SECTION 4

WASTE GENERATION AND DIVERSION RATE

4.1 SUMMARY OF FINDINGS

Waste generation is defined by statute and regulations as the sum of waste disposal and waste diversion. The City's waste generation study entailed gathering disposal and diversion data from a variety of sources, evaluating this information for accuracy, and determining the most accurate quantities of materials to report under each category.

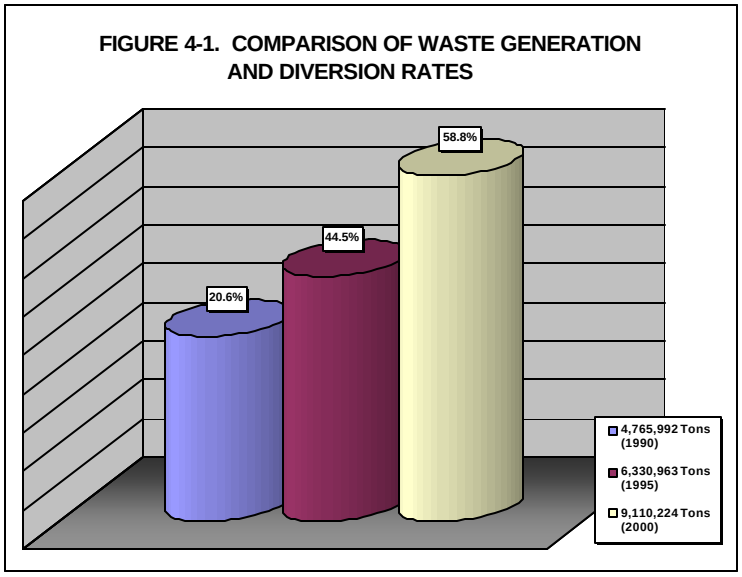
The results of the diversion study indicated a total of 5,359,943 tons of materials were diverted in the City in 2000. The data from the Disposal Reporting System indicates that 3,750,281 tons of waste was disposed from the City. Based on these numbers, the City's total generation for 2000 is 9,110,224 tons. Using the calculation of diversion divided by generation equals the diversion rate, the City's 2000 diversion rate equals 58.8%.

4.2 WASTE GENERATION

Waste generation is defined as the sum of the quantity and types of waste disposed and diverted. In compliance with the requirements of AB 939, the City conducted a waste generation study and established a 1990 base-year waste generation and diversion rate. The 1990 diversion rate was established at 20.6%. Based upon the solid waste generation study results, the City identified and selected appropriate programs to address the targeted waste stream that would help achieve the 1995 diversion mandate. In 1995, the City conducted a waste generation study to assess its progress in meeting the 25% diversion rate, and to further refine its plans and programs for meeting the 50% diversion mandate in 2000. At that time, the diversion rate had reached 44.5%.

For the year 2000 compliance report, the City conducted a comprehensive waste generation study to determine the City's existing disposal and diversion, and to assess the progress in meeting the 50% diversion rate. A comparison of 1990, 1995 and 2000 waste generation and diversion rates is included in ***Figure 4-1***.

FIGURE 4-1. COMPARISON OF WASTE GENERATION AND DIVERSION RATES



Upon completion of the City's waste characterization and quantification study, the disposal quantities and types will be further reviewed for accuracy, and a determination will be made whether to submit data supporting an alternative disposal amount.

4.3 2000 DIVERSION RATE

Utilizing the State methodology for calculating diversion rate, the City's 2000 diversion rate is 58.8%. This diversion rate is attributed to aggressive efforts in the public and private sectors, as described in detail in Section 3.0 of this report. City Departments programs contributed 1,216,035 tons of diversion. The major material categories for the reported diversion by City departments are organics and paper products. Landfills diverted over 418,000 tons of materials from the waste stream. The majority of materials diverted by these facilities included inert material and green waste. The survey of processors indicated these facilities diverted 3,181,190 tons. The materials diverted by processors included several major categories: paper products, metals, organics, and inert solids.

4.3.1 What the City of Los Angeles Counted Towards Its Reported Diversion Rate

This section includes excerpts from the adopted CIWMB Diversion Study Guide and are meant to inform the reader of some of the key components of the AB 939 submittal for consideration.

The question of "what counts" for diversion has evolved from the relatively simple statutes in AB 939 (e.g., if a waste was normally disposed, it could count toward diversion, except for agricultural wastes and inert solids), to the multi-faceted requirements of today. Subsequent bills, including AB 1820 and AB 2494, introduced restrictions and criteria for counting the diversion of specific waste types, including agricultural wastes and inert solids, and added other "restricted" waste types, such as scrap metals, white goods, and sludge.

For purposes of the AB 939 2000, the City counted the following as disposal:

- Wastes disposed at all permitted landfills that accepted waste from the City of Los Angeles.

- Wastes transformed at the Southeast Resource Recovery Facility (SERRF) and the Commerce Refuse-to-Energy Facility.

The City counted the following as diversion:

- Bureau of Sanitation Residential Recycling Programs.
- Other City department programs' diversion.
- Processors survey data.
- California Redemption Value data.
- Other government agency data.
- C&D and yard trimmings survey data.
- Generator survey source reduction.
- Alternative Daily Cover – reported by survey of Los Angeles and Ventura County landfills.

Although the State allows up to 10% of the total diversion of a municipality through the use of transformation facilities, the City did not count the use of transformation facilities as diversion. The City delivered 81,860 tons of material to the two facilities identified through the Disposal Reporting System. Additional diversion if the City had identified this material for credit would be approximately 1%.

The basic rule for what is considered "solid waste" is described in PRC Section 41781:

41781. (a) Except as provided in Sections 41781.1, and 41781.2, for the purpose of determining the base rate of solid waste from which diversion requirements shall be calculated, "solid waste" includes only the following:

(1) The amount of solid waste generated within a local agency's jurisdiction, the types and quantities of which were disposed of at a permitted disposal facility as of January 1, 1990. Nothing in this section requires local agencies to perform waste characterization in addition to the waste characterization requirements established under Sections 41030, 41031, 41330, 41331, and 41332.

(2) The amount of solid waste diverted from a disposal facility or transformation facility through source reduction, recycling, or composting.

(b) For the purposes of this section, "solid waste" does not include any solid waste, which would not normally be disposed of at a disposal facility.

(c) For the purposes of this chapter, the amount of solid waste from which the required reductions are measured shall be the amount of solid waste existing on January 1, 1990, with future adjustments for increases or decreases in the quantity of waste caused only by changes in population or changes in the number or size of governmental, industrial, or commercial operations in the jurisdiction.

The term "normally disposed" is defined in the Board's regulations. Simply stated, all wastes types/categories that were diverted from a landfill or transformation facility in the base year must have been "normally disposed" (i.e., constituted at least 0.001 percent of disposal) in the jurisdiction's original base year (i.e., January 1, 1990, per PRC Section 41781) for that diversion to "count," **unless other restrictions also apply**.

Several solid waste types have **additional** statutory restrictions or conditions for counting either their diversion, or allowances for their deduction, such as Alternative Daily Cover (ADC). The use of ADC may be considered diversion, as described in PRC Section 41781.3:

*41781.3. (a) The use of solid waste for beneficial reuse in the construction and operation of a solid waste landfill, **including use of alternative daily cover**, which reduces or eliminates the amount of solid waste being disposed pursuant to Section 40124, shall constitute diversion through recycling and shall not be considered disposal for the purposes of this division.*

The City does count ADC use as diversion for the material collected by private hauler, but does not use yard trimmings collected through our curbside programs as ADC as a matter of policy.

Household Hazardous Waste (HHW) does not count toward diversion at any time. AB 939's provisions relate to the diversion of solid waste, and it is specifically stated that solid waste does not include hazardous waste. HHW collection and reuse or proper disposal is summarized in Section 6 of this document, and a revised HHW element will begin the review process in 2001.

Restricted wastes may count towards diversion in the original or a new base year if certain criteria are met. Restricted wastes include the following:

- Inert solids, including inert solids used for structural fill, except inert solids which were disposed of at a permitted disposal facility as of January 1, 1990, which are diverted, and which are recycled or reused for paving materials or other construction-related materials.

- Scrap metals, except scrap metals which were disposed of at a permitted disposal facility as of January 1, 1990, which are diverted, and which are recycled or reused.

- Discarded, white-coated major appliances, except those discarded, white-coated major appliances which were disposed of at a permitted disposal facility as of January 1, 1990, which are diverted, and which are recycled, or refurbished and reused.

- Sludge disposal and diversion can only be counted by the jurisdiction in which the treatment facility is located; sludge diversion or disposal cannot be allocated back to the "contributing" jurisdictions, since it was not a "solid waste" until treated at the treatment facility. Therefore, all biosolids from Hyperion and Terminal Island treatment plant may be potential diversion.

(c) For purposes of determining the base amount of solid waste from which the diversion requirements of this article shall be calculated, "solid waste" does not include the diversion of agricultural wastes; inert solids, including inert solids used for structural fill; discarded, white-coated, major appliances; and scrap metals; unless all of the following criteria are met:

(1) The city, county, or regional agency demonstrates that the material was diverted from a permitted disposal facility ***through an action by the city, county, or regional agency*** *which specifically resulted in the diversion.*

(2) The city, county, or regional agency demonstrates that, ***prior to January 1, 1990, the solid waste which is claimed to have been diverted was disposed of at a permitted disposal facility in the quantity being claimed as diversion****. If historical disposal data is not available, that demonstration may be based upon information available to the city, county, or regional agency which substantiates a reasonable estimate of disposal quantities which is as accurate as is feasible in the absence of historical disposal data. (Note: In other words, the amount of that waste type diverted from the jurisdiction in 1990 was less than or equal to the amount of that waste type disposed by the jurisdiction in any year before 1990. Please note that this criterion is applicable to the waste type as a* ***component of the jurisdiction's entire waste stream****, not as a component of individual programs.)*

(3) The city, county, or regional ***agency is implementing, and will continue to implement, source reduction, recycling, and composting programs****, as described in its source reduction and recycling element.*

Diversion of the four "restricted wastes" shall not count unless the jurisdiction provides documentation to the Board demonstrating how it fulfills the criteria in that section. The City provides documentation of the diversion of any restricted wastes, such as inert material and

scrap metals, that are included in the 2000 diversion rate calculation. For example, the Bureau's collection and reuse of white goods from curbside is a program that was implemented after 1990, and therefore the diversion of 1,483 tons for the year 2000 is valid.

Although the material is beneficially reused, the City did not include biosolids diversion in the 2000 diversion rate calculation. If the City had reported as diversion the 310,550 tons of biosolids recycling in 2000, the additional diversion would be approximately 1.4%.

4.4 MEETING 70% DIVERSION

Now that the City has demonstrated its compliance with AB 939 by both meeting the diversion mandates and by the implementation of many successful diversion programs in both the public and private sector, the next challenge is the City of Los Angeles goal of 70% diversion by 2020. The City will have to continue its leadership and provide opportunities to increase diversion rates with the intent of reducing landfill disposal.

The waste characterization study will provide the basis, with its examination of the disposed wastestream, of designing programs to target either certain materials and/or certain business and public sector programs where the largest impact of new diversion will be accomplished. Although the intent of providing programs in the most cost-effective manner is also a goal of the Bureau, additional costs are expected for a number of these programs. The Bureau will work with the public and private sectors to design programs and continue our successful work in waste diversion and resource conservation.