# **California Environmental Quality Act**

Guidelines for a Waste Management Plan

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Contact: Lisa Wood Senior Planner Environmental Services Department City of San Diego (858) 573-1236 LFWood@sandiego.gov

# TABLE OF CONTENTS

1.0 BACKGROUND
1.1 Illegal Disposal
1.2 Collection Services
1.3 Processing and Disposal
1.4 Waste Diversion
2.0. SETTING
2.1 Disposal
2.2 Processing
2.3 Haulers
2.4 Litter and Illegal Dumping
2.5 Diversion
3.0. THRESHOLDS
4.0 LOCAL ORDINANCES
4.1 Storage Ordinance
4.1 Storage Orumance
4.1 Storage Ordinance
4.2 City Recycling Ordinance
<ul><li>4.2 City Recycling Ordinance</li></ul>
<ul> <li>4.2 City Recycling Ordinance</li></ul>
<ul> <li>4.2 City Recycling Ordinance</li></ul>
4.2 City Recycling Ordinance.94.3 Construction and Demolition (C&D) Debris Diversion Deposit Program.95.0 WASTE MANAGEMENT PLAN105.1 Purpose.105.2 Project Description.10
4.2 City Recycling Ordinance.94.3 Construction and Demolition (C&D) Debris Diversion Deposit Program.95.0 WASTE MANAGEMENT PLAN105.1 Purpose.105.2 Project Description.105.3 Waste to Be Generated.10
4.2 City Recycling Ordinance.94.3 Construction and Demolition (C&D) Debris Diversion Deposit Program.95.0 WASTE MANAGEMENT PLAN105.1 Purpose.105.2 Project Description.105.3 Waste to Be Generated.105.4 Managing Waste.11
4.2 City Recycling Ordinance.94.3 Construction and Demolition (C&D) Debris Diversion Deposit Program.95.0 WASTE MANAGEMENT PLAN105.1 Purpose.105.2 Project Description.105.3 Waste to Be Generated.105.4 Managing Waste.115.5 Summary.14
4.2 City Recycling Ordinance.94.3 Construction and Demolition (C&D) Debris Diversion Deposit Program.95.0 WASTE MANAGEMENT PLAN105.1 Purpose.105.2 Project Description.105.3 Waste to Be Generated.105.4 Managing Waste.115.5 Summary.145.5.1 Staying Under the Threshold for a Cumulatively Significant Impact.14
4.2 City Recycling Ordinance.94.3 Construction and Demolition (C&D) Debris Diversion Deposit Program.95.0 WASTE MANAGEMENT PLAN105.1 Purpose.105.2 Project Description.105.3 Waste to Be Generated.105.4 Managing Waste.115.5 Summary.145.5.1 Staying Under the Threshold for a Cumulatively Significant Impact.145.5.2 Diverting Sufficient Waste.14
4.2 City Recycling Ordinance.94.3 Construction and Demolition (C&D) Debris Diversion Deposit Program.95.0 WASTE MANAGEMENT PLAN105.1 Purpose.105.2 Project Description.105.3 Waste to Be Generated.105.4 Managing Waste.115.5 Summary.145.5.1 Staying Under the Threshold for a Cumulatively Significant Impact.145.5.2 Diverting Sufficient Waste.145.5.3 Providing Sufficient Overall Package.14

#### 1.0 BACKGROUND.



"Sanitation," as solid waste management is sometimes called, is essential to public health and safety. It is a heavily regulated public service. Federal law under the Resource Conservation Recovery Act sets the tone, establishing a preference for activities that divert materials from disposal, and outlining basic requirements for ensuring that disposal facilities do not threaten health, safety, or the environment. State law provides additional requirements throughout the state codes, in particular the Public Resource Code, where the Integrated Waste

Management Act is codified. Most solid waste laws in California are implemented by CalRecycle. Finally, local codes, franchises, and contracts provide the requirements that waste generators, haulers, and facility operators must follow.

Solid waste management is, ultimately, a local government responsibility. Each local government manages this responsibility differently in response to local conditions. Although the methods differ, each local government must ensure that solid wastes are: not deposited where they should not be, collected in an acceptable manner, processed as appropriate and wastes reduced, recycled, composted, transformed into energy, or safely disposed of if uses cannot be secured.

<u>1.1 Illegal Disposal.</u> State and local laws typically specify penalties for inappropriate disposal of wastes. In an effort to reduce inappropriate littering, most local governments provide litter bins and bin service in public areas, such as parks and trails, and have a code compliance section to prosecute people who dispose of materials inappropriately.





<u>1.2 Collection Services.</u> Virtually all residences and commercial facilities generate waste that must be removed from the premises. The frequency of this removal varies from daily, to weekly, bi-weekly, or even less frequently in some situations. In some rural areas, there is no formal collection service from the waste generation site. Instead the waste generator must haul wastes to a

regional bin site. Local government may provide the service, or they may contract out for it, or they may issue exclusive or non-exclusive franchises. Local government must make decisions about how collection will occur. For example, will recyclable materials be collected separately? Yard waste? What types of containers will be used?

<u>1.3 Processing and Disposal.</u> A wide variety of processing technologies are available. These include transfer stations, materials recovery facilities, composting operations, and various conversion technologies. Although the majority of the waste materials generated are diverted to a beneficial use, the residual materials comprise many millions of tons buried in landfills.

<u>1.4 Waste Diversion.</u> In California, one particularly significant piece of legislation, the Integrated Waste Management Act, often referred to by its bill number, Assembly Bill 939, was chaptered in 1989. This bill required local governments to ensure that 50% of the waste material generated was diverted from disposal. It specified that solid waste should be considered by the equation  $\underline{GENERATED} = \underline{DISPOSED} + \underline{DIVERTED}$ . "Diverted" materials are put into a *hierarchy* in the law, as follows:



- First *source reduction*, such as using a reusable bag, making double-sided copies, or other measure that stops waste at the source.
- Secondary measures include *recycling* and *composting*. Because these measures often have transportation and processing impacts, they are considered less preferable than source reduction.
- In the Public Resources Code, various methods of *transformation* for energy production are limited to 10% of the total 50% waste reduction target.

Local governments failing to achieve the 50% waste reduction level, as measured from a 1990 base year, are subject to fines of \$10,000 per day.

It is important to understand, the goal is not to recycle more; it is to dispose of less. Subsequent legislation, Senate Bill 1016, clarified this point. It modified how measurement for compliance occurs. Another reason for this modification is that little reporting is required for recycling

operations, and source reduction is often impossible to measure. Therefore it was virtually impossible for local governments to verify compliance with State law by measuring diversion rates. Senate Bill 1016 specified that each jurisdiction's waste reduction level that had been accepted by the State was to be converted into a unique per capita waste disposal target. Each local government has a unique target based on its diversion rate, economics, and demographics. Although the rate of waste reduction required is consistent across the board, because some jurisdictions contain more commercial waste generators than residential, the per capita waste disposal target is unique to each jurisdiction.

In 2011, the target for waste diversion was increased in Assembly Bill 341 from 50% to 75%. The goal is a statewide goal, but the State agency imposed requirements on local government to move toward this goal. Specifically, local governments are required to enact a mandatory recycling program.

## 2.0. SETTING

<u>2.1 Disposal.</u> In San Diego County there are three large solid waste landfills, Miramar, Sycamore, and Otay. Two of the three landfills, Miramar and Sycamore, are located within the City of San Diego. The City of San Diego operates Miramar, while the other two large landfills in the County are operated by a company locally known as Allied, and nationally known as Republic.

Solid waste planners often want to know remaining capacity and life expectancy estimates for landfills. These estimates change dramatically as permits are modified and depending on the waste input rate and "air utilization" and other factors specific to each operation. To estimate the capacity of the landfills and their expected closure date, it is necessary to visit the CalRecycle website and find the latest permit for each landfill. The permit includes the remaining volume of capacity at the time the permit was issued. The CalRecycle website posts the annual tonnages received at each facility, by jurisdiction, and how much, if any, of that material was diverted to beneficial use. To determine remaining capacity and life expectancy, disposal tonnages must be converted into cubic yards, and subtracted from the remaining capacity that was listed at the time the permit was approved. However, knowing the capacity and life expectancy of landfills is only one indicator of the ability of a jurisdiction to provide all of the necessary waste management services. Furthermore, with a diversion target of 75%, the disposal component will become less important over time, while the diverted component will become more important.

If a County cannot demonstrate that it has 15 years of disposal capacity, CalRecycle has several actions it can take to ensure that sufficient capacity is provided. The County of San Diego updates its *Countywide Summary Plan and Siting Element* every five years. This document typically provides a snapshot of disposal capacity at the time it is prepared. The plan points out that if the throughput allowed into the facility is less than the volume of waste that requires

disposal, the region will not have sufficient capacity. During none of the updates has the County had 15 years of capacity in existing permitted facilities.

<u>2.2 Processing.</u> In San Diego County there are several materials recovery facilities, transfer stations, recyclers, and composters. The materials recovery facilities and transfer stations are owned by various solid waste companies, but EDCO is the leader in this field in San Diego County. The City of San Diego has the largest and most comprehensive composting operation in the County, located at the Miramar Landfill. "Recyclers" include a varied group of businesses, including aggregate processing companies, scrap metal dealers, and others. The City of San Diego maintains a list of recyclers on its website, and includes information about the percentage of the throughput at each facility that is actually locally reused or recycled and/or shipped for use or remanufacture elsewhere. Processing facilities that must get a solid waste or composting permit from CalRecycle are included in the City of San Diego *Non-disposal Facility Element*.

<u>2.3 Haulers.</u> Section 66.0301 et. seq. of the San Diego Municipal Code specifies that only the generator of refuse or an authorized hauler may transport refuse or recyclables. More than a dozen private solid waste companies operate throughout the County in the unincorporated area and within the City of San Diego. The other 17 cities within the County have "exclusive franchises" with just one hauler, but the unincorporated area of the County and the City of San Diego have a non-exclusive franchise system. The non-exclusive system has the benefit of private competition to keep prices low and allow customers a choice between competitors. It has a disadvantage in terms of traffic and greenhouse gas impacts, since routing is less efficient. In many cases, multiple providers collect materials on a single street, each sending its own trucks and personnel to the same area.

In addition to the private haulers within the City, the City of San Diego provides collection service with no fee to certain waste generators pursuant to a Municipal Code section known as the Peoples' Ordinance. This law, which was originally enacted in 1919 by voter referendum, and was amended twice in the 1980s, applies generally to single family residences on public streets. Tens of millions of dollars each year are budgeted from the City's General Fund to provide collection service to specified waste generators pursuant to the Peoples' Ordinance.

Because of the Peoples' Ordinance, General Fund fees not only pay for refuse collection from single family residents, but they also are used to pay a \$1.40 per ton fee assessed by CalRecycle for various CalRecycle solid waste management services.

<u>2.4 Litter and Illegal Dumping.</u> The City does not provide for regular curbside "bulky item" collection. Generators of "bulky items" may transport these materials to the landfill for disposal.

Alternatively, they may use the community cleanup events that the City provides. In addition, the City supports the efforts of community groups and non-profit organizations to provide cleanup events.



Section 66.0201 of the San Diego Municipal Code prohibits dumping. Despite educational campaigns, community events, and other City efforts, dumping occurs in some canyons and certain areas of the City. The Earth Resources Foundation says that in California more than a billion dollars is spent every year on litter control by various agencies. Projects that increase the need for litter management and enforcement have impacts on local government's ability to provide these services. Plans for trails and bikeways often neglect provision for funding for litter bin service.

In San Diego, several existing pedestrian areas have no litter bin service. Enforcement for dumping and littering violations is largely complaint-driven. Problem areas are sometimes targeted for special treatment, and grant funding is sought for more concentrated efforts in such areas.

<u>2.5 Diversion.</u> All local governments are required to plan for and demonstrate that they have accomplished required waste diversion rates. Each year the City's *Source Reduction and Recycling Element* is updated with an Annual Report, which must be reviewed and approved by CalRecycle.

The City of San Diego has implemented a Construction and Demolition (C&D) Debris Recycling Ordinance. This ordinance requires people who apply for a demolition or construction permit to estimate the volume of waste they will generate, and post a deposit. The deposit is held until receipts are shown showing that at least 50% of the material generated at the job site is diverted from disposal. (The C&D Ordinance was enacted prior to AB341's 75% diversion target.)

Most mixed debris recyclers in San Diego achieve less than 65% diversion at their facilities. The City reviews and updates recycling rates from each facility quarterly. Not everything that comes through the door is usable or marketable. Therefore, from most project sites virtually all C&D waste must be sent to a recycling facility in order to achieve a minimum 50% diversion rate. The higher (75%) diversion rate established by AB341can be usually accomplished if any of the following occurs: salvage, onsite reuse, and segregation into material types that can be processed at facilities with higher recycling rates. The C&D Ordinance stipulates that when mixed debris facilities reach the 75% diversion mark, projects will be required to divert 75% of their wastes.

Although the State generally allows local governments to decide how best to comply with the diversion requirement, the State does require local governments to have an ordinance specifying that storage areas must be provided. It also requires local governments to enact an ordinance specifying that anyone generating four cubic yards or more of waste must have access to recycling service. The City developed its Storage Ordinance and City Recycling Ordinance before being required to do so. The City Recycling Ordinance requires not only the provision of recycling service, but also education of tenants on waste reduction and recycling.

#### 3.0. THRESHOLDS

The California Environmental Quality Act requires that potential impacts to public services must be considered. Several types of projects may have impacts. The City of San Diego establishes a threshold of 60 tons per year of solid waste as a threshold for potentially significant cumulative impacts. It is estimated that construction, demolition, and/or renovation of 40,000 square feet of building space would generate this volume. Projects developing 1,000,000 square feet or more of building space, generating 1,500 tons per year of waste, have the potential for direct impacts.

#### 4.0 LOCAL ORDINANCES

Three solid waste Municipal Codes with thresholds related to solid waste impacts include: Storage Ordinance, Recycling Ordinance, and Construction and Demolition Debris Ordinance. The thresholds of these three ordinances are different from the 60 ton and 1,500 ton threshold discussed above. The thresholds for the three ordinances are as follows:

<u>4.1 Storage Ordinance.</u> Municipal Code Section 142.0801 et. seq. contains the language of the Storage Ordinance, an ordinance that is required by State law.

Table 142-08C of the Municipal Code provides information on Minimum Exterior Refuse and Recyclable Material Storage Areas for **Residential Development**.

# of Units	Minimum Refuse Area (Feet <sup>2</sup> )	Minimum Recyclables Area (Feet <sup>2</sup> )	<b>Total Storage Area</b> (Feet <sup>2</sup> )
2-6	12	12	24
7-15	24	24	48
16-25	48	48	96
26-50	96	96	192
51-75	144	144	288
76-100	192	192	384
101-125	240	240	480
126-150	288	288	576
151-175	336	336	672
176-200	384	384	768
200+	384	384	768
	+ 48 for every 25 units more than 201	+ 48 for every 25 units more than 201	+ 96 for every 25 units more than 201

Floor Area (Square Feet)	Minimum Refuse Storage Area (Square Feet)	Minimum Recyclable Material Storage Area (Square Feet)	<b>Total Minimum Storage</b> Area (Square Feet)
0-5,000	12	12	24
5,000-10,000	24	24	48
10,001-25,000	48	48	96
25,001-50,000	96	96	192
50,001-75,000	144	144	244
75,001-100,000	192	192	384
100,001+	192	192	384
	+ 48 for every 25,000 more than	+ 48 for every 25,000 more than	+ 96 for every 25,000 more than
	100,001	100,001	100,001

Table 142-08C provides the minimum storage areas for **Non-residential Development.** 

4.2 City Recycling Ordinance. The City Recycling Ordinance is found in Municipal Code section 66.0701 et seq. It requires the provision of recycling service for all single family residences; and commercial facilities and multifamily residences with service for 4 cubic yards or more. In addition, the ordinance also requires development of educational materials to ensure occupants are informed about the City's ordinance and recycling services including information on types of recyclable materials accepted.

Special events such as street fairs, fireworks displays, and parades are sometimes subject to discretionary permitting and sometimes to non-discretionary permitting. Regardless of the type of permit required, all permitted special events must have as many recyclable materials receptacles as refuse receptacles, per section 66.0712 of the Municipal Code. For discretionary permits, additional impacts, such as impacts to collection schedules, must also be considered.

4.3 Construction and Demolition (C&D) Debris Diversion Deposit Program. Municipal Code section 66.0601 et seq. applies to all applicants for building, demolition, and removal permits. This ordinance requires that applicants post a deposit. The deposit is not returned until the applicants demonstrate that a minimum 50% of the material generated has been diverted from disposal in landfills.

C&D Debris Deposit Table				
Building Category	Sq. Ft. Subject to Ordinance*	Deposit per Sq. Ft.	Range of Deposits	
Residential New Construction	500-125,000 detached	\$0.40	\$200-\$50,000	
	500-100,000 attached		\$200-\$40,000	
Non-residential New Construction	1,000-25,000 commercial	\$0.20	\$200-\$5,000	
	1,000-75,000 industrial		\$200-\$15,000	
Non-residential Alterations	More than 286	\$0.70	\$200 and up	
Residential Demolition	More than 286	\$0.70	\$200 and up	
Non-residential Demolition	More than 1,000	\$0.20	\$200 and up	
Roof Tear-off	All	-	\$200	
Residential Alterations	More than 500	-	\$1,000	

\* Projects under the minimum square footage subject to the ordinance are exempt from the C&D debris recycling deposit.

Mixed construction debris recycling facilities in San Diego are evaluated quarterly to determine how much of the throughput is recycled, and how much is a "residual" material requiring disposal. Facilities that accept **mixed debris** typically achieve 50-70% diversion. **Single materials** recyclers, such as metal recyclers, often achieve a nearly 100% diversion rate.

When comingled materials are sent to a mixed facility, even if all material is sent to a recycling facility, the 75% diversion goal established by AB341 will not be met. Depending on the project, to ensure that the overall diversion goal is attained, some materials must often be separated and trucked to facilities with higher diversion rates, such as aggregate and metal recyclers. Multiple bins must be provided on the job site to ensure that segregation occurs.

## 5.0 WASTE MANAGEMENT PLAN

<u>5.1 Purpose.</u> The purpose of the Waste Management Plan is to identify and reduce solid waste impacts pursuant to the City's California Environmental Quality Act Significance Determination Thresholds, <u>http://www.sandiego.gov/development-services/pdf/news/sdtceqa.pdf</u>, section II. N.

<u>5.2 Project Description.</u> The project description provided in a Waste Management Plan must include a description of all permits and approvals being sought, grading volumes, and square footages of demolition and construction. Also, a description of any prior permits and/or existing uses on the property must be included. Any solid waste-related requirements associated with the prior approvals must be specified. If there is an existing use on the property, an estimate of the current level of waste generation is required. This may become the "baseline" for purposes of the analysis. The Waste Management Plan addresses the difference in waste generation between the existing and proposed use.

<u>5.3 Waste to Be Generated.</u> Different uses generate different amounts of waste. For example, a car rental agency generates a different type and volume of waste than does a fast food enterprise. Some government agencies provide waste generation numbers specific to Standard Industrial Classification codes. However, even within SIC codes, waste generation rates and waste composition can vary.

Because waste management is a costly service, efficient managers closely estimate waste generation, and take steps to reduce waste at its source. When specific information is available regarding waste generation, this information may be used in Waste Management Plans, provided the rates are within accepted standards. However, when managers/project proponents do not know specifics about waste generation rates, estimates may be used. As a rule of thumb, **three or more pounds per square foot** of waste are generated during demolition, construction, and also per year during ongoing use of a site.

If more specific information on waste generation is not available, the total amount of waste can be equally distributed between the types of waste expected. These include:

• Construction and Demolition Waste: asphalt, concrete, brick, masonry, tiles, cabinets, doors, fixtures, windows, cardboard, carpet, padding, foam, ceiling tiles, dirt, drywall, landscape debris,

roofing materials, scrap metal, stucco, treated/painted and unpainted/untreated wood. http://www.sandiego.gov/environmental-services/pdf/recycling/cdwastemanagementform.pdf

• Wastes Generated During Ongoing Use: paper, packaging, food waste, polystyrene, plastic, bimetal cans, bulky items, landscape debris, electronic waste, and others, depending on the use. http://www.sandiego.gov/environmental-services/recycling/ro/pdf/crobrochure.pdf

<u>5.4 Managing Waste.</u> As a requirement in the Waste Management Plan and to help a manager/project proponent minimize waste, the waste types that will be generated must be listed. When considering the best management methods, remember that while recycling is often less expensive than disposal, neither is without financial and environmental costs. The goal is not to recycle greater volumes, it is to reduce the amount of waste that is generated in the first place and send less volume for disposal.

- Source Reduction. Examples include:
  - Accurate estimates that reduce over-buying.
  - Reduced and/or recyclable packaging can be specified.
  - Washable products can be provided instead of disposable products.
  - Businesses can provide copiers with default-set double-sided functions.
  - Tenants can be given volume-based waste service charges.
  - Grading can balance cut and fill onsite rather than requiring the export of soil.
  - Concrete and asphalt that is slated for demolition can be reused onsite as a base material.
  - Wooden flooring, doors, fixtures, wiring, etc. can be salvaged and reused.

Source reduction measures must be specific. For example, the phrase "salvage and reuse ceiling tiles" does not provide sufficient specificity. Instead the Waste Management Plan could specify: "There are 400,000 square feet of ceiling tiles, with 14,400 individual tiles. Approximately 90% are in good condition. Each tile shall be removed prior to demolition and placed into either: a pile on a pallet in the area covered by the awning near the office trailer, or in the adjacent bin marked for damaged ceiling tiles."

Additional information required in the Waste Management Plan includes the weight of the materials. In the example above, if each tile weighs 1 pound, then the total amount of tile waste generated will be 7.2 tons. Of these 7.2 tons, the scenario above calls for approximately 6.5 tons to be re-used onsite. In this scenario, the .7 ton remainder is found to be recyclable. It is sent to a mixed debris recycling facility. This particular recycling facility has a 68% diversion rate. Therefore, approximately 460 pounds ends up in the landfill.

• Recycling.

Markets for recyclable materials change constantly. For example, there is not always a market for drywall. Furthermore, not all drywall has the same content, and sometimes some can be recycled and while other batches cannot. With some materials, such as polystyrene, the market is marginal. Marginal products that have a market if kept separate may not be cost-effective to recover from a mixed stream.

The facilities that separate mixed loads of construction and demolition debris for baling and shipment to remanufacturing facilities end up having to dispose of 32% or more of the material entering the facility. Thus if a 100 ton load is brought to such a facility, only 68 tons will be recycled.

In contrast, facilities that specialize in a single material type, such as metals dealers and cardboard recyclers, can often find a manufacturer to recycle 100% of clean loads. The market for these materials is strong.

**Segregation** of materials is required to improve the diversion rate, and often also the economics, of a project. A well-planned project will determine in advance the number of bins needed for each material type and a destination and service rate for each bin. Segregation is accomplished by:

- providing multiple bins,
- providing appropriate signage,
- educating the people using the bins,
- enforcing maximum contamination standards for bins, and
- ensuring that bins are transported to the appropriate recycling facility for remanufacture or for shipment to a remanufacturing facility.
- Composting.

One of the principles of waste management is that materials should go to their "highest and best use" at the end of useful life. The development of nutrient-rich soils is a valuable end use for many organic materials. Yard and food wastes are two examples of good compost feedstocks.

The City of San Diego operates the region's largest composting operation at the Greenery, located at the Miramar Landfill. Much of the clean wood wastes, grubbed plant materials, and yard wastes from projects throughout the City are sent to this facility. For all inputs into the Greenery, contamination with plastic, dirt, and other materials must be minimized. To participate in the food waste composting program, contamination rates must be minimized, specialized hauling must be provided, and the City must approve participation. If this measure is included in a Waste Management Plan, details about how the material will be kept clean and how it will stored and transported must be provided.

• Recycled Content.

Measures such as use of construction materials with post consumer content do not directly divert materials from disposal, but they provide a market for recycled materials. Providing a market for materials makes it possible to recycle them. Therefore such measures may be considered to

reduce solid waste impacts. As with all measures, they must be specific and verifiable. An inappropriately vague approach is to say that "the use of materials with post-consumer content will be encouraged." Instead, a Waste Management Plan must specify the post-consumer content minimums that will be ordered for specific materials. The Plan must provide the percentage of the total purchased that is represented by those materials.

CalRecycle maintains a directory of recycled-content materials at <u>http://www.calrecycle.ca.gov/rcp/</u>. In an example,

- 10 tons of 100% recycled framing materials will come from Jefferson Recycled Woodworks,
- 2 tons of Minerali flooring will be used in bathrooms, with 85% recycled content, and
- 1,000 pounds of modular rubber drains with 100% recycled content will be installed in the landscaping.

A total of 100 tons of construction materials will be used for the entire project. In this case, multiplying 85% times the weight of flooring shows that the weight of post consumer content for that product is 1.7 tons. Adding the recycled content tons (10+1.7+.5) and dividing by the total project tons provides the overall 12.2% post-consumer content rate that will be achieved by the project.

Product	<b>Tons Ordered</b>	% Post-Consumer Content	<b>Tons Recycled Content</b>
Wood	10.0	100	10
Flooring	2.0	85	1.7
Drains	.5	100	.5
Other	87.5	0	0
TOTAL	100.0	n/a	12.2

To verify that this measure is carried out, the applicant must provide purchase requisitions showing materials specifications for City staff inspection during a preconstruction meeting.

A Waste Management Plan must include a table or tables to organize the information on waste materials that will be generated and how they will be managed. If the project will occur in phases, then a table is needed for each phase. Table(s) must provide details on the wastes generated, how they will be managed, and the total requiring disposal.

	Generated Bins/		Handling (include diversion rate for the	Diverted	Disposed
		service	facility)		
Demolition Wastes					
<ul> <li>Hardwood</li> </ul>	X tons	40 yd	Salvage for re-use onsite.	X tons	X tons
floors		1/week			
<ul> <li>Drywall</li> </ul>	X tons	40 yd	Keep separate and take to Dalbergia Street; (100%	X tons	X tons
-		1/week	diversion)		
<ul> <li>Roofing</li> </ul>	X tons	2 40 yd	Add to "mixed" bin for hauling to Lemon Grove (68%	X tons	X tons
-		2/week	diversion)		
• Etc.	X tons			X tons	X tons
Construction Wastes					
<ul> <li>Metal</li> </ul>	X tons	40 yd	Keep separate and take to Pacific Steel (100% diversion)	X tons	X tons
		1/month			
• Etc.	X tons			X tons	X tons
C&D TOTAL	X tons			X tons	X tons
Ongoing Use Wastes					
<ul> <li>Food waste</li> </ul>	X tons/yr	10 yd	Keep separate, monitor contamination, provide	X tons/year	X tons/year
		2/week	education as needed, haul to Miramar Greenery (100% diversion)		
• Etc.	X tons/yr			X tons/year	X tons/year
ONGOING TOTAL	X tons/yr			X tons/year	X tons/year

#### SAMPLE TABLE

5.5 Summary. The Waste Management Plan must summarize the measures that the project will use to manage waste, and specify their effectiveness reducing waste. There are several approaches to sufficient waste management:

5.5.1 Staying Under the Threshold for a Cumulatively Significant Impact. If the project generates less waste than an existing use, or if it generates less than 60 tons more than an existing use, after verifiable measures have been incorporated, then the measures are sufficient.

5.5.2 Diverting Sufficient Waste. State law targets 75% waste reduction. Implementation of the City's Recycling Ordinance is expected to provide a minimum recycling service volume of 40% for large complexes and 30% for smaller complexes. This could fall short of the State target and can be overcome by providing BETTER than 75% waste reduction during construction, and/or providing measures that are not required by the City ordinances. An example of the latter is participation in the City's foodwaste composting program, the provision of onsite composting, or other measure that increases the overall diversion rate of the project.

5.5.3 Providing Sufficient Overall Package. Even if the project exceeds the waste generation threshold, and fails to accomplish 75% waste reduction, if sufficient other measures, such as requirements for post consumer content, can be demonstrated, the waste management measures may still be sufficient.

5.5.4 Implementation. The summary should include the necessary measures in a concise manner. Measures must identify who is responsible to implement, what is being required, when it must be satisfied, where the measure should be referenced, and how it will be verified. Sample measures include:

• Prior to start of construction, the owner/permittee/applicant shall

- Ensure attendance of a representative of the City's Environmental Services Department (ESD) at preconstruction meetings,
- Provide verification that dirt and grubbed material is being used onsite or transported to an appropriate facility for reuse/composting,
- Ensure that an appropriate number of bins are provided, with appropriate signage, as approved by ESD,
- Ensure that bins are appropriately used (contamination levels are minimized), as approved by ESD,
- Ensure that the C&D Ordinance deposit has been paid,
- Ensure that an appropriate diversion rate (from the Waste Management Plan) has been included on the deposit form, as approved by ESD, and
- Ensure that materials are being taken to the appropriate facility, as specified in the Waste Management Plan.

If post-consumer content or other environmental restriction on construction materials was included in the Waste Management Plan, the applicant shall provide to City representatives copies of the specifications that were used for materials purchase.

If salvage and/or onsite reuse was specified in the Waste Management Plan, the applicant shall provide the implementation plan for this activity for inspection and approval.

- Prior to issuance of any certificate of occupancy the applicant shall:
  - Ensure that a representative of ESD inspects and approves a storage area that has been provided consistent with the City's Storage Ordinance.
  - Ensure that a hauler has been retained to provide recyclable materials collection, and, if specified in the Waste Management Plan, yard waste and/or food waste collection.
  - Ensure that a representative of ESD inspects and approves education materials for building tenants/owners that are required pursuant to the City's Recycling Ordinance.
  - If onsite composting was specified in the Waste Management Plan, ensure that a representative of ESD inspects and approves the composting area(s).
  - If specialized product purchasing (for example with recycled content) for products to be used during occupancy was specified in the Waste Management Plan, applicant shall provide for inspection and approval by ESD of the documentation that will be used to carry out this requirement.

# 6.0 REFERENCES

- 1. California Integrated Waste Management Act, Public Resource Code §40000 et seq.
- 2. City Construction and Demolition Debris Ordinance, Municipal Code §66.0601 et seq.
- 3. City General Plan <u>http://www.sandiego.gov/planning/genplan/</u>
- 4. City Recycling Ordinance, Municipal Code §66.0701 et seq.
- 5. City Storage Ordinance, Municipal Code §142.0801 et seq.
- 6. County of San Diego Siting Element <u>http://www.sdcounty.ca.gov/dpw/recyclinghome.html</u>

# 7.0 ATTACHMENTS

A. Waste Management Plan Information Bulletin