



# REPORT TO DEVELOPMENT OVERSIGHT COMMISSION City of Sacramento

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915 I Street, Sacramento, CA 95814-2671

STAFF REPORT  
December 1, 2008

Honorable Members of the Development Oversight Commission:

**Subject:** Construction and Demolition Debris Recycling Ordinance in the City of Sacramento

**Location/Council District:** Citywide

**Recommendation:** Staff recommends the Commission provide review and comment regarding the new Construction and Debris Ordinance.

**Contact:** Chris Thoma, Program Analyst, 808-4833; Edison Hicks, Integrated Waste General Manager, 808-4949; Marty Strauss, Integrated Waste Planning Superintendent, (916) 808-4934

**Presenters:** Chris Thoma, Program Analyst, (916) 808-4833; Marty Strauss, Integrated Waste Planning Superintendent, (916) 808-4934

**Department:** Department of Utilities

**Division:** Solid Waste Services

**Organization Number:** 14001791

## **Description/ Analysis:**

**Issue:** Construction and demolition (C&D) waste makes up approximately 20% of the total waste stream in the City of Sacramento. In 2005, 137,000 tons of C&D was disposed. This is equal to an additional 10% diversion credit toward meeting the State's mandate of 50%. Currently the City is at 52%. Implementation of the proposed C&D ordinance will increase the City's total diversion rate to approximately 62%.

Title 17.72 of the City Code, attached, requires all discretionary development projects to submit a recycling plan showing how much waste will be generated, how much will be disposed and how much will be recycled. However, there is no enforcement for failing to meet the stated goals described in the recycling plan.

The attached C&D ordinance will require all construction projects having a valuation equal to or greater than \$100,000 to submit a solid waste management plan describing the following information:

- a. The types of C&D debris that will be generated from the covered project;
- b. The manner in which C&D debris will be managed and/or stored on the project site;
- c. The person who will haul, collect, or transport the C&D debris from the project site; and
- d. The certified C&D sorting facility or recycling facility where C&D debris will be delivered.

Implementation of the C&D ordinance will be done by the Department of Utilities, Solid Waste Services, with assistance from the Development Services Department, Building Division. Solid Waste Services will receive, review, approve and monitor implementation of the Solid Waste Management Plans; process fees, fines and security deposit, if applicable; and inspect the presence or absence of recycling at the site. The Building Division will include the application as part of the building permit application.

**Environmental Considerations:** Approval of the Construction and Demolition Ordinance is exempt from CEQA pursuant to Article 19, Categorical Exemption, Section 15308, Actions By Regulatory Agencies For Protection of the Environment. Implementation of the Construction and Demolition Ordinance will contribute to the enhancement of the environment by keeping waste out landfills and decreasing the amount of green house gas generated through generation of methane gas.

**Sustainability Considerations:** Diversion of construction and demolition waste away from landfills will increase the City's recycling/diversion efforts by 8 to 10%, and reduce the amount of green house gas generated by the City by lowering the amount of waste going to landfills.

**Commission/Committee Action:** The Law and Legislation Committee discussed the outline of the construction and demolition ordinance at their meeting on February 19, 2008, and directed staff to bring the ordinance directly to the City Council for review and consideration. A copy of the Law and Legislation report is attached.

The Solid Waste Advisory Committee (SWAC) reviewed the proposed ordinance and supports the approval of the ordinance.

**Rationale for Recommendation:** Adoption of the recommended ordinance will contribute to the City meeting the State mandate of 50% diversion of the total waste stream from landfill disposal and avoid being subject to fines and penalties from the State should the City fail to meet 50% diversion. The City currently has

a 52% diversion rate. Implementation of the C&D ordinance will increase diversion to 62%.


The general outline of the C&D Program was developed by the Department of Utilities, Solid Waste Services in coordination with an adhoc C&D technical advisory committee (City Building/Planning/Development Engineering). It was designed with input from industry stakeholders. In addition, Solid Waste Services worked with the County of Sacramento to develop a similar ordinance in order to achieve consistency in the region, and therefore make compliance easier.

**Financial Considerations:** Implementation of the Construction and Demolition Ordinance will be funded through fees paid by applicants for building permits. The increase in cost to the building permit is 0.04% of the project valuation, with a minimum of \$40, and a maximum of \$800. The fees will be used to pay for Solid Waste Services' time to review, approve and monitor the solid waste management plans and check for the presence or absence of recycling on construction.

**Emerging Small Business Development (ESBD):** No goods or services will be purchased as a result of the proposed actions in this report. Therefore, there are no Emerging Small Business Development issues.

Respectfully submitted by:   
Edison Hicks  
Integrated Waste General Manager

Recommendation Approved:

  
Marty Hanneman  
Acting Director of Utilities

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## BACKGROUND

Each year over 4 million tons of construction and demolition (C&D) debris are disposed in California landfills, representing 12% of the entire waste stream. In 2005 approximately 20% of the City's waste stream was C&D debris. This represents approximately 137,000 tons of waste disposed versus recycled. A 95% diversion requirement would have allowed recovery of 130,000 tons and would have represented an approximate 10% increase in overall diversion for the City.

C&D debris are commonly discarded materials removed from the premises during construction, remodeling, repair, demolition, deconstruction or renovation resulting from these operations on any pavement, house, commercial building, or other structure or from landscaping. Such materials include, but are not limited to, dirt, sand, rock, gravel, bricks, plaster, gypsum wallboard, aluminum, glass, asphalt material, plastic pipe, roofing material, carpeting, concrete, wood, masonry, rocks, trees, remnants of new materials, including paper, plastic, carpet scraps, wood scraps, scrap metal, packaging and rubble, and building materials, resulting from construction, remodeling, renovation, repair and demolition operations (California Integrated Waste Management Board, 2007). Much of this material can be reused or recycled if managed properly. Reuse and recycling of C&D debris conserves natural resources and slows the rate at which landfills reach capacity. It can also save builders money by reducing waste of purchased materials and lowering disposal fees.

AB 939, the Integrated Waste Management Act, requires diversion of 50% of the total waste stream generated by local governments. In 2005, the last year reported to the State, the City of Sacramento diverted 44%, 6% less than the State mandate. Since then, the City has implemented weekly recycling and the Solid Waste Authority (SWA) has adopted a Business Recycling Ordinance. Staff predicts that the successful implementation of the proposed C&D debris Ordinance, along with weekly recycling and the SWA Business Recycling Ordinance will result in the City achieving 64-66% diversion by the year 2012.

For the above reasons, Solid Waste Services views management of the C&D debris waste stream as an important element of their overall waste diversion efforts. The California Integrated Waste Management Board (CIWMB) has recommended a C&D diversion goal between 50 to 75 percent for State construction projects that are accessible to C&D waste processors and recyclers. In meeting with the stakeholders, Solid Waste staff has been advised to keep consistent with the County of Sacramento's version of the ordinance, which requires a particular set of materials to be recycled, instead of quantity-based. Staff expects this will meet or exceed the CIWMB's recommended goals. Materials required to be recycled are:

1. Scrap metal items (structural steel, ductwork, gutters, pipes, appliances, fixtures, fencing & railing, sinks, tubs, roofing material)
2. Inert materials (dirt, soil, rocks, concrete, asphalt paving, brick and block)

3. Corrugated cardboard (mostly from packaging)
4. Wooden pallets (whole or broken)
5. Clean wood waste (unpainted, untreated dimensional lumber and plywood)

For example, in the Sacramento region nearly all of the concrete rubble from mass demolition activities of structures is routed to inert waste processors for crushing and recycling. Therefore the demolition of a steel-reinforced concrete parking garage would be expected to result in a high recycling rate from a mass demolition approach. It is possible to divert 95% of this material. On the other hand, the mass demolition of a typical apartment building because of the mixed C&D materials would not necessarily yield a significant quantity of economically recoverable C&D waste materials. Requiring the recycling of particular materials avoids the potential problems from a quantity-based approach – all projects are evaluated equally, without a need for exemptions for particular types.

### **What is the City of Sacramento and Other Jurisdictions Doing?**

Driven by the need to comply with the State's waste diversion mandate, the City of Sacramento and other jurisdictions have targeted C&D debris as a priority waste stream that offers a high potential to divert waste from landfills. C&D ordinances of other jurisdictions within the region were reviewed for information on how C&D program measures are being implemented. A summary of this information is found in the Law and Legislation Report, attached.

The County of Alameda, the City of San Jose, the County of Ventura, the City of Oakland, the City of San Francisco, the City of Santa Monica, the City of Folsom, the City of Woodland, and the City of West Sacramento are among the many local jurisdictions that have adopted C&D ordinances. The City of Stockton is similar to the City of Sacramento in that they are revising their C&D Program, and amending their program policies to include enforcement. The County and City plans are fundamentally consistent, helping to provide a consistent program in the region.

The reason local jurisdictions and the City are targeting C&D waste, in addition to its weight to volume and impact on diversion, is that both its source and disposal points are relatively easy to monitor and regulate because the majority of C&D waste is disposed in the "self-haul" mode as a single source waste stream. Furthermore, C&D waste management goals and strategies can also be encouraged and/or mandated through the building permit process. Since the construction industry is already subject to this local permitting process within an existing institutional framework, it is not difficult to introduce new permitting requirements for C&D waste management.

### **The City's Current C&D Debris Recycling Program**

The Sacramento City Council adopted Ordinance No. 99-015 on April 20, 1999, creating Development Standards for Recycling and Solid Waste Disposal Regulations. Since that time, as part of the entitlement process, a project applicant is required to prepare and submit a Recycling Plan and requested to divert 95% of all C&D debris generated by project development from landfill disposal. Applicants submit a "Statement of

Recycling Information” for new developments; however, there are no enforcement measures if the applicant fails to meet this request. The proposed ordinance includes penalties for failing to meet the stated goals.

### **The City’s Proposed Implementation Program**

The proposed C&D ordinance is mandatory, not voluntary like the current ordinance. All construction projects with a valuation of equal to or greater than \$100,000 will be required to submit for review and approval a Waste Management Plan (WMP) as part of the building permit application. The WMP will include:

- a. The types of C&D debris that will be generated from the covered project;
- b. The manner in which C&D debris will be managed and/or stored on the project site;
- c. The person who will haul, collect, or transport the C&D debris from the project site; and
- d. The certified C&D sorting facility or recycling facility where C&D debris will be delivered.

The Solid Waste Management Plan (WMP) and instructions are attached as Attachment 6.

The Integrated Waste General Manager will approve the WMPs prior to the building permit being issued. If the applicant determines they cannot meet the recycling requirements they may petition Integrated Waste General Manager for an exemption.

Failure to comply with the C&D Ordinance requirements will result in the following possible actions:

1. The applicant will be required to pay a refundable deposit (1% of the project valuation) when submitting subsequent building permits subject to the ordinance.
2. The generator will be subject to a fine of \$250 for the first offense, \$500 for the second offense, and \$1,500 for all subsequent offenses within one year of being found in non-compliance.

**Chapter 17.72 RECYCLING AND SOLID WASTE DISPOSAL REGULATIONS**

**17.72.010 General provisions.**

A. Purpose. The purpose of these regulations is to regulate the location, size, and design features of recycling and trash enclosures in order to provide adequate, convenient space for the collection, storage, and loading of recyclable and solid waste material for existing and new development; increase recycling of used materials; and reduce litter. These regulations are necessary in order to lengthen the lifespan of the landfill, encourage recycling, and meet state mandated goals for waste reduction and recycling.

B. Applicability. These regulations apply to existing and new multi-family residential (with five or more units), commercial, office, industrial and public/quasi-public uses. (Ord. 99-015 § 3-4-A)

**17.72.020 Statement of recycling information requirement.**

Solid waste manager shall approve a statement of recycling information for new development prior to issuance of a building permit. A statement of recycling information shall include:

A. Site plan to include the location and design specifications of the recycling and trash enclosure(s) and receptacle(s) that shall meet the volume and material requirements (Section 17.72.030 of this chapter) and the development standards (Section 17.72.040 of this chapter). Identify materials to be recycled.

B. Demolition and construction plan to specify any proposed recycling of building material in the demolition of any structure on the site and to specify any recycled material to be used in the construction of the proposed development.

C. Education/public relations program to instruct users of the development about the benefits of recycling and how to recycle. (Ord. 99-015 § 3-4-B)

**17.72.030 Recycling volume requirement.**

Recycling volume shall be provided and maintained as specified in the table below for the use or uses to which the property is devoted. Fractional requirement: for volume required, fractional requirements up to one-half shall be omitted. One-half or over shall require additional volume.

Land Use	Recycling Volume Required	Recyclable Materials
1. Multi-family residential (5 or more units)	1 cubic yard/16 units	metal, glass, plastic, newspaper (ONP)
2. Commercial		
a. Office and general commercial	1 cubic yard/40,000 square feet	beverage containers, office paper, computer paper, newspaper (ONP), corrugated cardboard (OCC)
b. Restaurant/bar	1 cubic yard/5,000 square feet 90 gallon container minimum	metal, glass, and plastics, corrugated cardboard (OCC)
c. Retail sales	1 cubic yard/8,000 square feet 90 gallon container minimum	corrugated cardboard (OCC), office paper, computer paper
d. Retail services	1 cubic yard/10,000 square feet 90 gallon container minimum	corrugated cardboard (OCC), office paper, computer paper
e. Motel/hotel/inn/bed and breakfast	1 cubic yard/20 rooms 90 gallon container minimum	metal, glass, plastics, newspaper (OCC)
Item #6 to service and repair	1 cubic yard/3 000 square feet	tires motor oil scrap metal

1. Auto service and repair	1 cubic yard/5,000 square feet	metals, motor oil, scrap metal
3. Industrial	propose volume in recycling information	propose materials in recycling information
4. Public/quasi-public		
a. School	1 cubic yard/50 rooms	paper, cardboard, beverage containers
b. Library or church	calculate volume using office sq. ft.	office paper, computer paper
c. Park	supply recycling receptacle with each garbage receptacle unless park prohibits food and drink from outside the park and food and beverage containers provided in the park are paper only	beverage containers
5. Hospital/medical clinic	none except cafeteria (subsection (2)(b)) of this table and vending machines (Section 17.32.060(A) of this chapter)	metal, glass, plastics, corrugated cardboard (OCC)
6. Other land uses	propose volume in recycling information	propose materials in recycling information

(Ord. 99-015 § 3-4-C)

### 17.72.040 Development standards for recycling and trash enclosures.

The following regulations shall apply to recycling and trash enclosures:

A. Enclosure(s) and Receptacle(s) Requirement. Recycling and trash enclosures with recycling and garbage receptacles shall be required for: (i) multiple family residential with five or more units; (ii) any commercial, office, public/quasi-public project where garbage receptacle(s) are being used and the receptacle(s) are not stored wholly within the building; and (iii) any industrial project where garbage receptacle(s) are being used and the garbage receptacle(s) are not stored wholly within the building or screened by landscaping, fencing or a structure. The receptacles shall be screened from public view by landscaping, fencing, or a structure. The recycling collection area and the trash collection area shall be adjacent to one another.

B. Materials, Construction, and Design of the Enclosure(s).

1. Walls. The walls of each recycling and trash enclosure shall be constructed of solid masonry material with decorative exterior surface finish compatible to the main structure(s). Split face concrete block finish is recommended. The walls shall be a minimum of six feet in height.

2. Gates. Each recycling and trash enclosure shall have decorative solid heavy gauge metal gates and be designed with cane bolts to secure the gates when in the open and closed positions.

3. Concrete Apron. A concrete apron shall be constructed either in front of each recycling and trash enclosure or at the point of receptacle pick-up to minimize damage to the surrounding asphalt paving. The minimum dimensions of the concrete apron for a two cubic yard receptacle shall be ten (10) feet wide and twenty (20) feet long. The concrete apron shall be fifteen (15) feet wide and twenty (20) feet long whenever a crane-lifted recycling container will be used. Receptacles that are larger than two cubic yards shall require a larger concrete apron, subject to the approval of the city building inspection division. Paving material shall consist of five inch aggregate base rock and six inch portland cement paving.

Item #6

4. Overhead Clearance. The recycling and trash enclosure shall be designed to allow eighteen (18) feet of overhead clearance whenever crane-lifted dome recycling receptacles will be used.

C. Signs. Signs shall be permanently posted or painted on each receptacle listing which material shall be disposed of in that receptacle. General instructions about how to recycle shall be posted within the recycling and trash enclosure or near the receptacle area and shall be visible to the enclosure/receptacle users. The name and phone number of the person responsible for maintenance of the enclosure or receptacle shall be posted. Any sign visible from outside the enclosure shall be no larger than four square feet.

D. Setbacks. No recycling or trash enclosure or receptacle shall be located in any required setback area.

E. Parking. With the exception of Section 17.72.050(C) of this chapter for existing development, no recycling or trash enclosure or receptacle shall be located in any required parking space.

F. Convenient Access for Multi-Family Residents. Each recycling and trash enclosure within a multi-family residential development shall be no greater than two hundred fifty (250) feet from the nearest point of each unit. Each recycling and trash enclosure or receptacle within a multi-family residential development shall be designed to allow the convenient disposal of recyclable materials and trash by residents without having to open the main enclosure gates.

G. Regular Collection. The property owner is responsible for contracting with the recycling broker(s) for regular pick-up of recycled material. Recyclable material shall not be allowed to accumulate such that a visual or public health or safety nuisance is created.

H. Security. The recycling and trash enclosure and receptacles may be secured to prevent the theft of recyclable materials by unauthorized persons yet the enclosure shall be accessible for disposal of materials by authorized persons.

I. Maintenance. Maintenance of each recycling and trash enclosure and receptacle shall be the responsibility of the property owner. (Ord. 99-015 § 3-4-D)

#### **17.72.050 Exceptions to the development standards for existing development.**

Recycling and trash enclosures for existing development shall comply with all of the regulations in Section 17.72.040 of this chapter except as follows:

A. Existing Trash Enclosure. If the existing development has an existing trash enclosure, then the required recycling volume, pursuant to Section 17.72.030 of this chapter, shall be located inside the trash enclosure. If it is not possible to locate the required recycling receptacles in the trash enclosure, the recycling receptacles shall be located adjacent to the existing trash enclosure. Any proposed modifications to the existing trash enclosure shall comply with the requirements listed in Section 17.72.040 of this chapter.

B. No Existing Trash Enclosure. If the existing development does not have an existing trash enclosure, the required recycling receptacles shall be located adjacent to the existing dumpster or other receptacle. Any proposed recycling and trash enclosure(s) shall comply with the requirements listed in Section 17.72.040 of this chapter. The required recycling volume and suggested recyclable materials are those listed in the table in Section 17.72.030 of this chapter.

C. Exception—Waiver of Parking Requirement. In order to meet the required recycling volume requirement, an existing development may use one parking space for the location of the recycling receptacles, provided the enclosure or receptacles meet the design specifications in Section 17.72.040 of this chapter. A parking space that has been converted to recycling receptacle area shall be marked for recycling and shall be adequately barricaded by the installation of concrete wheel stops or other method to prevent use as a parking space.

D. Exception—Waiver of Setback Requirement. No recycling or trash enclosure or receptacle shall be located in any required setback area. Existing enclosures located in any minimum required setback may be enlarged in order to comply with the recycling design guidelines. The proposed addition shall not be located any closer to the property line than the existing enclosure and the addition shall not exceed fifty (50) square feet in area. (Ord. 99-015 § 3-4-E)

### **17.72.060 Special recycling design requirements.**

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- A. All vending machine companies shall provide and service recycling receptacles for the recycled beverage containers collected wherever vending machines are provided.
- B. Residential developers and property owners are encouraged to include recycling space or systems within the residence; such as roll-out drawers below the sink for recycling containers; fire-proof, cleanable, secure chutes from the living space to the garage containers, etc.
- C. Restaurants, bars, and food establishments are encouraged to use reusable soda canisters whenever possible instead of individually packaged glass bottles and cans.
- D. The use of balers to compact and bale cardboard, office paper, computer paper, and other products is encouraged. The sharing of balers among tenants with an office, commercial, or retail center is also encouraged. (Ord. 99-015 § 3-4-F)

### **17.72.070 Variance.**

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If compliance with the recycling volume requirement (Section 17.72.030 of this chapter) and the development guidelines (Sections 17.72.040 and 17.72.050 of this chapter) results in an unnecessary hardship to the property owner of a new or existing development, a zoning administrator's variance may be requested. The application, notice, and appeal requirements of Chapter 17.216 of this title shall apply to zoning administrator's variance sought pursuant to this section. A variance shall not be approved unless the following findings of fact are made by the zoning administrator:

- A. The project will not be detrimental to public health, safety, or welfare nor result in a nuisance.
- B. The project will provide adequate capacity, number, and distribution of recycling and trash enclosures and receptacles to serve the new or existing development. (Ord. 99-015 § 3-4-G)

## ORDINANCE NO.

Adopted by the Sacramento City Council

Date Adopted

### **AN ORDINANCE ADDING CHAPTER 8.124 TO TITLE 8 OF THE SACRAMENTO CITY CODE RELATING TO CONSTRUCTION AND DEMOLITION DEBRIS RECYCLING**

BE IT ENACTED BY THE COUNCIL OF THE CITY OF SACRAMENTO:

#### SECTION 1.

Chapter 8.124 is added to Title 8 of the Sacramento City Code to read as follows:

#### **Chapter 8.124**

#### **Construction and Demolition Debris Recycling**

##### **8.124.010 Findings and purpose.**

- A. The city council of the city of Sacramento finds and declares as follows:
1. The California Integrated Waste Management Act of 1989 (AB 939) requires each local jurisdiction in the state to divert a minimum of fifty (50) percent of discarded materials away from disposal in landfills.
  2. In past years, construction and demolition (C&D) debris accounted for approximately twenty (20) percent of the waste stream generated in the city. These materials have significant potential for waste reduction and recycling.
  3. The reuse and recycling of C&D debris reduce the amount of waste transported for disposal in landfills and return these materials into the economic mainstream, thereby conserving natural resources and stimulating markets for recycled and salvaged materials.
- B. The purpose of this chapter is to establish recycling requirements for construction and demolition debris to further the city's efforts to reduce waste deposited in landfills and to meet the mandatory diversion requirements imposed by AB 939.

### **8.124.020 Definitions.**

For purposes of this chapter, the following terms, words and phrases shall have the meanings given them in this section.

“Certified C&D sorting facility” means a facility that receives and/or processes C&D debris into its component material types for reuse, recycling, and disposal of residuals and possesses a valid certificate as a C&D sorting facility from the Sacramento Regional County Solid Waste Authority.

“Construction and demolition debris” or “C&D debris” means used or commonly discarded materials resulting from construction, repair, remodel or demolition operations on any pavement, house, building, or other structure, or from landscaping that are not hazardous as defined in California Health and Safety Code section 25100 et seq. Such materials include, but are not limited to, concrete, asphalt, wood, metal, brick, dirt, sand, rock, gravel, plaster, glass, gypsum wallboard, cardboard and other associated packaging, roofing material, ceramic tile, carpeting, masonry, plastic pipe, trees, and other vegetative matter resulting from land clearing and landscaping.

“Covered project” shall have the meaning set forth in section 8.124.030.

“Director” means the Director of the Department of Utilities or his or her designee.

“Divert” or “diversion” means to use materials for any purpose other than disposal in a landfill or transformation facility. Methods to divert materials include on-site reuse of the materials, delivery of materials from the project site to a certified C&D sorting facility or authorized recycler, or other methods as approved in regulations promulgated by the Director.

“Franchised waste hauler” means a person who possesses a valid commercial solid waste collection franchise issued by the Sacramento Regional County Solid Waste Authority.

“Mixed C&D debris” means loads that include commingled recyclable and non-recyclable C&D debris generated at a project site.

“Permit holder” means any person who receives from the city the applicable permit to erect, construct, enlarge, alter, repair, move, remove, convert or demolish a building or structure within the City.

“Person” means any natural person, company, partnership, agency or other public or private entity.

“Recyclable C&D debris” means C&D debris designated by the Director to be diverted from landfills and returned to the economic mainstream in the form of raw material for new, reused or reconstituted products which meet the quality standards necessary to be used in the marketplace.













































































