



Zero Waste Advisory Commission

C&D Recycling Committee

February 27, 2015

Construction Material Management Ordinance



AGENDA

- **Ordinance & Rules Development Status**
- **Qualified Processors**
 - + C&D Haulers
 - + Project Diversion Report

Ordinance & Rules Development

1. Affected Projects

Ordinance Intent:

Covered Projects	Initial	2020
• New or Renovation (sq ft)	5,000	1,000
• Commercial Demolition	All	All
• Residential Demolition	None	All

Status:

- Law, PDRD, & ARR developing draft LDC language
- PDRD to invite feedback from stakeholders

Ordinance & Rules Development

2. Project Requirements

Ordinance Intent:

Performance Measures	Initial	2020	2030
• Disposal Rate (lbs/sq ft)	< 2.5	< 1.5	< 0.5
• Diversion Rate	50%	75%	95%

2.3 Project C&D Diversion Report

Status:

- Law, PDRD, & ARR developing draft LDC language
- PDRD to invite feedback from stakeholders

Ordinance & Rules Development

3. Licensed C&D Haulers

Ordinance Intent:

Report separately

- Tons of C&D material hauled
- Tons of other materials hauled

Status:

- Staff developing draft amendments to 15-6 Code and Rules

Ordinance & Rules Development

5. Penalties

Ordinance Intent:

- Affected projects pay performance-based penalty

Status:

- Law Department analyzing options
- Follows development of other amendments

Ordinance & Rules Development

4. Qualified C&D Processors

Ordinance Intent:

- Permits and reporting requirements
- Semi-annual diversion rate report
- Minimum diversion rate
- City-approved 3rd party certification

Process:

- ARR shares research with C&D Committee
- ARR will interview processors & facilitates public discussion
- COA will staff draft Code and Rule amendments for future discussion

Qualified C&D Processors

15-6 SWS Code

- Qualified Processor permits
- Reporting requirements
- Qualified Processor diversion rate

Administrative Rules

- Qualified Processor criteria
- Application & renewal
- Recordkeeping & reporting
- Evaluating entity

Qualified C&D Processors

Reduce costs while validating diversion

- Contractors & Processors

Track and report diversion for entire processing operation rather than by each load

- City

Registration, audit and inspection of processing operation rather than review each project's report

Construction Scenario

1. Contractor checks box on Permit Application indicating project is subject to the recycling requirements
2. At preconstruction conference, City gives Contractor pamphlet on C&D recycling requirements and resources
3. Contractor contracts with licensed C&D Haulers to remove mixed or sorted C&D debris during construction
4. C&D Haulers report material types, weights, destinations (landfill, end-user, processor, etc.) to Contractor
5. After project completion, Contractor or (C&D Hauler) submits C&D recycling report to City

2.3. Project C&D Diversion Report

Project C&D Diversion Rate =

$$\frac{\text{Diversion}}{(\text{Diversion} + \text{Disposal})}$$

Diversion:

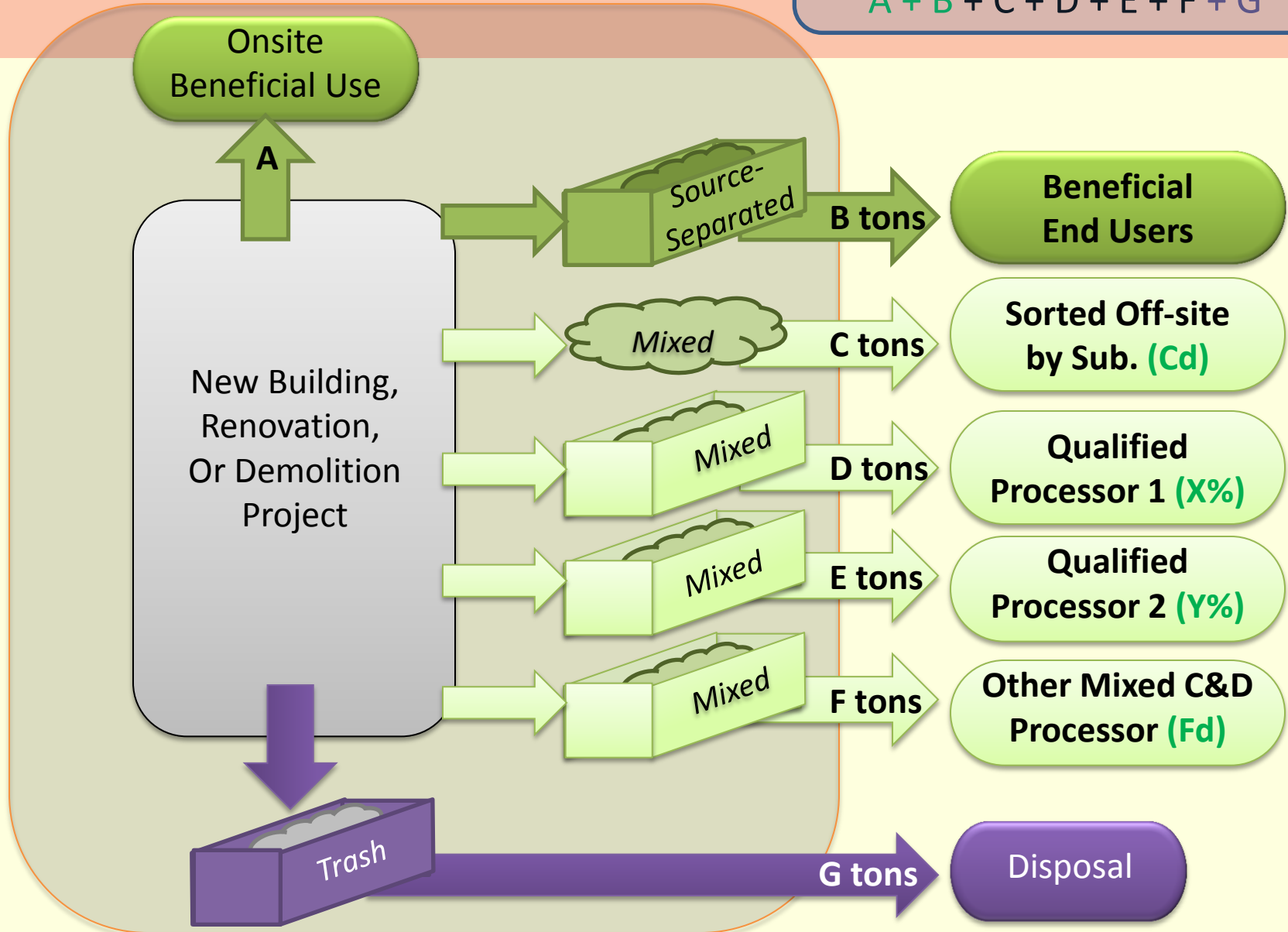
- Onsite beneficial use
- Delivered directly to end-users
- Diverted by:
 - Qualified Processor
 - Other processors
 - Subcontractors

Disposal:

- Disposed onsite
- Delivered to landfill directly
- Disposed by:
 - Qualified Processor
 - Other processors
 - Subcontractors

Affected Project

$$\text{Project Diversion Rate} = \frac{A + B + C + D(X\%) + E(Y\%) + Fd}{A + B + C + D + E + F + G}$$



2.3. Project C&D Diversion Report

Example Summary Report with Multiple Destination Types

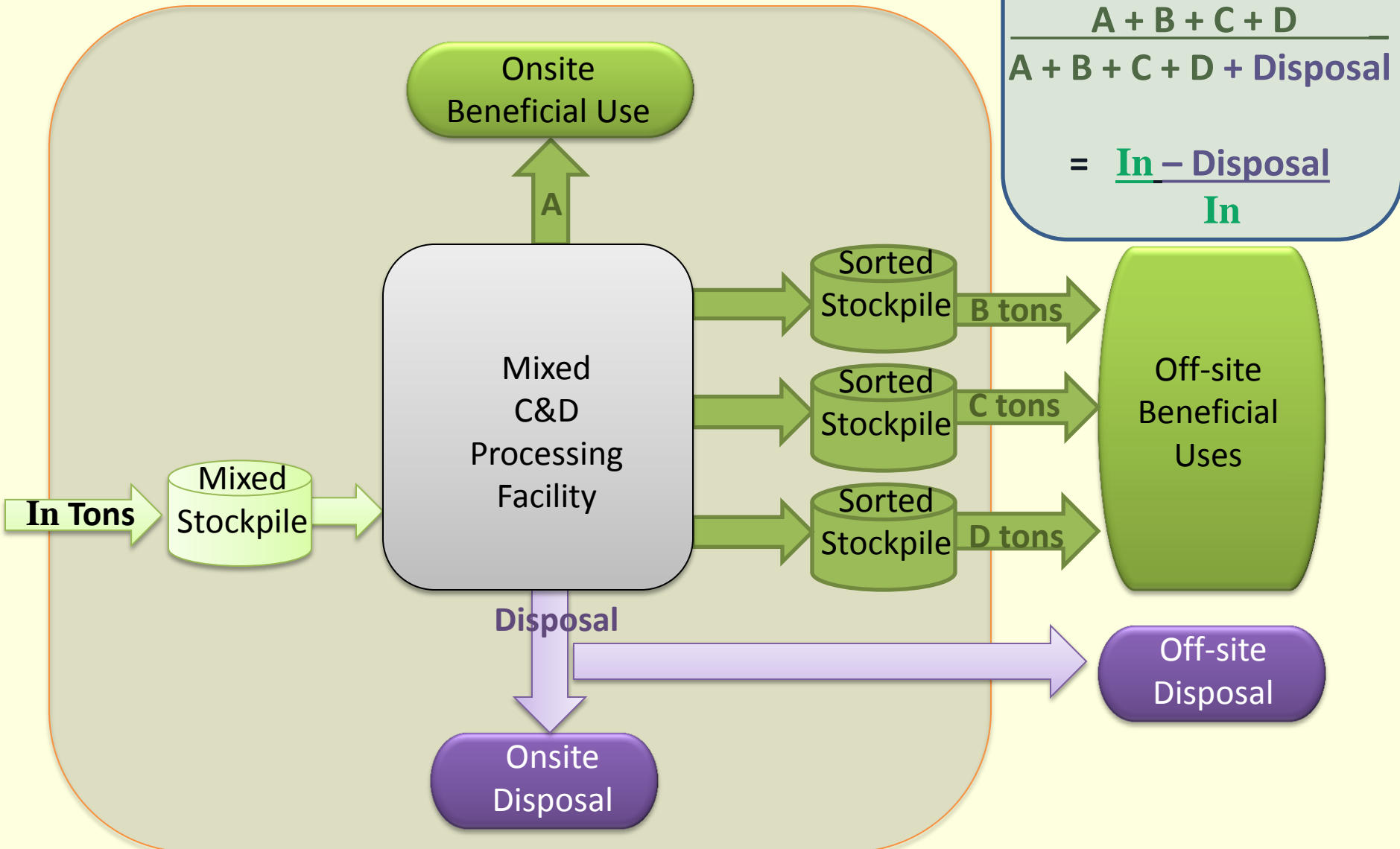
Start Date	End Date	Destination	Diversion Rate	Weight	Diverted Weight
		Onsite Use	100%	A	A
		End-User	100%	B	B
		Sub Contractor	-	C	Cd
		Qualified Proc. 1	X %	D	D * X %
		Qualified Proc. 2	Y %	E	E * Y %
		Other Processor	-	F	Fd
		Disposal	0%	G	None
Project Totals				Total	Diverted
Project Diversion Rate				Diverted / Total	

Mixed C&D Processor

Facility
Diversion Rate =

$$\frac{A + B + C + D}{A + B + C + D + \text{Disposal}}$$

$$= \frac{\text{In} - \text{Disposal}}{\text{In}}$$



Qualified C&D Processors

Certify all or part of a facility:

- a. Commingled (mixed) processing lines
- b. Source-separated processing operations
- c. Select processing lines
- d. Entire processing facility
- e. Transfer operation

Qualified C&D Processors

Certification Criteria

1. Permits, Authorizations
2. Minimum Facility Diversion Rate
3. Diversion Rate Validation

Application & Renewal

- Process
- Recordkeeping, Reporting, & Monitoring

Evaluating Entity

Qualified C&D Processor Criteria

1. Permits, Authorizations

- TCEQ Solid Waste authorization
- Storm water management
 - TPDES
 - Watershed Protection Dept.
- Land use (zoning)
- Fire protection

Qualified C&D Processor Criteria

2. Minimum Facility Diversion Rate

Minimum Facility Diversion Rate options:

- a. Equal to Project Diversion Rate
- b. Less than Project Diversion Rate
- c. No minimum

San Diego C&D Facilities

Historical Diversion Rates

	CERTIFIED MIXED C&D PROCESSING FACILITIES				CERTIFIED MIXED C&D TRANSFER STATIONS				
Effective Date	SANCO Recovery Facility	EDCO CDI Recycling San Marcos	Waste Management Inc.	Otay CDI Processing Facility	EDCO Recovery & Transfer Station	EDCO Station La Mesa	Escondido Resource Recovery	Ramona Transfer Station	Fallbrook Refuse Service
7/1/2008	57%	72%			57%	57%	57%	57%	
9/4/2008	56%	66%			56%	56%	56%	56%	
11/21/2008	66%	64%			66%	66%	66%	66%	66%
2/11/2009	63%	73%			63%	63%	63%	63%	63%
6/19/2009	67%	74%			67%	67%	67%	67%	67%
6/30/2009	67%	74%	50%		67%	67%	67%	67%	67%
8/5/2009	67%	71%	60%		67%	67%	67%	67%	67%
1/1/2014	67%	85%	Closed	67%	67%	67%	67%	67%	67%
4/1/2014	66%	88%	Closed	65%	66%	66%	66%	66%	66%
7/1/2014	65%	88%	Closed	66%	65%	65%	65%	65%	65%

Example:

San Diego Facility Directory



2014 Certified Construction & Demolition Recycling Facility Directory

These facilities are certified by the City of San Diego to accept materials listed in each category. Hazardous materials are not accepted. The diversion rate for these materials shall be considered 100%, except mixed C&D debris which updates quarterly. The City is not responsible for changes in facility information. Please call ahead to confirm details such as accepted materials, days and hours of operation, limitations on vehicle types, and cost. For more information visit: www.recyclingworks.com

Please note: In order to receive recycling credit, Mixed C&D Facility and transfer station receipts must:
-be coded as construction & demolition (C&D) debris
-have project address or permit number on receipt
**Make sure to notify weighmaster that your load is subject to the City of San Diego C&D Ordinance.*
Note about landfills: Miramar Landfill and other landfills do not recycle mixed C&D debris.

	Mixed C&D Debris	Asphalt /Concrete	Brick/Block/Rock	Building Materials for Reuse	Cardboard	Carpet	Carpet Padding	Ceiling Tile	Ceramic Tile / Porcelain	Clean Fill Dirt	Clean Wood / Green Waste	Drywall	Industrial Plastics	Lamps / Light Fixtures	Metal	Mixed Inerts	Styrofoam Blocks
EDCO Recovery & Transfer 3660 Dalbergia St, San Diego, CA 92113 619-234-7774 www.edcodisposal.com/public-disposal	65%											•					
EDCO Station Transfer Station & Buy Back Center 8184 Commercial St, La Mesa, CA 91942 619-466-3355 www.edcodisposal.com/public-disposal	65%				•							•			•		
EDCO CDI Recycling & Buy Back Center 224 S. Las Posas Rd, San Marcos, CA 92078 760-744-2700 www.edcodisposal.com/public-disposal	88%				•										•		
Escondido Resource Recovery 1044 W. Washington Ave, Escondido 760-745-3203 www.edcodisposal.com/public-disposal	65%																
Fallbrook Transfer Station & Buy Back Center 550 W. Aviation Rd, Fallbrook, CA 92028 760-728-6114 www.edcodisposal.com/public-disposal	65%				•										•		
Otay C&D/Inert Debris Processing Facility 1700 Maxwell Rd, Chula Vista, CA 91913 619-421-3773 www.sd.disposal.com	66%																
Ramona Transfer Station & Buy Back Center 324 Maple St, Ramona, CA 92065 760-789-0516 www.edcodisposal.com/public-disposal	65%				•										•		
SANCO Resource Recovery & Buy Back Center 6750 Federal Blvd, Lemon Grove, CA 91945 619-287-5696 www.edcodisposal.com/public-disposal	65%				•										•		
All American Recycling 10805 Kenney St, Santee, CA 92071 619-508-1155 (Must call for appointment)						•											
Allan Company 6733 Consolidated Wy, San Diego, CA 92121 858-578-9300 www.allancompany.com/facilities.htm					•										•		



Example RCI-Certified Facility

Zanker Road Resource Management

675 Los Esteros Road

San Jose, CA 95134

www.zankerrecycling.com



RECYCLING
CERTIFICATION
INSTITUTE

PROCESS/LINE	12-mo Recycling Rate Average	
	W/ADC	WO/ADC
Demolition Processing Operation	82.3%	82.3%
C&D Recycling	77.7%	65.1%
Wood Waste / Yard Waste Recycling	99.3%	99.3%
Shingle Recycling	86.5%	28.3%
Concrete Recycling Facility	99.1%	98.7%
Sheetrock Recycling	84.5%	82.2%

Seattle "Qualified" Mixed Recyclers

Seattle "Qualified" Mixed Waste Recyclers and Disposal Facilities							
published 4/23/2014 -updated at least quarterly							
FACILITIES	Seattle Certified 2014	Regulatory Compliant	Reporting Compliant	Residual Compliant	Recycle %	Beneficial Use %	Landfill*
MIXED WASTE RECYCLERS				TBD 2nd Quarter 2014	1st Quarter 2014 data**		
Black River Transfer Station - Republic 501 Monster Road SW, Renton - (425) 235-0269	Yes	Yes	Yes	TBD	14%	37%	49%
Busy Beaver 101 East Marine View Drive, Everett - (425) 339-0117	No	No	No	TBD	data not available		
CDL Recycle 7201 E. Marginal Way S. Seattle - (206) 763-2002	Yes	Yes	Yes	TBD	44%	44%	12%
Recovery 1, Inc. 1805 Stewart Street, Tacoma - (253) 627-1180	Yes	Yes	Yes	TBD	19%	55%	26%
United Recycling & Container 18827 Yew Way, Snohomish - (425) 485-0355	TBD	Yes	TBD	TBD	TBD without soils		TBD
SOLID WASTE TRANSFER STATIONS	Need to inform customers if						
City of Seattle North Transfer Station 1350 N 34th Street, Seattle							
City of Seattle South Transfer Station 130 South Kenyon Street, Seattle (206) 684-3000	Not Applicable	Yes	Yes	Not Applicable			
Third & Lander Transfer Station - Republic 2733 3rd AVE S. Seattle - (206) 332-7700	Not Applicable	Yes	Yes	Not Applicable	transloads some tons to Black River for recycling		
Waste Management Eastmont Transfer Station 7201 W Marginal Way SW, Seattle (866) 962-9253	Not Applicable	Yes	Yes	Not Applicable	transloads some tons to CDL Recycle for recycling		

Notes:

* Landfill includes direct disposal, Alternative Daily Cover (ADC) and Industrial Waste Stabilizer (IWS)
 Certified Facilities Status for 2014 - TBD (To Be Determined) , Yes, No
 Recycle % - does not include soils
 Beneficial Use % - pertains to clean wood sent to energy recovery end markets

** for Black River the % of recycling, beneficial use and landfill disposal is based on the amount delivered for recycling - the facility also re

Mixed Waste Recyclers Certification includes:

- 1) solid waste handling permit from local Health Department
- 2) compliance with local flow control requirements
- 3) submitting monthly reports to City of Seattle on material inflows and outflows
- 4) residual sampling meets standards for Seattle's landfill disposal bans on targeted construction materials

Qualified C&D Processor Criteria

3. Diversion Rate Validation

- Processing capability
- Meet end-user specs
- Beneficial end-markets
- Diversion rate measurement
 - Material management
 - Recordkeeping

Qualified C&D Processors

Application & Renewal Process

EXAMPLE: San Francisco

Application

- Tonnage summary
- Signature confirming meeting criteria

San Francisco Registered Facility Application

Reporting Period: From: _____ (mo/yr) To: _____ (mo/yr)

	INCOMING	OUTGOING TONS					
Material Type	Total Tons RECEIVED	Reuse	Recycling Markets	Composting	ADC	Bio-Mass Conversion	Disposal
<i>EXAMPLE: Wood</i>	<i>100</i>	<i>5</i>	<i>20</i>	<i>5</i>		<i>45</i>	<i>25</i>
MIXED C&D DEBRIS	A	-----DO NOT USE THIS AREA-----					
	SOURCE- SEPARATED MATERIALS						
Wood	<i>n</i>						
Metal	<i>o</i>						
Drywall	<i>p</i>						
Green Waste	<i>q</i>						
Asphalt	<i>r</i>						
Brick	<i>s</i>						
Concrete	<i>t</i>						
Rock/Stone/Soil	<i>u</i>						
Screen Fines	<i>v</i>						
Cardboard	<i>w</i>						
Carpet	<i>x</i>						
Plastic	<i>y</i>						
Other:	<i>z</i>						
Total Source-Separated (total "n" through "z")	G						
TOTALS		B	C	D	E	F	

San Francisco Registered Facility Application

By submitting this application, facility owner/operator agrees to comply with all requirements of Ordinance No. 27-06, Environment Code Chapter 14, and SFE Regulation 06-05-CDO, including maintaining a minimum mixed C&D recovery rate of 65% on a monthly basis and issuing numbered receipts to each truckload of C&D material from San Francisco, including quantity of material, name of facility and recovery rate.

**I DECLARE UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA
THAT THE FOREGOING IS TRUE AND CORRECT.**

Signature _____

Date _____

Print Name _____

Title _____

Qualified C&D Processors

Application & Renewal Process

EXAMPLE: San Diego, San Jose

- a. Review permits and compliance
- b. Onsite operations inspection
 - Processing capability
 - Meet end-user specs
- c. Onsite recordkeeping review
 - Material flow tracking
 - Diversion rate measurement
 - Beneficial end-markets

Qualified C&D Processor

Record Keeping, Reporting, Monitoring



- Project plan & report
- Processor reporting



RECYCLING
CERTIFICATION
INSTITUTE

- Processor reporting
- Certification



- URO Annual Diversion Plan
- US EPA “Challenges” reporting



greenhalo
S Y S T E M S

Recycling today's resources
for tomorrow's generations.

- Developed for CalGreen & LEED C&D recycling
- Online data entry & reporting
- Contractors
 - Contractor or hauler enters load data
 - GH reports & calculates **Project Diversion Rate**
- Facilities
 - Facility enters incoming & outgoing load data
 - GH calculates **Facility Diversion Rate**



RECYCLING CERTIFICATION INSTITUTE

- For USGBC's LEED pilot credit MRpc87
- Uses Green Halo for data management
- Facilities
 - Facility enters incoming & outgoing load data
 - GH calculates **Facility Diversion Rate**
- RCI Evaluators
 - Inspect processing operations
 - Audits records

Qualified C&D Processors

Evaluating Entity

- **Recycling Certification Institute**
 - Meets USGBC criteria for a certification org
 - Developed standards and protocols per ISO
 - Trains independent evaluators
- **Green Halo**
 - Data management integrity
 - No onsite evaluation
- **Third-party Criteria**

A Rose by any other name ...

PALO ALTO APPROVED FACILITY LIST FOR C&D DEBRIS

Seattle "Qualified" Mixed Waste Recyclers and Disposal Facilities

City of San Diego Environmental Services Department
Certified Mixed C&D Processing Facilities

Licensed C&D Facilities

**CITY OF LOS ANGELES
CERTIFIED PROCESSOR**

Qualified C&D Processors

What is the correct term?

Fill in the blank: _____ Processor

- a. **Qualified** – officially recognized as able to perform a particular job
- b. **Certified** – recognized as meeting a standard
- c. **Registered** – recorded or enrolled officially
- d. **Licensed** – given permission
- e. **Approved** – officially agreed as acceptable or satisfactory

Next Steps

- Interview local processors
- Invite stakeholder input on draft Qualified Processor
 - Criteria
 - Application process
 - 3rd party evaluation
- Report to C&D Committee





