

Location factors: sources of waste, destination of residue, permitting, transportation access, traffic impact, compatibility with adjacent sites.
Technical factors: geotechnical and topographic concerns, zoning , regulatory issues, political issues, site visibility.
Mitigating off-site impacts: litter and traffic.
Political factors: community relations, business and neighborhood groups.
Site size-rule of thumb.

Illustrations:

A survey crew at work.
Aerial view of a site before development.

Page 9 ***How is the Site Arranged?***

Site development concepts: site design driven vs. internal layout driven.
On-site traffic arrangement principles: separation of commercial, curbside, public /self-haul, buy-back, and queuing.
Site elements: gatehouse, office, fuel stations, wash station, vehicle maintenance facilities.

Illustrations:

Aerial view of a site after the facility is built.
A site development plan.
A queue of packer trucks, pickups, and passenger cars.

Page 10,11 ***What Happens Inside the Building?***

Two page layout

Waste receiving strategies and alternatives: commercial and public.
Program elements: curbside program, buy-back center, processing alternatives, equipment alternatives , yard waste, office, staff and visitor facilities
Loadout alternatives: Top loading and compaction.
Mitigating environmental concerns: dust, odor, vectors.
Enclosure alternatives: Pre-engineered metal buildings and conventional construction.
Exterior design.

Illustrations:

Typical floor plan or exploded perspective view.
Illustrations of various types of separating equipment.

Page 12 ***What About Health and Safety at a MRF?***

Complying with regulatory provisions.
Housekeeping and cleanliness at the MRF.
Do hazardous wastes go to a MRF?
Definition of hazardous waste.
Dealing with unacceptable and household hazardous wastes at the MRF?

Illustration:

Workers in protective gear on a sorting line or in a collection area.

Page 13 ***How Much Does a MRF Cost?***

Hard cost elements : land, building, equipment.
Soft cost elements: Site search, survey, soils investigation, and engineering (waste composition studies, environmental reports,project development).
Continuing costs: staff, operations, maintenance.

Illustration:

A ledger sheet with various relevant categories.

Page 14 *Where Does the Money Come From?*

Public projects: project financing, bonds, tipping fees.
Private projects: Capital investment strategy.
Public/Private projects: custom mix of financing with examples.
Impact on the individual through tipping fees, taxes and collection rates.
Illustration:
A gatehouse transaction, pickup at a home, a bond certificate, tax statement.

Page 15 **Inside Back Cover**

Summary and Conclusion
Review of key points.
Role of regulatory process.
Role of informed citizenry.
References.
Illustration:
Children getting off a school bus and entering a MRF.

Page 16 **Back Cover**

Address and mailing format.

mrf book layout 4

1

WHAT IS A MRF?

An Introduction to
Materials Recovery Facilities
and Transfer Stations

EPA Identification

2

Page 2: Inside Front Cover
Metro Identification
Credits

3

MEET "MRF"

Rhymes with "surf." The goal of this document is to provide an understanding of what MRFs and Transfer Stations do, and don't do.

Old, urban landfills are filling and closing throughout the United States. New landfills, designed to meet strict environmental standards, are being built much farther away from the communities they serve. Materials Recovery Facilities (MRFs) and Transfer Stations serve as the gateway to these new destinations. Yet most people know little about what goes on in these buildings. Misunderstanding and apprehension are often the reasons why these facilities fail to gain approval from the communities where they are needed as the new link in the chain of waste disposal—from garbage to waste recovery.

It will help to understand several terms used in this booklet:

- Mixed solid waste is unsorted, wet and dry garbage, or everything that is disposed.
- Source separated recyclables are all the dry materials which can be reclaimed from the waste stream. Separated means they have been divided into their collection category at the home, business or factory. The levels of separation, starting from the least separated are: fully commingled, partially commingled, and fully separated.
- Residue is the material left over after extracting and processing recyclables. Residue goes to a landfill.

Aerial view of generic MRF, exhibiting more detail than the cover drawing

4

WHAT'S A MRF?

Cutaway drawing of generic MRF used throughout the booklet

A MRF is a facility where recyclable materials are extracted from a waste stream. The initials "MRF" stand for Materials Recovery Facility. Sometimes called an intermediate processing facility (IPF), or an intermediate processing center (IPC), they all do the same thing: they separate, compact, store, and ship recyclables. Often the recyclable materials have been separated at their source before shipping to the MRF.

A transfer station's mission is simpler. It is a facility where mixed waste is reloaded for shipment to a more distant location. Typically, mixed waste is dropped at the station from garbage route trucks, often compacted in some form, and then loaded into cargo trailers or containers, for shipment to a landfill or other destination. Increasingly, transfer stations process a portion of the wastes received to remove recyclables.

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WHAT DOES A MRF DO?

The amount and complexity of processing in MRFs vary considerably. Some accept only a small number of source separated materials. Other, larger facilities are designed for comprehensive sorting of a wide range of materials. Some MRFs use sophisticated equipment to extract recyclables from commingled waste. Almost all use some amount of hand sorting.

It's important to note that waste collection/disposal systems vary widely throughout the country as well as at the community level. This means that MRFs and transfer stations will vary depending on the community they are located in.

Typically, source separated waste arrives at a MRF from commercial collection, curbside programs, public or self-hauling, transfer from other facilities, and from public drop-off or collection centers. Most facilities are not designed for sorting of commingled waste.

Illustration: A typical "line"

6

HOW DO MRF PROJECTS GET STARTED?

Project origination, and sponsor:
Public Projects, Private Developers, Public-Private Partnerships
Project elements:
Waste stream characteristics, Recovery goals, Operating criteria,
Input/output driven, Throughput, Curbside program integration
Id, urban landfills are filling and closing throughout the United States. New landfills, designed to meet strict environmental standards, are being built much further away from the communities they serve. Materials Recovery Facilities (MRFs) and Transfer Stations serve as the gateway to these new destinations. Yet most people know little about what goes on in these buildings. Misunderstanding and apprehension are often the reasons why these facilities fail to gain approval from the communities where they are needed as the new link in the chain of waste disposal—from garbage to waste recovery

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It will help to understand several terms used in this booklet: Mixed solid waste is unsorted, wet and dry garbage, or everything that is disposed. Source separated recyclables are all the dry materials which can be reclaimed from the waste stream. Separated means they have been divided into their collection category at the home.

7

HOW ARE PROJECTS DESIGNED AND BUILT?

An architect/engineer at a computer with the initial drawing of plans

A construction site elevation

Development alternatives: Public, Private, Public/Private
Construction strategies: Traditional, Design/Build, Fast Track
Id, urban landfills are filling and closing throughout the United States. New landfills, designed to meet strict environmental standards, are being built much further away from the communities they serve. Materials Recovery Facilities (MRFs) and Transfer Stations serve as the gateway to these new destinations. Yet most people know little about what goes on in these buildings. Misunderstanding and apprehension are often the reasons why these facilities fail to gain approval from the communities

8

WHAT HAPPENS INSIDE THE BUILDING?

Illustration: Typical floor plans or exploded perspective view. Illustrations of various types of separating equipment

Aerial view of a site before development

Waste receiving strategies and alternatives: Lowdock alternatives: Top loading and compaction
Program elements: Curbside program, Buy-back center, Processing alternatives, Equipment alternatives, Yard waste, Office, Staff and visitor facilities
Mitigating environmental concerns: Dust, odor, vectors

Enclosure alternatives: Pre-engineered metal buildings and conventional construction
Exterior design/Enclosure alternatives: Pre-engineered metal buildings and conventional construction. Exterior design

Waste receiving strategies and alternatives
Lowdock alternatives: Top loading and compaction
Program elements: Curbside program, Buy-back center, Processing alternatives, Equipment alternatives, Yard waste, Office, Staff and visitor facilities
Mitigating environmental concerns: Dust, odor,
Exterior design

Waste receiving strategies and alternatives
Lowdock alternatives: Top loading and compaction
Program elements: Curbside program, Buy-back center, Processing alternatives, Equipment alternatives, Yard waste, Office, Staff and visitor facilities

10

HOW ARE MRF SITES SELECTED?

A survey crew at work

Aerial view of a site before development

Location factors: Sources of waste, destination of residues, politics, permitting, transportation access, traffic impact, compatibility with adjacent sites,
Technical factors: Geotechnical and topographic concerns, zoning, regulatory issues, Political issues, Site visibility/Marketing, off-site impacts: Litter and traffic. Political factors: community relations, business and neighborhood groups. Site size-Rule of thumb

permitting, transportation access, traffic impact, compatibility with adjacent sites,
Technical factors: Geotechnical and topographic concerns, zoning, regulatory issues, Political issues, Site visibility/Marketing, off-site impacts: Litter and traffic. Political factors: community relations, business and neighborhood groups. Site size-Rule of thumb

11

HOW IS THE SITE ARRANGED?

Illustrations: A site development plan
Aerial view of a site after the facility is built
A queue of collection trucks, pickups, and passenger cars

Arrangement concepts: Site design driven vs. Internal layout driven
On-site traffic arrangement principles: Separation of commercial, curbside, public and buy-back traffic, Queuing
Site elements: Gatehouse, Office, Fuel stations, Wash station, Vehicle maintenance facilities

Arrangement concepts: Site design driven vs. Internal layout driven
On-site traffic arrangement principles: Separation of commercial, curbside, public and buy-back traffic, Queuing
Site elements: Gatehouse, Office, Fuel stations, Wash station, Vehicle maintenance facilities

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WHAT ABOUT HEALTH AND SAFETY AT A MRF?

Illustration of workers in protective gear on a sorting line

Complying with base regulatory provisions
Housekeeping and cleanliness at the MRF
Do hazardous wastes go to a MRF
What happens when unacceptable and household hazardous wastes come to the MRF
Complying with base regulatory provisions
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Do hazardous wastes go to a MRF
What happens when unacceptable and household hazardous wastes come to the MRF

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HOW MUCH DOES A MRF COST?

Hard cost elements: land, building, equipment
Soft cost elements: Site search, Survey, Soils investigation, Engineering (Waste composition studies, Environmental reports/Project development)
Continuing costs: staff, operations, maintenance
Hard cost elements: land, building, equipment
Soft cost elements: Site search, Survey, Soils investigation, Engineering (Waste composition studies, Environmental reports/Project development)
Continuing costs: staff, operations, maintenance
Hard cost elements: land, building, equipment
Soft cost elements: Site search, Survey, Soils investigation, Engineering (Waste composition studies, Environmental reports/Project development)
Continuing costs: staff, operations, maintenance
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Illustration: A ledger sheet with various relevant categories

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WHERE DOES THE MONEY COME FROM?

Public projects: Project financing, bonds, tipping fees
Private projects: Capital investment strategy
Public/Private: Custom mix of financing with examples
Impact on the individual through tipping fees, taxes and collection rates
Public projects: Project financing, bonds, tipping fees
Private projects: Capital investment strategy
Public/Private: Custom mix of financing with examples
Impact on the individual through tipping fees, taxes and collection rates
Public projects: Project financing, bonds, tipping fees
Private projects: Capital investment strategy
Public/Private: Custom mix of financing with

Illustration: A purchase transaction, pickup at a farm, a bond certificate, tax statement

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Inside Back Cover

Review of key points
Role of regulatory process
Role of informed citizenry
References

Illustration of children getting off a school bus and entering a MRF

NOT

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STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 92-1608 FOR THE PURPOSE OF AUTHORIZING A SOLE-SOURCE CONTRACT WITH CHARLES SAX, AIA TO CREATE A BOOKLET ENTITLED *Meet "MRF" An introduction to Materials Recovery Facilities and Transfer Stations.*

Date: April 20, 1992 Presented by: Katie Dowdall

Proposed Action

Adoption of Resolution No. 92-1608 waives competitive bidding procedures and authorizes the execution of a sole-source personal services agreement with Charles Sax, AIA to create the booklet *Meet "MRF" An Introduction to Materials Recovery Facilities and Transfer Stations* which is being produced by Metro when funded by a one time EPA grant.

Factual Background and Analysis

There will be a significant increase in the number of materials recovery facilities (MRFs) and transfer stations proposed in this decade. Many will not be built or will be significantly delayed, and almost all will be subjected to increased costs because of citizen objection. Community hostility kills projects, affects location, and lengthens the citing and approval process. It is the classic NIMBY phenomenon.

Governments and regulatory agencies try to anticipate such negative responses and tend to attach special conditions to proposed facilities specifically aimed at avoiding and defusing predictable public concerns. Those self-imposed site limitations, building requirements, special mechanical systems and restricted operating conditions are often stricter than those imposed on comparable industrial facilities and they increase property acquisition, site development, building construction and other costs including the long-term operating expenses of such facilities.

Every unbuilt facility slows the solution to one of the nation's most significant environmental problems. Each protracted approval process or site relocation adds to our environmental debt. The result is escalating site disposal and solid waste management costs which could be avoided. The solution is in a simple, cost effective means to educate the public and disarm prevailing fears.

In January, 1992 Charles Sax of Sax Associates, Architects, AIA, met with Judith Mandt and Katie Dowdall to address these NIMBY issues. They acknowledged that MRFs and transfer stations are critical links in the solid waste stream and yet most people know very little about their function and operation.

Mr Sax outlined his concept of designing a booklet which would target a national audience and explain what MRFs and transfer stations are and do. It would be utilized by public agencies and developers as an information handout and distributed at community events and facility tours. If user friendly, it could help displace the fears associated with these buildings and the

subsequent difficulties in their citing and approval. It would provide the information necessary to affect public opinion as no one has to date. It could be a unique opportunity to provide at modest cost a very valuable, high quality, nationally published and environmentally responsible document.

Therefore, Metro applied in April, 1992 for a one-time grant from EPA to fund this creative booklet entitled *Meet "MRF" An Introduction to Materials Recovery Facilities and Transfer Station.* This four-colored booklet with text and illustration will cost effectively explain what MRFs and transfer stations are and do, thereby providing the information necessary to affect public opinion.

Metro will contribute $3,000 of in kind service for staff time. Metro will provide graphic design, graphic mechanicals, graphic design for an insert template, production coordination and printing coordination. The booklet will be consistent with the high quality graphic standards associated with Metro products. Metro will maintain graphic integrity and continuity. The booklet will be identified as printed on recycled paper with soy base inks.

The EPA grant of $35,000 will pay the $9,900 for printing and shipping costs and $25,100 for the originating consultant's costs. The consultant's costs include research, writing, editing, illustrating, review process, production coordination and project administration.

Two sets of templates designed for an 8 1/2" x 11" insert describing a local project will be provided. This will allow local agencies to conveniently and inexpensively promote a local project.

Sole-Source Justification

The proposed personal services agreement with Charles Sax is considered a sole-source because he is the originating author who perceived the need for and conceptualized the use of an appropriately designed booklet, to target a public audience and explain what MRFs and transfer stations are and do.

Budget Impact
FY 1992-93
$35,000 EPA grant pass through to pay costs for:
$ 9,900 Printing and shipping expenses
$25,100 Originating Consultant's costs

$ 3,000 Metro in kind staff time contribution

$38,000 Total cost of creating, producing, printing and shipping 1,500 booklets

Executive Officer's Recommendation:

The Executive Officer recommends approval of Resolution No. 92-1608.

SOLID WASTE COMMITTEE REPORT

CONSIDERATION OF RESOLUTION NO. 92-1608, FOR THE PURPOSE OF AUTHORIZING A SOLE-SOURCE CONTRACT WITH CHARLES SAX, AIA, TO CREATE A BOOKLET: MEET "MRF" AN INTRODUCTION TO MATERIALS RECOVERY FACILITIES AND TRANSFER STATIONS

Date: May 6, 1992 Presented by: Councilor Hansen

Committee Recommendation: At the May 5 meeting, the Committee voted 4-0 to recommend Council adoption of Resolution No. 92-1608. Voting in favor: Councilors Buchanan, Hansen, Van Bergen and Wyers.

Committee Issues/Discussion: Katie Dowdall, Solid Waste Staff, explained that the purpose of the resolution is to authorize a contract with Charles Sax for the production of a booklet related to the locating of material recovery and transfer station facilities in local communities. The booklet would explain how such facilities operate in an effort to overcome traditional negative local reaction to the siting of such facilities.

Dowdall noted that Mr. Sax, Metro and DEQ have applied for a $35,000 Federal EPA grant to produce the booklet which would be distributed nationwide. Mr. Sax would receive $25,100 for writing and illustrating the booklet and $9,900 would pay for the design and printing of the booklet. Metro's role in the production of the booklet would be noted on the inside cover. Dowdall indicated that Metro's costs associated with the project would be limited to $3,000 of in-kind staff time.

Councilor Van Bergen asked for background information on Mr. Sax. Dowdall noted that he is a Portland-based architect who has designed many material recovery and transfer station facilities.

Councilor Wyers expressed concern that the booklet not promote material recovery to the detrement of other waste reduction processes, such as source separation. Dowdall noted that the purpose of the booklet was not to specifically promote material recovery facilities, but to combat fears that local residents have about locating material recovery and transfer facilities in their communities. She explained that Metro would have final review authority concerning the booklet.

Wyers noted that material recovery may not even be a preferred method of waste reduction. Bob Martin explained that material recovery efforts at Metro Central reduced the number of trips to the Arlington Landfill by 2,000.

Councilor Hansen and Bob Martin both noted that such a booklet would be beneficial in addressing NIMBY issues related to facility siting.

Councilor Wyers asked how much Metro staff time would be involved in the production of the booklet. Dowdall indicated that the maximum would be 20 hours.

Councilor Van Bergen asked who would own the rights to the booklet. Dowdall indicated that there would be joint ownership by Metro and the Federal EPA, with each having camera-ready copies available for reproduction.