



Date: January 17, 2007
To: Environmental Committee
From:  Suzanne Frick, Director of Planning & Building
Subject: Proposed Construction & Demolition Debris Recycling Program

On January 24, 2006, the City Council requested that the City Manager work with the Departments of Planning & Building and Public Works to develop a report detailing the potential implementation of a construction and demolition (C&D) debris recycling program for the City of Long Beach.

According to the 2004 Statewide Waste Characterization Study, construction and demolition materials account for almost 22 percent of the waste stream. Many of these materials can be reused or recycled, thus prolonging the supply of natural resources and potentially saving money in the process. Common C&D materials include lumber, drywall, metals, masonry (brick, concrete, etc.), carpet, plastic, pipe, rocks, dirt, paper, cardboard or green waste related to land development.

Reuse and recycling of C&D materials is one component of a larger holistic practice called sustainable or green building construction. The efficient use of resources is a fundamental tenet of green building construction. This means reducing, reusing, and recycling most if not all materials that remain after a construction, demolition or renovation project. Reuse and recycling of C&D materials is also a major component of LEED Green Building Certification. LEED Green Building Certification gives points to projects that attain multiple levels of C&D recycling as part of the project.

The State of California encourages and supports the creation of C&D programs at the local jurisdiction level. Over 100 cities and counties in California have already adopted ordinances enacting a C&D materials recycling program specific to their jurisdiction. Staff has evaluated the direction provided by the City Council and prepared an analysis of the options and is offering recommendations. The attached report is an overview of what such a program could look like for the City of Long Beach. It should be noted that the minimum threshold for projects covered by the program was set to exclude most (approximately 9 out of 10) single-family remodeling projects, see Policy #1 in Attachment A.

Implementation of a C&D materials recycling program would 1) support the City's sustainable development goals, 2) help the City conform to State-wide waste diversion goals (AB 939), 3) be part of a Sustainable City Program in the Department of Planning and Building, and 4) provide an incentive for deconstruction and/or recycling of construction materials.

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Recommendation: Make a recommendation to City Council to direct the City Attorney to draft an Ordinance creating a C&D program based on the attached report.

Attachments:

- A. The City of Long Beach Construction & Demolition Recycling Program
- B. C&D Debris Recycling Sample Project Scenarios
- C. C&D Recycling Facilities

The City of Long Beach Construction & Demolition Recycling Program

1. Purpose

The purpose of the proposed Construction and Demolition (C&D) Recycling Program is to comply with the Long Beach 2010 Strategic Plan, as well as several California State waste reduction mandates.

One of the major goals of the Long Beach 2010 Strategic Plan is to “Become a Sustainable City”¹. Sustainability is commonly defined as the ability to meet the needs of the present without compromising the ability of future generations to meet their own needs. Another aspect of sustainability is the idea of eliminating the concept of waste. That is to say, our society, in order to ensure long-term survival, needs to find as many ways as possible to turn what we now consider waste into a useable (and profitable) resource. The reuse or recycling of construction and demolition debris is an important step toward the goal of becoming a sustainable city and society, and is a path already proven to be effective in over 100 jurisdictions in California.

The State reduction mandates include Assembly Bill 939 (AB 939), Senate Bill 928 (SB 928), and Senate Bill 1374 (SB 1374). In 1989, AB 939 passed, requiring all cities and counties to reduce their waste by 50% by the year 2000 and beyond. The City of Long Beach diverted 62% of the City of Long Beach solid waste during the year 2004, exceeding the 50% goal. SB 1374 passed last year, and recommended that municipalities have C&D recycling programs to comply with AB 939 requirements. However, new legislation, SB 928, is now being considered to possibly raise the diversion requirement to 75% by the year 2010, if the bill passes. According to the California Integrated Waste Management Board, C&D debris accounts for 22% of the City of Long Beach solid waste². The City of Long Beach Construction and Demolition Recycling Program could divert solid waste and keep Long Beach in compliance with the current and possible future State diversion standards.

The Federal Government is also in support of recycling C&D debris. “We’re increasing our focus on the resources conservation piece of the Resource Conservation and Recovery Act,” said Matthew Hale, Director of the Office of Solid Waste at the Environmental Protection Agency (EPA). “A key focus in our efforts in promoting the reuse of materials such as construction and demolition debris is partnership with industry. We’re really looking for help in where EPA can be most effective.”

2. Overview

This C&D recycling program is a joint effort between the Planning and Building Department and Public Works, Environmental Services Bureau. The program will aim to encourage permit applicants to recycle all C&D materials through a refundable

¹ See the Long Beach 2010 Strategic Plan, Environmental Task Force Goal One

² <http://www.ciwmb.ca.gov/ConDemo/>

performance deposit. This program would also encourage green building in new building construction, and promote reuse or salvaging of recyclable materials in demolition, deconstruction and construction projects. Reuse and recycling of C&D materials is also a component of LEED (Leadership in Energy and Environmental Design) Green Building certification, which has already been adopted as the standard for all City of Long Beach municipal building projects.

Much of the waste generated in C&D activities also includes large quantities of materials found in the general waste stream. For example, the C&D waste stream can include corrugated cardboard from packaging, a variety of plastics, and glass from site work. The existing residential recycling program is suitable to recover these common materials from smaller projects. However, some of the other materials (yard waste, wood, cement, asphalt, metal pipes, etc.) may need special handling, either as heavy, bulky, or hazardous waste.

3. C&D Program Recommendations

Every city in California with a C&D ordinance created an ordinance that is personalized to that particular City's needs and the availability of the recycling centers for various C&D materials. Over 100 cities and counties in California have already enacted C&D recycling programs. The program for the City of Long Beach will be created to fit the assessed needs. Seven recommended policy points have been highlighted below.

3.1 Policy #1: Types of Projects Covered

Not every project would be covered by this policy. Part of the decision on what threshold to set will depend on the staffing resources, diversion level desired, wait time for the applicant, and how many projects can be handled (for example, reviewing waste management plans, determining ordinance compliance, handling deposits, etc.).

Recommendation: Staff recommends that the following types of projects be covered by this program:

- All private construction projects with an estimated valuation of \$50,000 or more.
- All demolition projects, regardless of size or valuation.
- Any City-sponsored construction, demolition or renovation project.

These initial thresholds are recommended to minimize the impact on both building permit applicants (only about 12% of permits currently processed would be affected) and Development Services Center staff and processing time. Of the approximately 5,000 permits issued in FY05 for single-family residential remodels, only about 500, or 10%, (those with a valuation of \$50,000 or more) would be required to participate in the C&D program. Thus 9 out of 10 single-family residential remodel projects would not be subject to the C&D program. After a 12-month pilot period, establishing a lower valuation threshold on private projects could be considered in order to achieve a higher overall diversion rate for the city.

3.2 Policy #2: Diversion rate requirement:

This policy would require the recycling or reuse of C&D materials for applicable projects. Exemptions or waivers could be submitted if the material cannot be recycled. The waste diversion would help to keep Long Beach in compliance with AB 939.

Recommendation: Staff recommends a 60% diversion of project C&D waste. The materials diverted will include inert waste³, reuse of materials (especially for demolition projects), and the recycling of any of the other C&D debris materials (cardboard, metal, wood, etc.).

3.3 Policy #3: Waste Management Plan:

Most Construction and Demolition (C&D) diversion ordinances include a requirement that a waste management plan (WMP) be completed and submitted prior to the beginning of a covered project. A WMP is essentially a plan that estimates how much C&D debris will be generated by the project and describes how the materials will be managed. This will require a project applicant to estimate how much C&D material will be generated and to consider the methods, locations, and quantities of materials they will divert. Handouts will accompany this plan to give the project applicant additional information. This plan will be turned in at the end of the project with weight tickets, proving the diversion occurred.

Recommendation: Staff recommends the intake and review of the WMP would occur as part of the building permit process. The WMP would have to be reviewed and approved prior to a building or demolition permit being issued. Staff would assist many first-time applicants with the proper completion of the WMP. In order to ensure compliance, a deposit would be collected from the applicant. At the completion of a project if the project met the diversion goals of the WMP, the Waste Diversion Deposit would be refunded.

3.4 Policy #4: Waste Diversion Deposit:

The waste diversion deposit will be a method to encourage recycling. This deposit will be determined by the type and valuation of a project. An important consideration for the deposit amount is that if the amount charged is too high for contractors, they may consider not building in the City of Long Beach. If the amount is too low, it could be cheaper for the contractor to forfeit their deposit than to comply with the diversion requirement. These important considerations will be taken into account when setting the deposit amount.

Recommendation: Staff recommends that the deposit be 3% of the project valuation (\$50,000 or more) with a maximum deposit amount of \$50,000 and a minimum of \$1,500. This means that a project with a total valuation of \$100,000 would be required to make a \$3,000 deposit before a building permit would be issued. After successfully providing proof (weight tickets) that at least 60% of C&D waste was diverted, this deposit would be refunded in full. Demolition-only projects would also be subject to a minimum \$1,500 deposit, regardless of their valuation.

³ See Section 5 for a definition of Inert Solids/Inert Waste

3.5 Policy #5: Administrative Fee:

An administrative fee is recommended to pay for the time spent by the City employees coordinating this program.

Recommendation: Staff estimates that one additional full-time staff person with appropriate expertise will be necessary to implement a C&D program without significantly impacting existing services and processing times at the Development Services Counter. A ½% of project valuation administrative fee (with a minimum fee of \$250 and a cap of \$2,500) is proposed to cover costs related to this position and other administrative costs (marketing & informational materials, public workshops) that would be part of the overall C&D program. This means that a project with a total valuation of \$100,000 would pay a non-refundable \$500 administrative fee. Projects of \$500,000 or more would pay a maximum fee of \$2,500. Demolition-only projects would also pay the minimum fee of \$250, or ½% valuation, whichever is higher.

3.6 Policy #6: C&D Recycling Facilities

Only certain facilities handle mixed materials for recycling, other facilities accept clean single stream materials (like concrete or yard waste).

Recommendation: Staff recommends a list of local facilities be provided to each contractor. This list will show local facilities that accept all C&D materials.

3.7 : Policy #7: Enforcement:

Enforcement of this program is needed to ensure that this policy is effective. Many cities have fines, penalties, and forfeiture of their deposit as a means of enforcing this policy.

Recommendation: If the Permit applicant does not follow the program the deposit will be forfeited. A clause in the ordinance can be included with an "option to revise" section. This will allow the policy to be changed later, if more enforcement is needed. The issuance of Certificate of Occupancy could also be linked to the C&D program compliance.

3.8 : Policy #8: Exemptions:

There are times when an applicant anticipates circumstances that will make it more difficult, if not impossible, to comply with the C&D diversion requirements. This possibility is often provided for in a C&D ordinance, and would include a description of the process an applicant would use to request an exemption or reduction in the required diversion rate. Usually the applicant and staff negotiate a more feasible and reduced diversion rate, and that reduced rate is included in the waste management plan (WMP).

Recommendation: Staff recommends exemptions be made for the following situations:

- the material is not recyclable
- an emergency situation occurs
- the material is hazardous

4. Benefits

Projects that generate C&D debris create economic and environmental problems in addition to creating waste. These include depletion of natural resources, air and water pollution from waste that is improperly disposed, as well as an increased demand of limited landfill space and taxpayer dollars.

"While, building construction worldwide uses 40 percent of all the raw materials extracted from the earth," according to the Worldwatch Institute, "the renovation and demolition of buildings in the US accounted for more than one-fifth of our total annual waste stream -- 125 million tons -- in 1996."⁴ Currently, the estimated annual C&D debris total is around 325 million tons per year,⁵ according to William Turley, Executive Director of the Construction Material Recovery Association.

As virgin materials become scarcer and more costly, some increased recycling of C&D waste has occurred, but most of these materials continue to be discarded. Only 20 to 30 percent of the C&D waste generated in 1996 was recovered for recycling.⁶

Benefits of recovering construction and demolition materials:⁷

- Reduces the environmental effects of extraction, transportation, and processing of raw materials.
- Reduces project costs through avoided disposal costs, avoided purchases of new materials, revenue earned from materials sales, and tax breaks gained for donations.
- Helps communities, contractors, and/or building owners comply with state and local policies, such as disposal bans and recycling goals.
- Enhances the public image of companies and organizations that reduce disposal.
- Conserves space in existing landfills.

5. Definitions⁸

For the purposes of this Report, the following definitions shall apply:

(a) "Class III Landfill" means a landfill that accepts non-hazardous resources such as household, commercial, and industrial waste, resulting from construction, remodeling, repair, and demolition operations. A Class III landfill must have a solid waste facilities

⁴ "A Building Revolution: How Ecology and Health Concerns Are Transforming Construction," Worldwatch Institute

⁵ "EPA grapples with size of C&D waste stream," Waste News, January 30, 2006

⁶ "Built to Last: Preventing Waste from Construction, Renovation, and Demolition Materials," INFORM, Inc., www.informinc.org

⁷ Building Savings Strategies for Waste Reduction of Construction and Demolition Debris from Buildings, US EPA, Solid Waste and Emergency Response (5306W) EPA-530-F-00-001, June 2000

www.epa.gov/osw

⁸ Definitions quoted from CIWMB model ordinance and City of Redondo Beach ordinance

permit from the California Integrated Waste Management Board and is regulated by an Enforcement Agency (as defined in Public Resources Code Section 40130).

(b) "Construction and Demolition Debris (C&D Debris)" means building materials and solid waste resulting from construction, remodeling, repair, cleanup, or demolition operations that are not hazardous as defined in California Code of Regulations, Title 22, Section 66261.3 et seq. This term includes, but is not limited to, asphalt, concrete, Portland cement concrete, brick, lumber, gypsum wallboard, cardboard, and other associated packaging, roofing material, ceramic tile, carpeting; plastic pipe and any steel. The material may be commingled with rock, soil, tree stumps; and other vegetative matter resulting from land clearing and landscaping for construction or land development projects.

(c) "Covered Project" includes all demolition projects and all City-sponsored demolition and renovation projects, plus all projects of \$50,000 valuation and over.

(d) "Deconstruction" means the careful dismantling of buildings and structures in order to salvage as much material as possible for reuse.

(e) "Demolition" means the decimating, razing, ruining, tearing down or wrecking of any facility, structure, pavement or building, whether in whole or in part, whether interior or exterior.

(f) "Disposal" means the final deposition of construction and demolition or inert material to a Class III landfill.

(g) "Divert" means to use material for any purpose other than disposal in a Class III landfill or transformation facility.

(h) "Diversion Requirement" means the diversion of a percentage of the total demolition or construction debris generated by a demolition project via reuse or recycling, unless the applicant has been granted an exemption, in which case the diversion requirement shall be the maximum feasible diversion rate established by the Waste Management Plan Compliance Official in relation to the project.

(i) "Inert solids/inert waste" means non-liquid solid resources including, but not limited to, soil, fully cured asphalt paving, uncontaminated concrete (including fiberglass or steel reinforcing rods embedded in the concrete), brick, glass, and ceramics, that do not contain hazardous waste or soluble pollutants at concentrations in excess of water quality objectives established by a regional Water Board pursuant to Division 7 (Section 13000 et seq.) of the California Water Code and does not contain significant quantities of decomposable solid resources.

(j) "Project" means any activity, which requires an application for a building or demolition permit, or any similar permit from the City.

(k) "Recycling" means the process of collecting, sorting, cleansing, treating, and reconstituting materials for the purpose of using the altered form in the manufacture of a new product. Recycling does not include burning, incinerating, or thermally destroying solid waste.

(l) "Renovation" means any change, addition or modification in an existing structure.

(m) "Reuse" means the use, in the same or similar form as it was produced, of a material which might otherwise be discarded.

(n) "Solid Waste" means all putrescible and non-putrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse; paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, dewatered, treated, or chemically fixed sewage sludge which is not hazardous waste, manure, vegetable or animal solid and semisolid wastes, and other discarded solid and semisolid wastes. "Solid waste" does not include any of the following wastes:

(1) Hazardous waste, as defined in Public Resources Code Section 40141;

(2) Radioactive waste regulated pursuant to the Radiation Control Law (Chapter 8 (commencing with Section 114960) of Part 9 of Division 104 of the Health and Safety Code);

(3) Medical waste regulated pursuant to the Medical Waste Management Act (Part 14 (commencing with Section 117600) of Division 104 of the Health and Safety Code).

(o) "Threshold" means the limit of size at which a project is covered by the C&D recycling program.

(p) "Waste Management Plan Attachments" means a list of Permitted Haulers, Reuse Facilitators, Disposal and Recycling Facilities, Conversions for mass to weight, and Green Building Material suggestions.

(q) "Waste Management Plan Compliance Official" means the Director of the Planning and Building Department or his or her designee.

C&D Debris Recycling Sample Project Scenarios

Scenario #1

Project Description:

- Existing single-family home
- Kitchen remodel
- Estimated project valuation is \$43,000

C&D Recycling requirements:

- Does not meet threshold for covered project
- Does not have to comply with C&D requirements

Scenario #2

Project Description:

- Existing single-family home
- Remodel plus addition of a new bedroom and bathroom
- Estimated project valuation is \$58,000

C&D Recycling requirements/outcomes:

- Meets threshold for covered project
- Submits Waste Management Plan (WMP) in order to receive building permit
- Makes performance deposit of \$1,740 (3% of \$58,000)
- Pays administrative fee of \$290 (1/2% of \$58,000)
- Successfully diverts 60% of waste to be reused or recycled
- Submits completed WMP including receipts and weight tickets
- Compliance Official authorizes return of \$1,740 performance deposit

Scenario #3

Project Description:

- Complete demolition of 1,500 square foot building
- Estimated project valuation is \$6,000

C&D Recycling requirements/outcomes:

- Demolition is a covered project, despite valuation of \$6,000
- Submits Waste Management Plan (WMP) in order to receive demolition permit
- Makes performance deposit of \$1,500 (minimum for demo projects)
- Pays administrative fee of \$250 (minimum for demo projects)
- Successfully diverts 60% of waste to be reused or recycled
- Submits completed WMP including receipts and weight tickets
- Compliance Official authorizes return of \$1,000 performance deposit

C&D Recycling Facilities

Facility name	Address	Phone #	Materials accepted	Cost
25th Street Recycling, Inc.	2121 East 25th St., Los Angeles, CA 90058	818-767-3088	Concrete, Asphalt only	Varies based on truck size
Alameda Street Metal Corp.	10313 South Alameda St., Los Angeles, CA 90001	323-564-5601	All metals, including non-ferrous	Pay per gross ton, rate based on going market rate
Alpert and Alpert	2350 W 16th St., Long Beach, CA 90813	562-624-8833	Metals- large quantities only	Will pay market price
Another Pallet Co	6116 Paramount Blvd., Long Beach, CA 90805	562-437-6106	Stacked Wood- longer than three feet to build pallets	Will purchase wood or take for free
American Concrete cutting	620 Poinsettia St., Santa Ana, CA 92701	714-547-7181	Demolition hauling	Call for estimate for hauling and dumping
Armie's supply service	1541 North Ditman Ave., Los Angeles, CA 90063	323-263-1696	Wood for pallets, 3 foot or longer	Will pick up for free or will pay for a truckload
Arnone Recycling Center	5674 Cherry Ave., Long Beach, CA 90805	562-984-7080	Iron, copper, metal, brass, radiators, aluminum	Based on market price
Bel Art Waste Transfer Station	2501 E 68th St., Long Beach, CA 90805	562-663-3672	Yard waste	\$50 per ton
Bradley Landfill and Recycling	9081 Tujunga Ave. Sun Valley, CA 91352	818-767-6180	All C&D materials except hazardous materials	\$46.50 per ton
California Waste Systems	621 W 152nd St., Gardena, CA 90247	310-538-5998	Any C&D that is not hazardous, including wood, concrete, metal, drywall, Sand, gravel, topsoil	\$54.00 per ton
Canco Recycling	2725 South St., Long Beach, CA 90805	562-602-0622	Cardboard, metals including wire	Higher than market value
Carpet Pad Recycling	1923 Rosemead Blvd, South El Monte, CA 91733	626-444-6048	Carpet pads	Per pound cost based on going rate
Century Pallets	2911 Norton Ave, Lynwood, CA 90262	310-605-0788	Wood bundled nail free, large loads only	Depends on material
Chandler's Sand & Gravel Co.	26311 Palos Verdes Dr. East, Rolling Hills Estates, CA 90274	310-784-2914	Asphalt, concrete, dirt, rock, gravel, and cinder block	Cost per truckload varies based on truck size and material type
Community Recycling	9147 De Garmo Ave., Sun Valley, CA 91352	818-767-6000	wood, concrete, dirt, greenwaste, metal, sheet rock	\$45 per ton for mixed material
CSULB	5800 Atherton St., Long Beach, 90815	562-985-5461	Cardboard, scrap metals, paper, and beverage containers	Buy back for CRV only, other material can be recycled for free

D&D Recycling Incorporated	7551 Acacia St., Garden Grove CA, 92643	714-373-4431	Copper pipe	Buy material based on current market value
Dan Copp Crushing	12017 Greenstone Ave., Santa Fe Springs, CA 90670	714-777-6400	asphalt, rebar/mesh, asphalt, concrete smaller than 2x2x1	varies by material and truck size
Downtown Diversion	2424 East Olympic Blvd., Bldg. #3, Los Angeles, CA 90021	877-WE-DIVERT	Asphalt, mixed inert, concrete, dirt, drywall, metal, wood, and cardboard (OCC)	\$44.00 per ton for mixed C&D (less for source separated materials), minimum fee of \$100 on all materials other than metal and OCC
Earthshine	13633 South Central Ave., Los Angeles, CA 90059	714-897-4311	Asphalt, concrete, dirt	charge by truckload, varies by truck size and material type
Ewles Materials	8182 Katella Ave, Stanton, CA 90680	714-894-1988	Concrete and Asphalt	Cost based on size of truckload
FS Pallets & Repair Service	140 E 163rd St., Carson, CA 90248	310-538-9165	scrap wood-at least 3	Sometimes pay
Good Earth Recycling Center	2007 Bixby Rd., Lakewood, CA 90712	562-490-0072	Cardboard and Non- Ferrous Metal	No money exchanged
Habitat for Humanity Restore	17700 South Figueroa St., Gardena, CA 90248	310-323-4663	Any home improvement materials including, cabinets, door, windows, light fixtures, door knobs, bathroom fixtures-- only new toilets, no aluminum windows	Donations only, will pick- up materials
Hanson Aggregates	6956 Cherry Ave., Long Beach, CA 90805	800-300-6120	Asphalt and Concrete	\$40 to \$105 per truckload
Hugo Neu-Proler Company	901 New Dock St., Terminal Island, CA 90731	310-831-0281	Metals- steel, including rebar, plates, cabinets	Pay based on market value and grade
Ideal Metal and Savage Co.	18700 S. Broadway St., Gardena, CA 90248	310-324-1191	Metals- copper, aluminum, brass, stainless steel, titanium, steel	Buy these materials based on market value
Interior Removal Specialist, Inc	9309 Rayo Ave., South Gate, CA 90280	323-357-6900	yard waste	\$43.02 per ton
Justis Waste Recycling	3031 I St., Wilmington, CA 90744	562-432-2268	wood, concrete, dirt, greenwaste, metal, sheet rock	\$38.00 per ton for source separated, \$49 per ton for commingled materials
Joe Levin and Sons	2863 E Slauson Ave., Huntington Park, CA 90255	323-588-4207	Metal	At least 3-4 tons for payment based on market value
JP Rebound Wholesalers	1301 North Hancock St., Unit C, Anaheim, CA 92807	714-779-1565	Carpet padding	Pick up material or collect at their facility and pay based on market price

Los Angeles Fiber Company	5190 South Santa Fe Ave., Vernon, CA 90058	323-589-5637	Waste carpet accepts based on site visit	Varies
Madison Materials	1035 East 4th St., Santa Ana, CA 92701	714-664-0159	Asphalt, brick, cardboard, carpet, cinder block, concrete, dirt, drywall, gypsum, glass, metal, rock, gravel, structural elements for reuse, tree trimming, wood, no hazardous waste	\$48.00 per ton for mixed or separated materials
Master Recycling Center, Inc.	2852 Dufee Ave., El Monte, CA 91732	626-442-4242	Cardboard	Pay based on market value and pounds
Pacific Pallet Co.	2110 W Gaylord Ave., Long Beach, CA 90803	562-432-4315	Wood in large quantities for making pallets- over 3 feet, 2x or 4x	No money exchanged
PC Pallets	11500 Wrightwood Rd., Lynwood, CA 90262	310-608-3330	Wood in large quantities for making pallets- over 2 feet, 2x or 4x	No money exchanged
R.J. Noble	15505 East Lincoln Ave. Orange 92865	714-637-1550	Concrete and Asphalt dirt and brick	Cost based on material type and truck size
Shamrock Base	555 1/2 North Mission Rd., Los Angeles, CA 90033	323-223-2366	Concrete and Asphalt at least 2x2 feet	\$150/load
Sun West Metals	1150 North Anaheim Blvd., Anaheim, CA 92801	714-635-0470	Steel, aluminum, any metals	Pay based
TVI Gold Coast Recycling	7982 Irvine Blvd., Irvine, CA 92618	949-551-0363	All materials including green, except haz. mat.	\$21 min charge, \$42 per ton for mixed C&D
Valley Base Materials	9050 Norris Ave., Sun Valley, CA 91352	818-767-3088	Concrete, river rock, asphalt	Charge varies by truck size, extra for rebar
West Coast Land Clearing	Long Beach, CA	562-599-2882	Metal, brick, dirt, no cement, no asphalt	Call for estimate for hauling and dumping