ATTACHMENT I

POTENTIAL REVISIONS TO CHAPTER 4 (2nd Draft) OF THE LOS ANGELES COUNTY COUNTYWIDE SITING ELEMENT (Redline Version)

October 9, 2008

TO: Members of the Facility and Plan Review Subcommittee
Los Angeles County Solid Waste Management Committee/
Integrated Waste Management Task Force

FROM: Chuk Agu CA
Staff

POTENTIAL REVISIONS TO CHAPTER 4 OF THE LOS ANGELES COUNTY COUNTYWIDE SITING ELEMENT

Attached is the 2nd draft revisions to Chapter 4 (Current Disposal Rate and Assessment of in-County Disposal Capacity Needs) of the Countywide Siting Element, for your review and discussion at the October 16, 2008, Subcommittee meeting.

Please note that the data contained in this draft is based on the Countywide Siting Element 2006 Annual Report. However due to the dynamic nature of solid waste management in Los Angeles County, the information will continue to be updated as new data becomes available. Based on the Subcommittee's input, staff will further fine-tune Chapter 4 revisions, and resubmit to the Subcommittee for review.

Also, due to the extent of the proposed revisions to the Chapter, a Redline (Attachment I), and Clean (Attachment II) version of the draft revisions are provided.

If you have any questions, please contact me at (626) 458-3556, Monday through Thursday, 7 a.m. to 5:30 p.m.

Attach.

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CHAPTER 4
CURRENT DISPOSAL RATE AND ASSESSMENT OF DISPOSAL CAPACITY NEEDS

4.1 PURPOSE

The purpose of this chapter is to quantify the current disposal rate in Los Angeles County and to address the disposal capacity needs of the 88 cities in Los Angeles County and the County unincorporated communities for a planning period of 15 years pursuant to Title 14, Section 18755.3(b), of the California Code of Regulations (CCR). Specific requirements for the content of this chapter are drawn from Title 14, Sections 18755 and 18755.3 of the CCR.

4.2 REQUIREMENTS

The California Code of Regulations, Title 14, section 18755.3 requires the following:

a) Each county and regional agency, with assistance from the local task force, shall include documentation in the countywide siting element providing the following information:

(1) The January 1, 1990, permitted disposal capacity in tons and cubic yards established pursuant to the CCR, Title 14 Section 18777(b).

(2) The existing permitted disposal capacity in tons and cubic yards in the year the Siting Element is prepared; and

(3) The disposal capacity in cubic yards and in tons in any year the Siting Element is revised.

b) The anticipated disposal capacity needs shall be described in tons and cubic yards, on an annual basis and aggregated for a minimum 15-year period, beginning with the year in which the Siting Element is prepared and any year the Siting Element is revised.

c) Area(s) shall be selected where solid waste disposal facilities are envisioned to be expanded or sited and constructed for the purpose of meeting a required minimum of 15 years of combined permitted disposal capacity. Each county shall consider the following in determining the areas where solid

waste disposal facilities are planned to be expanded or sited and constructed:

(1) The total amount of solid waste generated, expressed in tons and cubic yards for volumetric capacity for the required 15-year period.

(2) The existing remainder of combined permitted disposal capacity in tons and cubic yards for the required 15-year period.

(3) An estimation of the total disposal capacity in tons and cubic yards needed to meet a minimum of 15 years of combined permitted disposal capacity.

4.3 DEFINITIONS

Below are the definitions of key terms used in this Chapter. For a more complete listing of definitions and acronyms, please refer to the Glossary of Terms and List of Acronyms at the beginning of this ~~volume~~ document.

4.3.1 Available Out-of-County Disposal Capacity

"Available Out-of-County Disposal Capacity" refers to the amount of solid waste generated in Los Angeles County that can be accepted by the out-of-County ~~c~~Class III landfills that are currently accepting solid waste from Los Angeles County.

4.3.2 CDI Waste Disposal Facility

"CDI Waste Disposal Facility" ~~means~~ is defined in Section 17388, Title 14 of the CCR as a facility at which construction and demolition ~~waste~~ (C & D) waste, C & D waste together with inert debris (Type A or B) or inert debris (Type B only) is disposed.

4.3.3 Class III Landfill Disposal Need

"Class III Landfill Disposal Need" refers to the difference between the total disposal need (excluding ~~i~~Inert ~~w~~Waste landfills) and the available disposal capacity of the transformation facilities, and available out-of-County disposal, and alternative technology facilities.

4.3.4 Conversion Technology

"Conversion technology" refers to a wide array of state-of-the-art technologies

capable of converting post-recycled or residual solid waste into useful products, green fuels, and renewable energy through non-combustion thermal, chemical, or biological processes other than composting.

4.3.5 Disposal Facility

"Disposal Facility" is defined in Section 40121 of the Public Resources Code as "any facility or location where disposal of solid waste occurs."

4.3.6 Export Need "Out-of-County Disposal ~~Capacity~~ Need"

~~4.3.8~~ "Export Need/Out-of-County Disposal ~~Capacity~~ Need" refers to the amount of solid waste generated in ~~or imported into~~ Los Angeles County that needs to be exported out of the ~~c~~County.

4.3.7 In-Place Solid Waste Density "~~Conversion Factor~~Compaction Rate"

"In-Place Solid Waste Density/~~Conversion Factor~~Compaction Rate" refers to the compaction rate, i.e., the density in pounds by per cubic yard of solid waste (excluding cover materials used) deposited in a landfill after it has been compacted. Throughout this CSE, the in-place solid waste density/~~conversion factor~~ compaction rate listed has been provided by the landfill operator. When a site-specific density is not available, an in-place solid waste density/~~conversion factor~~compaction rate of 1,200 pounds per cubic yard is assumed for Class III Landfills, 3,000 pounds per cubic yard for Inert Waste Landfills, and 900 pounds per cubic yard for Material Recovery Facility/Transfer Stations.

4.3.8 Inert Debris Engineered Fill Operation

"Inert Debris Engineered Fill Operation" refers to a disposal activity exceeding one year in duration in which only the following inert debris may be used: fully cured asphalt, uncontaminated concrete (including steel reinforcing rods embedded in the concrete), crushed glass, brick, ceramics, clay and clay products, which may be mixed with rock and soil. These materials are spread on land in lifts and compacted under controlled conditions to achieve a uniform and dense mass which is capable of supporting structural loading, as necessary, or supporting other uses such as recreation, agriculture and open space. (Reference: Title 14 Section 17388 of the CCR).

4.3.9 Inert Waste Landfill

"Inert Waste Landfill" refers to a broad category of landfills, which accept only inert waste for disposal. Inert Waste Landfills include facilities/operations such as inert debris disposal facilities, inert debris engineered fill operations, and inert debris engineered fill activities. The Inert Waste Landfills are grouped into four distinct regulatory tiers, namely, ~~f~~Full ~~s~~Solid ~~w~~Waste ~~f~~Facility ~~p~~Permit tier, ~~r~~Registration, ~~e~~Enforcement ~~a~~Agency ~~n~~Notification, and ~~e~~Excluded ~~o~~Operation tiers. Inert waste includes materials such as soil, concrete, asphalt, and other construction and demolition debris. These landfills must be designed and operated in accordance with all laws and regulations mandated by State, regional, and local jurisdictions. (Reference: Title 14, Section 17387 of the CCR).

4.3.10 Planning Period

The 15-year planning period is defined to begin with the year in which the CSE is prepared or revised. For the purpose of this CSE, "Planning Period" refers to the period beginning in the year ~~2005~~ 2006 and ending in the year ~~2020~~2021.

4.3.11 Permitted Capacity

~~4.3.5~~ "Permitted Capacity" refers to the ~~daily,~~ total ~~or remaining~~ quantity of waste (in tons and/or cubic yards) which a permitted landfill or permitted transformation facility is allowed to receive in accordance with the terms, conditions, and limitations of the facility's current Solid Waste Facility Permit (SWFP), Land/Conditional Use Permit (LUP/CUP), Waste Discharge Requirements (WDR) permit, or the Air Quality Management District Permit to Operate, whichever is less.

4.3.12 Remaining Daily Disposal Capacity Need (Shortfall)

"Disposal Capacity Shortfall" refers to the daily amount of solid waste in need of disposal in excess of the ~~available~~ in-County and available out-of-County disposal capacity.

4.3.13 Solid Waste Disposal Capacity

"Solid Waste Disposal Capacity" refers to the capacity, expressed in either weight in tons (or its volumetric equivalent in cubic yards), which is either currently available at a permitted solid waste landfill, or will be needed for the disposal of solid waste generated within a jurisdiction over a specified period of time.

4.3.14 Transformation Facility

As used herein, "transformation facility" refers to a facility whose principal function is to process solid waste by incineration. Transformation facility does not include composting, gasification, conversion or biomass processing facilities.

4.3.15 Waste-to-Energy Facility

"Waste-to-Energy Facility" refers to a transformation facility, such as the Commerce Refuse to Energy Facility located in the City of Commerce and the Southeast Resource Recovery Facility located in the City of Long Beach, that engages in the cogeneration of electricity through the incineration of ~~residual~~ excess solid waste.

4.4 ~~EXISTING~~ DISPOSAL QUANTITIES AND CAPACITY

4.4.1 Disposal Quantities and Capacity Methodology

4.4.1.1 1990 Disposal Quantities and Capacity Study

In accordance with the requirements of the CCR, Title 14, Section 18777, in March 1991, the Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force (Task Force) completed a study that quantified the amount of solid waste disposed ~~of~~ at landfills and transformation facilities located in Los Angeles County, as well as a projection of remaining permitted combined capacity of these facilities. A summary of the study was submitted to the California Integrated Waste Management Board (CIWMB) in a report dated March 28, 1991. A copy of the Report is provided in **Appendix 4-A**. ~~An overview of the study is provided below and, a copy of the eport is provided in **Appendix 4-A.**~~

4.4.1.2 Integrated Solid Waste Management Information System

Prior to the current Disposal Reporting System (DRS) ~~In the past~~, the Los Angeles County Department of Public Works (Department) had established the Integrated Solid Waste Management Information System (ISWMIS), ~~a process~~ for tracking solid waste disposal quantities at landfills and transformation facilities based on the monthly Solid Waste Management Fee invoices submitted to the Department on a quarterly basis by the facility operators. These invoices were audited periodically and ~~are~~ were compared with the quantities landfill and transformation facility operators report to local enforcement agencies, as well as other regulatory agencies.

Solid waste facility operators submitted routing and diversion information from solid waste facilities each month, resulting in thousands of data entry points on a quarterly basis. The information was manually entered into an internal database and reports were then mailed to the CIWMB and over 300 governmental agencies involved in the solid waste disposal reporting process.

4.4.1.3 Solid Waste Disposal Reporting System

On October 27, 1994, the CIWMB adopted regulations for the current Solid Waste Disposal Reporting System, ~~(DRS)~~ pursuant to Sections 18800 through 18813 of the CCR, as amended, and Section 41821.5 of the PRC. Effective January 1995, the regulations required all solid waste disposal facility operators/owners to provide information on a quarterly basis as to the quantities of waste disposed at their facilities by individual jurisdictions. Based on these regulations formulated by the CIWMB, the DRS provides the jurisdictions in Los Angeles County and the Los Angeles County Department of Public Works with a valuable tool for tracking the amount of solid waste disposed by all jurisdictions utilizing solid waste disposal facilities in the County.

The CIWMB regulations mandated that disposal facility operators, through quarterly surveys, obtain the jurisdictional origin of the waste being disposed at their facilities from haulers. The facility operators ~~are~~were required to submit this information to the County. The County in turn reports the information to each jurisdiction as to the amount of waste disposed at each disposal facility during the quarter.

To assist the local jurisdictions, solid waste haulers and facility operators in their compliance with these regulations, the Task Force drafted uniform Disposal Quantity Reporting Forms and distributed them to all cities, haulers, and facility operators in Los Angeles County for their review and comments.

The data obtained from the DRS served~~s~~ as the basis for all jurisdictions to measure their individual waste disposal reduction goals. This data was also used in the~~is~~ CSE to measure the 2006~~5~~ disposal quantities (see Section 4.4.5~~3.2~~) and project waste generation quantities (see Section 4.5.4) for the ~~2005~~2006-~~2020~~ 2021 planning period.

4.4.1.4 Solid Waste Information Management System

In 2005, Los Angeles County Department of Public Works (Public Works) set out to develop the Los Angeles County Solid Waste Information Management System (SWIMS). SWIMS is a web-based system that would allow governmental agencies,

the public, and private businesses to conveniently access solid waste information online. In addition, the data gathered is also imperative in assisting each city and county to better plan, develop, and monitor waste recycling and diversion programs. Public Works consulted and worked with the California Integrated Waste Management Board (CIWMB) to ensure the system's compatibility with the CIWMB's standards. In August 2006, SWIMS became operational.

SWIMS allows for the uploading, managing, reporting, publicizing, and downloading of solid waste disposal information for the County of Los Angeles via the Internet. On the average, every month, the operators of the current 28 landfills, two waste-to-energy (transformation) facilities, 50 MRF/TS, and 140 waste haulers log on to SWIMS website (www.solidwastedrs.org) to submit the required solid waste disposal information for their facility. After submitting the information, they can generate reports, update figures, and make changes using minimal Public Works staff resources.

Once the solid waste disposal information is submitted, Public Works notifies the respective governmental agencies for verification, and finalizes it for publication to approximately 300 cities and counties and to the CIWMB once the data is verified. All data is managed in one central location electronically. Public Works also answers any questions submitted via e-mail or over the phone and maintains the website with any updates or problems that may occur.

When the solid waste disposal information is publicized, all records can be made available online. Any user, whether Public Works, facility operators, the State, governmental agencies, or the general public, can access solid waste disposal information and download a wide variety of pre-defined or user-defined reports. Access to this information is crucial for solid waste management and planning for all stakeholders in the County.

4.4.2~~1~~ 1990 Disposal Quantities and Capacity

~~In accordance with the requirements of the CCR, Title 14, Section 18777,~~ As previously discussed in Section 4.4.1.1, in March 1991, the Los Angeles County Integrated Waste Management Task Force (Task Force) completed a study that quantified the amount of solid waste disposed of at landfills and transformation facilities located in Los Angeles County, as well as a projection of remaining permitted combined capacity of these facilities. ~~A summary of the study was submitted to the California Integrated Waste Management Board (CIWMB) in a report dated March 28, 1991. A copy of the report is provided in **Appendix 4-A**.~~ An overview of the study is provided below.

4.4.21.1 1990 Disposal Quantities

In 1990, the residents/businesses of Los Angeles County disposed of approximately 15.9 million tons of solid waste at the then-existing landfills and transformation facilities within the County. Of this amount, approximately 13.5 million tons (85 percent) were disposed at 19 permitted Class III landfills; 0.3 million tons (2two percent) were managed by two waste-to-energy facilities (does not include 0.15 million tons of residual ash which was landfilled); and 2.1 million tons (13 percent) were disposed of at the then-unclassified inert waste landfills. A list of the Class III landfill facilities, as well as disposal quantities for each facility as provided in the March 28, 1991, report to the CIWMB, is provided in **Appendix 4-ATable 4-1**. The disposal quantities listed were established based on monthly surveys of solid waste facilities conducted by the Los Angeles County Department of Public Works during the 1990 calendar year, a written survey of each solid waste facility conducted during the month of October 1990, and a telephone survey conducted in January 1991.

The above quantities translated into a 1990 average disposal rate of approximately 51,000 tpd ons per day (six days/week) Countywide; 43,245 tons tpd (85 percent) at Class III landfills; 1,000 tpd (2two percent) at waste-to-energy (transformation) facilities (excluding 500 tons of ash that was landfilled), and 6,755 tpd (13 percent) at permitted inert wWaste landfills.

4.4.21.2 1990 Remaining Permitted Disposal Capacity

The remaining permitted disposal capacity for Class III landfills as of December 31, 1990, was also established by the Task Force at approximately 99 million tons (156 million cubic yards based on in-place solid waste density/compaction rate provided by landfill operators). The analysis was based on various data collected by the Los Angeles County Department of Public Works from facility operators and site specific permit criteria established by local land use agencies, local enforcement agencies, California Regional Water Quality Control Boards and the California Integrated Waste Management Board (CIWMB). A summary of the data collected and various permit limitations are also shown on **Table 4-1**.

The remaining permitted combined disposal capacity of Class III landfills as of January 1, 1990, can bewas established at approximately 112.15 million tons (1778 million cubic yards), which is was the sum of the remaining permitted capacity

as of December 31, 1990, and the total quantities disposed during the 1990 calendar year.

4.4.3~~2~~ 1990-200~~6~~5~~5~~ Disposal Trends

~~In the past, the Los Angeles County Department of Public Works established a process for tracking solid waste disposal quantities at landfills and transformation facilities based on the monthly Solid Waste Management Fee invoices submitted to the Department on a quarterly basis by the facility operators. These invoices were audited periodically and are compared with the quantities landfill and transformation facility operators report to local enforcement agencies, as well as other regulatory agencies. Today, this data is collected and reported through the Los Angeles County Solid Waste Information Management System (SWIMS) interactive web-based application.~~

~~Starting in 1995, Section 41821.5 of the PRC, provided jurisdictions an additional tool to track waste quantities through the establishment of the Disposal Reporting System (see Section 4.4.3.1). Under the Disposal Reporting System (DRS), all permitted solid waste facility operators and haulers are required to report quarterly to their respective county or regional agency the amount of waste disposed by each jurisdiction utilizing their facilities.~~

1990-1995 Disposal Trends

Based on the disposal information from the Integrated Solid Waste Management Information System, ~~these two tracking systems,~~a net downward trend in the quantities of solid waste disposed was observed during the period 1990 through 1995, at permitted Class III landfills within the County, with no reduction in quantities of solid waste managed at the two transformation facilities. The reported disposal quantities during this period ~~from 1990 to 2005~~ are summarized on a yearly basis in **Tables 4-2** (in tons) and **4-3** (in cubic yards). While aggressive waste diversion programs being implemented by jurisdictions throughout the County contributed in substantial measure to the drop in disposal quantities during the period of 1990 to 1995, much of this reduction occurred as a result of the recession experienced in the region between 1990 and 1995.

Another trend that developed during this period was a~~n~~ net upward trend ~~increase~~ in the amount of municipal solid waste imported from other counties such as Orange, Riverside, San Bernardino, San Diego, and Ventura Counties for disposal at Los Angeles County disposal facilities. During the 1995 calendar year, approximately 774,000 tons of solid waste were disposed at in-County facilities,

which originated from neighboring counties. This trend was attributed to steep increases in disposal costs experienced in those counties and/or the difficulties in permitting new disposal capacity.

1996-2006 Disposal Trends

Based on the disposal information from DRS and SWIMS, a cyclical but net downward trend in the quantities of solid waste disposed was observed ~~during the~~during the period 1996 through 2005, at permitted Class III landfills within the County and no reduction in quantities of solid waste managed at the two transformation facilities. The reported disposal quantities from the years 1996 (11,854,479 tpd) to 2005 (12,286,394 tpd) are summarized on a yearly basis in **Tables 4-2** (in tons) and **4-3** (in cubic yards).

Another trend that developed during this period was a cyclical but net upward trend in the amount of municipal solid waste exported to other counties. Based on available data, in 1992, 22,000 tons (71 tpd) was exported out of Los Angeles County and by the year 2005, approximately 2,177,097 tons (6,978 tpd) of solid waste were exported to out-of-County facilities. Based on the DRS reports, from 2000 to 2005, on the average approximately 80 percent of the residual solid waste generated in Los Angeles County (i.e., the amount destined for disposal after waste diversion) was disposed in landfills located in Los Angeles County. The remaining 20 percent (about 7,000 tpd) were exported for disposal at out-of-County Class III landfills. The majority of the 20 percent average waste export was to surrounding counties. For example, Orange, Riverside, and Ventura Counties respectively received eight, eight and two percent of the 20 percent waste exports. The remaining two percent of the exports were sent to landfills in Alameda, Fresno, Kern, King, San Bernardino, San Diego, Solano, and Stanislaus counties.

4.4.43 ~~2005~~ 2006 Disposal Quantities and Capacity

~~4.4.3.1 Disposal Reporting System~~

~~On October 27, 1994, the CIWMB adopted regulations for the Disposal Reporting System (DRS) pursuant to Sections 18800 through 18813 of the CCR, as amended, and Section 41821.5 of the PRC. Effective January 1995, the regulations required all solid waste disposal facility operators/owners to provide information on a quarterly basis as to the quantities of waste disposed at their facilities by individual jurisdictions. Based on these regulations formulated by the CIWMB, the DRS provides the jurisdictions in Los Angeles County and the Los Angeles County~~

~~Department of Public Works with a valuable tool for tracking the amount of solid waste disposed by all jurisdictions utilizing disposal facilities in the County.~~

~~The CIWMB regulations mandate that disposal facility operators, through quarterly surveys, obtain the jurisdictional origin of the waste being disposed at their facilities from haulers. The facility operators are required to submit this information to the County. The County in turn reports the information to each jurisdiction as to the amount of waste disposed at each disposal facility during the quarter.~~

~~To assist the local jurisdictions, solid waste haulers and facility operators in their compliance with these regulations, the Task Force drafted uniform Disposal Quantity Reporting Forms and distributed them to all cities, haulers, and facility operators in Los Angeles County for their review and comments.~~

~~The data obtained from the DRS serves as the basis for all jurisdictions to measure their individual waste disposal reduction goals. This data was also used in his CSE to measure the 2005 disposal quantities (see Section 4.4.3.2) and project waste generation quantities (see Section 4.5.4) for the 2005-2020 planning period~~

4.4.4~~3~~.1~~2~~ ~~2005~~ 2006 Disposal Quantities

The 2006~~5~~ disposal quantities are based on DRS data for the period of January 1 through December 31, ~~2005~~2006. In ~~2005~~2006, the residents and businesses in Los Angeles County disposed of approximately ~~12.37~~ 11.9 million tons of solid waste at existing permitted land disposal and transformation facilities located in and out of ~~the~~ County. The disposed quantity distribution among the various types of disposal facilities was as follows:

- In-County Class III Landfills
  - ~~9~~Eight major landfills ~~9,437,101~~9,457,175 tons
  - ~~4~~Four minor landfills[1] ~~136,971~~126,051 tons
    ~~(excluding Brand Park Landfill since it only accepts inert waste)~~
- Transformation facilities ~~535,225~~ 537,733 tons
- Exports to out-of-County Class III landfills ~~2,177,097~~1,782,609 tons

[1]This excludes Brand Park landfill (a minor Class III landfill) because Brand Park currently only accepts inert waste landfill.

- Permitted Inert Waste landfills[18] ~~85,678~~ 101,748 tons

- **Total amount disposed** ~~12,372,072~~**12,005,316 tons**

The above disposal quantities for solid waste generated in Los Angeles County translate into a ~~2005~~ 2006 average disposal rate of approximately ~~32,612~~38,152 tpd (six days/week) Countywide; ~~30,686~~(i.e., 30,715 tpd at Class III landfills; ~~1,715~~1,724 tpd at waste-to-energy facilities; ~~275~~ 326 tpd at permitted Inert Waste landfills~~,~~; and ~~6,978~~5,713 tpd exported to out-of-County Class III landfills). **Table 4-~~10~~9** lists existing permitted landfills, and transformation facilities and the quantities of solid waste disposed of originating in Los Angeles County. In addition, approximately ~~756~~ 854 tpd ~~tons per day~~ (six days/week) were imported to Los Angeles County for disposal at Class III landfills, permitted Inert Waste landfills, and transformation facilities. Please note that the quantities listed in **Tables 4-2** and **4-~~10~~9** may differ slightly from the above quantities due to the rounding of numbers.

4.4.~~3~~2 Remaining Permitted Disposal Capacity as of December 31, ~~2005~~2006

As part of the preparation for the revised CSE, a new ~~survey~~ study was conducted by the Los Angeles County Department of Public Works to determine~~,~~ (among other things)~~,~~ the remaining combined permitted disposal capacity, as of December 31, ~~2005~~2006. The study consisted of a written survey of all permitted solid waste disposal facilities in Los Angeles County, as well as review of site specific permit criteria established by local land use agencies, local enforcement agencies, California Regional Water Quality Control Boards and the South Coast Air Quality Management District. A summary of the data collected and existing permit limitations are provided in Chapter 3, ~~are also~~and shown in **Tables 4-~~7~~ 4 and 4-~~10~~9**.

Based on the data provided in **Table 4-~~10~~9**, as of December 31, ~~2005~~2006, the remaining permitted combined disposal capacity for Class III landfills and transformation facilities located in Los Angeles County are estimated as follows:

- Remaining permitted Class III landfill capacity – ~~102.42~~87.83 million tons (approximately 143.33~~168.4~~ million cubic yards).

- The remaining permitted Inert Waste landfill capacity – 47.02 million tons (51.43 million cubic yards).

- The ~~remaining~~ permitted average daily transformation facility capacity – 2,069.09 tons per day.

The above permitted average daily transformation facility capacity is a 6-day/week average based on the Solid Waste Facility Permit limits of 2,800 tons per week for the Commerce Refuse-to-Energy Facility (CREF) and an EPA limit of 500,000 tons per year for the Southeast Resource Recovery Facility (SERRF). It should also be noted that all ash residuals generated by CREF Commerce Refuse-to-Energy and 4.9 percent of the ash residual generated by SERF Southeast Recovery facility are currently being diverted for beneficial use.

4.5 DISPOSAL NEED PROJECTIONS FOR THE PLANNING PERIOD (2005 2006 2020 2021)

Section 18755.3 (b) of Title 14 of the CCR requires a description of the anticipated disposal capacity needs for the 15-year planning period beginning with the year the CSE is prepared, and any year the Siting Element is revised.

4.5.1 Base Year Waste Generation and Disposal

The DRS data and the monthly solid waste disposal data submitted by the disposal facility operators on-line to the Los Angeles County Department of Public Works through the SWIMS database website provide accurate, up-to-date information on the total quantities of solid waste disposed of at Los Angeles County facilities and on the quantities exported for disposal at out-of-County sites. Thus, the year for which the most current and complete data is available, (i.e., 20052006), was selected as the base year to be used in projecting waste quantities. The 2005 2006 disposal quantities are based on DRS and the SWIMS database for from January 1, 20052006, through December 31, 20052006.

In 2005 2006 the approximate total disposal quantity distribution (of solid waste originating within the County) among the various types of disposal facilities were as follows:

In-County Class III landfills	9,574,0729,583,227	tons
In-County Transformation facilities	535,225537,733	tons
In-County Permitted Inert Waste landfills	2,177,0971,782,609	tons
Exports to out-of-County Class III landfills	85,678101,748	tons
Total Disposed	12,372,072**12,005,317**	tons

In summary, jurisdictions within Los Angeles County disposed of approximately 12,286,39411,903,569 tons of solid waste at Class III landfills and transformation facilities located in and out of the County (excluding inert waste disposed at permitted Inert Waste landfills). **Table 4-5** shows the 2005 2006 disposal quantities

for solid waste disposed at Class III in-County landfills and in-County transformation facilities. Out-of-County exports to Class III landfills are also taken into consideration. The ~~2005~~ 2006 Solid Waste Generation of ~~24,572,788~~23,807,137 tons (the basis of the solid waste generation projections) was calculated assuming a diversion rate of 50 percent. This estimate of waste generation excludes disposal at the ~~non-permitted~~ Inert Waste landfills~~.~~ that do not have Full or Registration tier Solid Waste Facility permit.

The above disposal quantities for solid waste generated in the County translate into a ~~2005~~ 2006 average disposal rate of approximately ~~39,380~~38,152 tpd (six days per week) Countywide (i.e., ~~30,686~~30,715 tpd at Class III landfills ~~1,715~~1,724 tpd at transformation facilities, and ~~6,978~~5,713 tpd exported to out-of-County Class III landfills). The disposal quantities at permitted Inert Waste landfills, translates to approximately ~~275~~326 tpd. **Table 4-9~~10~~** lists existing permitted landfills and transformation facilities and the quantities of solid waste disposed that originated from within Los Angeles County.

In addition, approximately ~~756~~ 854 tpd (six days per week) were imported for disposal at in-County Class III landfills, permitted Inert Waste landfills, and transformation facilities.

In order to determine the ~~2005~~ 2006 solid waste generation quantities, a diversion rate must be either quantified or assumed. Since there is currently no accurate method of measuring waste diversion, the total diversion amount was assumed as a percentage of total waste generated.

In ~~2004~~2005, the CIWMB approved ~~formal~~ diversion rate for the entire Los Angeles County was ~~over~~ 50 percent.~~, and the diversion rate for Los Angeles County unincorporated area was 53 percent.~~ The unofficial Countywide diversion rate for ~~2005~~ 2006 is estimated at about ~~52~~ 54.7 percent[2]. Therefore, for ~~2005~~2006, the State-mandated diversion rate of 50 percent is assumed to have been met. The projection for ~~2005~~ 2006 waste generation is shown in **Table 4-~~5~~ 5.** For the purposes of the disposal capacity need analysis in this Chapter, the diversion rate for 2006 (49 percent and 2007 (48 percent) was adjusted to maintain consistency with the generation rate of 23,807,137 presented in **Table 4-5** (although the actual diversion rate was over 50 percent). Also, the diversion rate is conservatively assumed as ~~to remain at least at~~ 50 percent from 2008 to 2021~~during the planning period~~, unless where noted otherwise.

[2] Diversion rate is based on preliminary information from CIWMB. It uses the default diversion rate for all jurisdictions plus the Taxable Sales deflator index value. The rate does not include transformation credit, or disposal modifications requested by jurisdictions.

4.5.2 Waste Generation Projection Methodology

A number of alternatives were considered for use in projecting countywide waste generation for the ~~2005~~ 2006 - ~~2020~~ 2021 planning period. These include use of the waste generation growth factors from each jurisdiction's SRRE, an adaptation of the CIWMB's Adjustment Methodology, and waste generation growth rates based on population growth projections.

The use of growth factors from each jurisdiction's SRRE were not selected because of the complexity involved in projecting waste generation for 89 individual jurisdictions. In many instances, the jurisdiction's projections were based on jurisdiction-specific population and economic growth projections which are either difficult to emulate or which may now be outdated.

Other methodologies, such as the projection of per capita waste generation in conjunction with population trends, were not used because of their failure to take into consideration the impact that changes in economic conditions has on waste generation. As discussed later in this Section, nearly three fifths of all solid waste generated in Los Angeles County can be attributed to economic activity (i.e., about 58 percent of all waste generated in the County was generated by commercial/industrial sources). Major changes in economic activity would have a significant impact on waste generation; however, population-based methods do not take into account this important factor. For example, linearly projecting the per capita waste generation data for 1990 through 1994 (a recessionary period) and using the projected per capita waste generation figures to project total waste generation, incorrectly assumes that the recession of the early 1990s would continue into the future without any economic recovery.

The use of growth rates based on population growth projections was considered ~~for use~~ since population projections are available from the State Department of Finance through the year 2010. However, projections based on population growth would not be able to account for economic downturns or a resumption of strong economic growth, which may have a significant effect on solid waste generation. Therefore, this alternative was not selected.

The projection methodology selected for use in the CSE consists of projecting solid waste generation using the CIWMB's Adjustment Methodology, which is described below.

4.5.2.1 Description of the Adjustment Methodology

Public Resources Code Section 41780.1(c), mandates that before measuring compliance with the solid waste diversion goals of 25 and 50 percent for the years 1995 and 2000, respectively, each jurisdiction must use a California Integrated Waste Management Board-approved standard adjustment methodology when calculating their maximum allowable disposal quantity for the year.

The CIWMB-approved Adjustment Methodology measures how increases or decreases in population, employment, inflation-adjustable taxes sales and special events (such as natural disasters) affect waste generation amounts. The Adjustment Methodology provides jurisdictions with a valuable tool for more accurately measuring their progress in reducing solid waste disposal, as well as for estimating future disposal quantities.

The adjustment formula uses a combination of ratios of base year to target year population, employment, and taxable sales to calculate target year solid waste generation, and maximum allowable disposal amounts based on established diversion goals. Since population, employment, and taxable sales influence residential waste generation rate differently than waste generated by non-residential sectors (i.e., commercial, industrial, etc.), the formula also provides correction factors to address these variances. As such, residential waste quantities are calculated separately from non-residential solid waste and then combined.

The adjustment formula as adopted by the CIWMB is expressed as follows:

Estimated Solid Waste Generation for the Reporting Year □

□ **[(B-Y RWG) (RAF)]** □ **[(B-Y NWG) (NAF)]**

Where:

B-Y RWG □ Base-Year Residential Waste Generation
B-Y NWG □ Base-Year Non-residential Waste Generation
RAF □ Residential Adjustment Factor □ {(PR/PB) □ [ER/EB□(CB/CR□TR/TB)]/2}/2
NAF □ Non-residential Adjustment Factor □ [ER/EB□(CB/CR□TR/TB)]/2
PR □ Population in the Reporting Year
PB □ Population in the Base Year
ER □ Employment in the Reporting Year
EB □ Employment in the Base Year
CR □ Consumer Price Sales in the Reporting Year
CB □ Consumer Price Index in the Base Year

TR = Taxable Sales in the Reporting Year
TB = Taxable Sales in the Base Year

Also note:

- Population is based on Countywide Population Projection (UCLA, Long Term Forecast of Los Angeles County, June ~~2006~~2007);~~.~~

- Employment is based on Countywide Employment Projection (UCLA, Long Term Forecast of Los Angeles County, June ~~2006~~2007;~~.~~ Employment data from UCLA only accounts for non-farm employment

- Taxable Sales is based on Countywide Taxable Sales (Source of Information is UCLA, Long Term Forecast of Los Angeles County, June ~~2006~~2007). Taxable Sales data from UCLA considers the real dollar value.

It can be seen that the adjustment formula predicts that increases/decreases in employment and taxable sales would have an impact on non-residential waste generation, and to a lesser extent, residential waste generation. Also, it can be seen that increases in population would have a direct impact on residential waste generation only. This does not mean however, that changes in population would have no effect on non-residential waste generation, since employment and taxable sales are intrinsically related to population.

It should be noted that when jurisdiction-specific data is not available, or when state-supplied data is not considered to be truly representative of a jurisdiction's situation, the method allows the jurisdiction to develop and use locally-developed alternative data or the use of countywide or other data, which the jurisdiction deems representative of its situation.

~~The Adjustment Methodology was field-tested in spring 1994 by 47 jurisdictions in the State. Based on the test results and independent scientific review, the accuracy of the method is considered to be generally very good.~~

4.5.3 Waste Generation Projection Factors

Projections of solid waste generation for the 15-year planning period were calculated using the Adjustment Methodology developed by the CIWMB. The Methodology was adopted for projecting waste generation by utilizing projections of future population, employment, and taxable sales. The graph in **Figure 4-1** shows the resulting projections for population, employment, and taxable sales.
It also requires knowledge of the distribution of waste generation by sector (residential and non-residential). The use of this methodology to project waste generation requires projections of the above factors through the year ~~2020~~2021. The following discusses in more detail the best available data, and how it was applied using the CIWMB ~~-~~Adjustment Methodology.

4.5.3.1 Distribution of Waste Generation by Sector

No data is available on the distribution of waste generation by sector for ~~2005~~2006 and future years. However, the data provided in each jurisdiction's SRRE for the base year (1990) was used to determine the 1990 countywide waste generation distribution by sector. The distribution is as follows:

- 1990 Residential Waste Generation – 42 percent[3] of total waste generation
- 1990 Non-Residential Waste Generation – 58 percent[4] of total waste generation

The 1990 distribution by sector was used to approximate the distribution for the years ~~2005~~ 2006 through ~~2020~~2021.

4.5.3.2 Population Projections

The population projections for the County are available from the State Department of Transportation and University of California, Los Angeles (UCLA) for each year during the planning period. The UCLA Long-Term Forecast, which indicates an approximate increase in population of 7.4 percent towards the end of the 15-year planning period, was used to yield slightly more conservative projections. The graph in **Figure 4-1** shows the resulting projections for population, employment, and taxable sales.

[3] The percentage of residential versus non-residential waste to the total waste generation is the same percentage used in the 2006 CSE Annual Report; however, all data and percentages are subject to change as new information becomes available.
[4] See footnote 3.

4.5.3.3 Employment

The employment projections are available from the State Department of Transportation and UCLA for each year during the planning period. However, the UCLA projections and the State Department of Transportation projections are nearly identical, with UCLA projecting an employment increase of approximately 8.4 percent by the end of the 15-year planning period. UCLA projections were used because the data has been more recently updated than the data from the State Department of Transportation. The graph in **Figure 4-1** shows the resulting projections for population, employment, and taxable sales.

4.5.3.4 Taxable Sales

Countywide taxable sales projections are available from the UCLA Long-Term Forecast for the County, for each year during the planning period. The figures were available in constant dollars and do not need to be further adjusted for inflation. The graph in **Figure 4-1** shows the resulting projections for population, employment, and taxable sales.

4.5.4 ~~2005-2020~~ Waste Generation Projections for the Planning Period (2006-2021)

The resulting projections in waste generation, diversion, and disposal for each year of the 15-year planning period are shown in **Table 4-6 ~~and 4-7~~.** This table also shows the needed Class III landfill disposal capacity for each year of the planning period assuming no additional transformation capacity will be developed. The analysis assumes that the County will be responsible for management of solid waste generated in the County. As such, the analysis does not take credit for that portion of solid waste that is exported out-of-County and neither does it consider any capacity for imported solid waste to the County.

4.6 REMAINING PERMITTED IN-COUNTY DISPOSAL CAPACITY AS OF DECEMBER 31, 2006~~5~~

4.6.1 Inert Waste Landfills

As of December 31, 2006, ~~T~~there were ~~are~~ 12 ~~i~~inert ~~W~~waste ~~L~~landfills in Los Angeles County (**See Table 4-4**)[5]**.** The total inert waste (including imports)

[5] Brand Park Landfill is currently permitted as a minor ~~c~~Class III landfill with full ~~s~~Solid ~~w~~Waste ~~f~~Facility ~~p~~Permit. However, Brand Park Landfill is ~~currently~~now only accepting inert waste. Therefore, for the purposes of this Chapter, Brand Park Landfill is listed under the Permitted Inert Waste Landfill section of Table 4 -~~1~~10 (Remaining Permitted Combined Disposal Capacity of Existing Solid Waste Disposal Facilities in Los Angeles County) but is not included in ~~the List of Inert Waste Landfills (~~Table 4-4~~).~~ (Disposal Capacity of Inert Waste Landfills located in Los Angeles County.

disposed in the ~~Los Angeles County~~ Inert Waste landfills in ~~2005~~ 2006 is ~~5.86~~4.76 million tons. ~~The current classification of inert waste landfills is primarily governed by the State's Construction and Demolition Waste and Inert Debris Disposal Regulatory Requirements (C&D Regulations), Title 14 of CCR, Sections 17387-17390. These regulations have placed inert waste landfills into four regulatory tiers, namely, full solid waste facility permit, registration permit, enforcement agency notification, and excluded operations. However, p~~Pursuant to the Construction and Demolition Waste and Inert Debris Disposal Phase II Tiered Regulation[6], ~~these regulations,~~ only Inert Waste landfills falling under the ~~f~~Full ~~solid waste facility permit~~ and ~~r~~Registration permit tiers (of the Solid Waste Facility permit tier) are considered "permitted" disposal facilities.

~~4.6.1.1 Permitted Inert Waste Landfills~~

~~The permitted inert waste landfills are those that fall under the Full Solid Waste Facility Permit Tier. There are only two 2 permitted inert waste landfills in Los Angeles County, namely, the Azusa Land Reclamation and Peck Road Gravel Pit.~~ Azusa Land Reclamation and Peck Road Gravel Pit are the only two permitted Inert Waste landfills in Los Angeles County that fall under the Full or Registration tiers. The ~~remaining~~ combined remaining disposal capacity for the permitted ~~i~~Inert ~~w~~Waste landfills (excluding Brand Park Landfill) is estimated at 46.33 million tons (51.09 million cubic yards) as shown in ~~(see~~ **Table 4-4**~~)~~. Including the capacity of Brand Park Landfill, the total remaining permitted disposal capacity for all the permitted Inert Waste landfills is estimated at 47.02 million tons (51.44 million cubic yards). At the 2006 average rate of disposal of 540 tpd (0.17 million tons per year), this total permitted Inert Waste landfill capacity would be exhausted in 279 years. Accordingly, the County has adequate permitted inert waste landfill capacity at this time.

~~The total remaining permitted disposal capacity for inert waste landfill (including Brand Park Landfill) is estimated at 47.02 million tons (51.43 million cubic yards) **(see Table 4-10).** At the 2005 average rate of disposal of 478 tpd (0.169 million tons per year), and this capacity would be exhausted in 278 years. Accordingly, the County currently has adequate permitted inert waste landfill capacity.~~

~~4.6.1.2 Inert Debris Engineered Fill Operations~~

~~Inert Debris Engineered Fill operations (IDEFO) are inert waste landfills under the~~

[6] The current classification of inert waste landfills is primarily governed by the State's Construction and Demolition Waste and Inert Debris Disposal Phase II Tiered Regulation (Title 14 of CCR, Sections 17387-17390). These regulations placed inert waste landfills into four regulatory tiers, namely, Full Solid Waste Facility Permit, Registration tier permit, Enforcement Agency Notification, and Excluded Operations.

~~Enforcement Agency (EA) Notification Tier, and are excluded from the disposal capacity analysis as a result of changes in the State law.~~ In addition, ~~T~~there are seven Inert Debris Engineered Fill Operations(IDEFO)[7] in Los Angeles County, namely: Chandler's Palos Verdes Sand and Gravel, Hanson Aggregates (Livingston-Graham), Lower Azusa Reclamation Project, Nu-Way Arrow Reclamation, Nu-Way Live Oak Reclamation, Reliance Pit 2 (CalMat/~~—~~Vulcan) and Sun Valley (CalMat/Vulcan). These operations handled approximately 4.17~~5.32~~ million tons of inert waste in the County in 2006 ~~2005~~ (**see Table 4-4**).

~~4.6.1.3 Non-Permitted Inert Waste Landfills~~

~~Non-permitted inert waste landfills are those inert waste landfills that are still undergoing reclassification under the Construction and Demolition Debris Phase II Regulation. These inert waste landfills also do not have solid waste facility permit, and are therefore, excluded from the disposal capacity analysis as a result of changes in the State law.~~ Furthermore, ~~T~~there are also three inert waste landfills in Los Angeles County which are not placed in any C D Phase II regulatory tier (and are currently undergoing reclassification), namely, Atkinson Brick Company, Montebello Land and Water Company and Strathern Landfill. In ~~2005~~2006, these operations handled approximately ~~453,000~~420,000 tons of inert material in the County (**See Table 4-4**).

4.6.2 Transformation Facilities

Currently, ~~Presently,~~ two transformation facilities operate in the County (Commerce Refuse-to-Energy Facility (CREF) and Southeast Resources Recovery Facility (SERRF)) ~~with~~ and has a combined maximum permitted daily capacity of 3,240 tons (six days/week average, based on a maximum permitted annual capacity). ~~operate in the County.~~ It is expected that these two facilities will operate at their current permitted daily capacity during the planning period of ~~2005~~ 2006 through ~~2020~~2021. The owners/operators of these facilities have indicated that ~~currently~~ there are currently no plans for increasing the permitted daily capacity of these facilities.

~~Accordingly~~The disposal capacity need analysis (see **Section 4.10**) ~~discussed below~~ assumes ~~that~~ the average permitted daily capacity of 2,069[8] tpd as the estimated permitted remaining capacity for the two existing transformation facilities ~~will provide~~instead of 3,240 tpd, six days per week (i.e., their combined maximum permitted daily capacity, equivalent to approximately 1,075,360 ~~645,600~~ tons per year), ~~of transformation capacity~~ towards satisfying the daily disposal needs of the

[7] Inert Debris Engineered Fill Operations are inert waste landfills under the Enforcement Agency (EA) Notification Tier, and are excluded from the disposal capacity analysis as a result of changes in State law.

[8] Based on the SWFP limit of 2,800 tons per week (expressed as a daily average, six days/week) for the CREF, and an EPA limit of 500,000 tons per year (expressed as a daily average, six days/week) for SERRF.

jurisdictions in the County through the 15-year planning period. The remaining daily disposal needs must be handled by the in-County Class III landfills, out-of-County landfills, and by utilizing ~~using~~ other strategies.

4.6.3 Conversion Technology Facilities

Currently, there are no conversion technology (CT) facilities in Los Angeles County. However, in order to encourage their development, the County is working with the Alternative Technology Advisory Subcommittee (ATAS) of the Task Force to investigate and promote conversion technologies, including actively pursuing the development of one or more demonstration facilities in Southern California. As part of their investigation, the County and ATAS have conducted a series of studies to evaluate conversion technologies. ~~with the ultimate goal of developing a conversion technology demonstration facility in Southern California~~. The studies resulted in the development of the Los Angeles County Conversion Technology Evaluation ~~(CTE)~~ Report, (Phase I), adopted by the Task Force on August 18, 2005.

On October 18, 2007, the Los Angeles County Integrated Waste Management Task Force adopted the ~~Phase II~~ Conversion Technology Evaluation Report, Phase II - Assessment, which identifies four viable conversion technology suppliers and four suitable locations for potential development of a demonstration project. ~~These technologies and locations will now be participating in a County-sponsored competition to select the optimum pairing, and leverage maximum private sector financing and development.~~ This project will be a public-private partnership between the technology supplier, MRF owner/operator, and the County. A Request for Offers was released to the ~~shortlisted~~short listed companies in January 2008, and offers were received in August 2008. The offers would be evaluated for ultimate recommendation to the Board of Supervisors.

Concurrently, the City of Los Angeles is also conducting its own ~~conversion technology studies~~ evaluation with the goal of developing conversion or other alternative technology facilities to manage the City's waste stream. ~~by the year 2025~~. The City's effort is highlighted by the adoption of the RENEW LA Resource Management Blueprint for the City of Los Angeles, which promotes ~~conversion~~ alternative technologies.

These efforts demonstrate the promise and likely development of CT facilities in Los Angeles County and the Southern California region in the coming years. As such, the CSE's disposal capacity analysis (see **Table 4-21**) assumes that up to 10,000 tpd ~~(see **Table 4-21**)~~ of solid waste could be managed through conversion

technologies by the end of the 15-year planning period. However, it should be noted that at this time, the regulatory status of CT is still uncertain due to lack of legislative clarification on which conversion technologies should be categorized as solid waste disposal facilities, and therefore need to be included and listed in a CSE. Nevertheless, the way CT and alternative technology facility capacity is incorporated in the disposal capacity need analysis (see **Tables 4-11 to 4-16)** ensures that whether CT is ultimately considered as a disposal and/or non-disposal facility will not affect the result of the disposal capacity need analysis or the remaining daily disposal capacity need (shortfall).

A detailed discussion of conversion technologies is included in Chapter 5 (Alternative Disposal Technologies) and Chapter 7 (Proposed In-County Facility Locations and Descriptions) of this CSE.

4.6.4 Biomass Processing Facilities

There are no existing or proposed new biomass facilities in Los Angeles County.

4.6.5 Class III Landfills

As a part of the preparation of this CSE and the ~~2005~~ 2006 Los Angeles County Countywide Integrated Waste Management Plan Annual Report (Annual Report), the Los Angeles County Department of Public Works conducted a survey of landfills in the County to update its estimate of remaining combined permitted disposal capacity. Based on the results of the survey and considering permit restrictions and other factors, the remaining permitted Class III landfill capacity in the County as of December 31, ~~2005~~2006, is estimated at ~~102~~ 88 million tons (~~168~~ 143 million cubic yards) **(see Table 4-9~~10~~).** As shown in **Table 4-7**, the cumulative permitted Class III landfill disposal capacity needs (approximately ~~110.5~~96.7 million tons) will exceed this existing remaining permitted Class III landfill capacity (~~102~~ 88 million tons) by the year 2014.

However, as discussed below, this simple comparison does not accurately predict when a shortfall in daily permitted disposal capacity may be experienced. Rather, one must compare the maximum permitted daily capacity available with the County's daily disposal needs, with full consideration of the facilities constraints~~,~~ to determine when the shortfall in permitted daily capacity will occur.

~~As indicated in Section 4.4, the remaining permitted Class III landfill capacity in this County as of December 31, 2005, was estimated at 102.42 million tons (168.42 million cubic yards) (see **Table 4-10**). As shown in Table 4-7, the cumulative~~

~~permitted Class III landfill disposal capacity needs of 110.4 million tons will exceed the existing remaining permitted Class III landfill capacity by the year 20014. However, as indicated above, this simple comparison does not accurately predict when a shortfall in daily permitted disposal capacity will be experienced. Rather, one must look at the maximum permitted daily capacity available and compare it with the County's daily disposal requirements, with full consideration of the facilities' constraints, to determine when the shortfall in permitted daily capacity and permitted landfill capacity will occur.~~

Additionally, waste generation and disposal quantities must be adjusted to account for waste imported from adjacent counties, waste exports to out-of-County facilities, and waste generated as a result of natural disasters together with the time necessary to develop additional permitted daily capacity and permitted landfill capacity in order to be able to project as to when a disposal capacity ~~shortfall~~ need may occur.

4.7 OUT-OF-COUNTY DISPOSAL

4.7.1 Introduction

While the goal of jurisdictions in Los Angeles County is to provide in-County disposal capacity to serve the needs of their residents, past and current experience in ~~siting new landfills and/or~~ expansions of existing landfills underscores the magnitude of the challenge facing Los Angeles County. Since no new Class III landfills are expected to be sited in the County in the foreseeable future, ~~Delays associated with the environmental review process and litigation (which has become an inevitable component of the planning process) have increased the time required to permit a landfill expansion, in excess of seven years, and more than ten years to permit a new landfill. Thus,~~ and since more than ten years advance planning is required to maintain appropriate disposal capacity in the County~~, as well as maximizing~~ all available disposal options need to be maximized in the event that planned capacity does not materialize.

One of these options is the disposal of County-generated waste at out-of-County facilities through rail and/or truck transport. Jurisdictions throughout Los Angeles County have recognized the need for out-of-County disposal capacity to complement ~~supplement~~ and extend the life of in-County disposal capacity~~. In fact, out-of-County disposal will be necessary to supplement Los Angeles County's disposal capacity~~ in the present as well as in the future, even if most of the potential disposal capacity identified in the CSE is permitted.

4.7.2 Available Out-of-County Disposal Capacity

In 2005, approximately 2,177,097 tons (6,978 tpd) of solid waste were exported to out-of-County facilities. Based on the DRS reports from 2000 to ~~2005~~2005, on the average, approximately 80 percent of the residual solid waste generated in Los Angeles County (that is destined for disposal) ~~are~~ was disposed ~~in landfills located~~ in Los Angeles County. The remaining 20 percent (about 7,000 tpd) were ~~are~~ exported for disposal at out-of-County ~~c~~Class III landfills. The majority of the 20 percent average waste export ~~are~~ was to surrounding counties. For example, Orange, Riverside and Ventura Counties respectively received eight, eight and two percent of the 20 percent waste exports. The remaining two percent of the exports ~~are~~were sent to landfills in Alameda, Fresno, Kern, King, ~~Kern, King,~~ San Bernardino, San Diego, Solano, and Stanislaus counties combined.

A list of the ~~-~~out-of-County landfills (in the respective counties) currently receiving waste exported from Los Angeles County are shown in **Table 4-~~21~~19**. Additionally, a list of all the out-of-County landfills (both in-~~s~~State Class III landfills and out-of-~~s~~State Subtitle D equivalent landfills) ~~landfills~~ that are potentially viable for exporting Los Angeles County waste during the 15-year planning period are listed in **Tables 9-1 and 9-2** of Chapter 9.

The El Sobrante Landfill in Riverside County, which has a remaining capacity of ~~118~~ 115 million tons, is permitted to receive 10,000 tpd of waste for disposal, and has an expected of about 35-40 years. This landfill received an average of ~~8,200~~7,404 tpd in ~~2005~~2006, of which about ~~2,840~~2,397 tpd were imported from Los Angeles County. Optimistically, the landfill could receive up to 4000 tpd from Los Angeles County through the 15-year planning period. Also, Orange County landfills ~~also~~ received over ~~3000~~ 2,509 tpd in ~~2005~~2006, though, its waste importation agreements with various entities in Los Angeles County is expected to expire in 2015. The Simi Valley Landfill in Ventura County, which has a permitted daily throughput of 3,000 tpd and ~~currently~~ receiveds an average of ~~700~~ 522 tpd from Los Angeles County, is proposing an expansion that will extend its remaining life by 14 years. ~~These and other out-of-County landfills shown in **Table 4-21** could accommodate the County's export disposal need during the 15-year planning period are shown in **Table 4-19**.~~

In addition, Puente Hills Landfill Conditional Use Permit (CUP) No. 02-027-(4) requires the County Sanitation District (CSD) of Los Angeles County to develop a waste-by-rail system that would be consistent with the daily maximum permitted disposal capacity of Puente Hills Landfill (13,200 tpd) and meet specified milestones or demonstrate best faith efforts as specified in Condition 58 of the CUP. The

milestones are as follows: (1) To begin development of at least one remote landfill by December 31, 2007, or be assessed a penalty of 2,000 tpd in Puente Hills Landfill's daily maximum permitted refuse intake capacity (i.e., 13,200 tpd); (2) For at least one remote landfill to become operational by December 31, 2008, or CSD would be assessed a penalty of 1,000 tpd reduction in Puente Hills Landfill's daily maximum permitted refuse intake capacity; and (3) For the waste-by-rail system to become operational by December 31, 2009, or CSD would be assessed a penalty of 2,000 tpd reduction every year thereafter in Puente Hills Landfill's maximum permitted refuse intake capacity. For the purpose of the disposal need analysis in this Chapter, it is assumed that CSD will most likely meet the CUP milestones or the corresponding best-faith efforts requirement. However, the final determination would be made by the Director of the Department of Public Works.

~~Additionally, t~~Moreover, the County Sanitation Districts of Los Angeles County (CSD) has completed acquisition of the Mesquite Regional Landfill in Imperial County, and ~~-~~has signed a purchase agreement for acquisition of the Eagle Mountain Landfill (subject to resolution of pending litigation).

The Mesquite Regional Landfill is permitted to accept up to 20,000 tpd with a capacity of 600 million tons. This ~~gives~~ provides the Landfill an approximate lifespan of 100 years. Construction of Mesquite Regional Landfill began in April 2007 and will be ready for operations in 2009. Construction of the rail spurs and rail yard necessary to receive waste-by-rail is expected to be completed in 2011/2012. Once operational, the Mesquite Regional will provide additional out-of-County export capacity during the latter part of the 15-year planning period.

Currently, the Mesquite Regional Landfill is only permitted to receive out-of-County waste-by-rail. However, CSD is currently working with Imperial County to revise the CUP of the Mesquite Regional Landfill to allow up to an additional 4,000 tpd of out-of-County municipal solid waste from Los Angeles County to the landfill by truck. Moreover, waste-by-truck remains a viable and economical option to transport waste to other out-of-County and remote landfills particularly for distances less than 200 miles (see **Chapter 9, Section 9.5**).

Similarly, Eagle Mountain Landfill is permitted to accept 10,000 tpd for the first 10 years with the option of increasing the daily limit to 20,000 tpd after a review of environmental performance. It's permitted capacity of 460 million tons and total capacity of 700 million tons would give the Landfill an approximate lifespan of 100 years as well. However, Eagle Mountain Landfill Project is under litigation and therefore its capacity is not included in this Chapter's analysis of the disposal capacity need during the planning period.~~Once operational, the Mesquite Regional~~

~~would provide additional out-of-County export capacity during the later part of the 15-year planning period.~~

~~Furthermore~~As previously stated, other existing and proposed new ~~c~~Class III ~~(or equivalent)~~ out-of-~~c~~County landfills (located both in-~~s~~State and out-of-~~s~~State) that could accept solid waste from Los Angeles County also exist (See **Table~~s~~ 9-1 and 9-2** in Chapter 9). Based on the ~~above, , and the~~ analysis in the Scenario **Tables 4-11~~2~~ to 4-~~18~~16**, the current and future available disposal capacity provided by the out-of-County landfills (listed in **Tables 9-1 and 9-2** of Chapter 9), will provide adequate out-of-County disposal capacity to cover the ~~c~~Class III landfill export need and permitted daily capacity ~~shortfall~~ need during the 15-year planning period. However, this conclusion takes into consideration the following assumptions:

a) ~~t~~The amount of export capacity (i.e., out-of-County disposal capacity) available for Los Angeles County, would continue to be available as indicated in ~~to the County would continue as anticipated (see~~ **Table 4-~~21~~ 19** ~~of Chapter 4~~ and **Tables 9-1 and 9-2** in Chapter 9. ~~in Chapter 9 and **Table 4-21.**~~

b) ~~t~~The amount of current exports will steadily increase in concert with closure of in-County landfills as anticipated.

c) The need for development of in-County alternative (e.g., conversion) technology facilities.

4.8. IN-COUNTY SOLID WASTE TRANSFER ~~FACILITY~~ CAPACITY

Currently, there are approximately 65 MRF/TS (see **Chapter 9, Table 9-7**) ~~39 permitted large volume (over 100 tpd permitted in-take capacity) transfer stations/MRF's (**Table 4-8**) and numerous small volume transfer stations~~ operating Countywide which transport ~~transfer~~ solid waste inside and outside the County and has a permitted daily intake capacity of 74,122 tpd. Forty-one of the 65 MRF/TS are permitted major or large volume MRF/TS and has a total permitted capacity of 68,754 tpd (see **Chapter 4**, **Table 4-8**).

However, as local waste disposal capacity options diminish within the County and with the anticipated development of Puente Hills Inter-modal Facility ~~(waste-by-rail)~~ by CSD, ~~transfer station/~~MRF/TS operators may also elect to utilize rail transport to ship waste to out-of-County landfills for disposal (see **Table 4-8**). Currently, there are 41 railroad yards (see **Table 9-8, Chapter 9**) in Los Angeles County. Other proposals for~~on~~ transporting ~~shipping~~ waste out of the County by ~~water~~ sea or

combination of various transportation modes are discussed in detail in Chapter 9 of this CSE.

4.9 DISPOSAL CAPACITY NEED ANALYSIS

4.9.1 ~~Understanding t~~The Disposal Capacity Need Analysis

As indicated in Section 4.5 (Disposal Need Projections for the Planning Period 2006-2021), the Los Angeles County Department of Public Works (Public Works) has established a process for tracking solid waste disposal quantities at landfills and transformation facilities, ~~which is based on~~ using the DRS, ~~through~~ and ~~the Solid Waste Information Management System (~~SWIMS~~). web-based and database application developed and managed by the Department of Public Works. The database is available to solid waste haulers and facility operators, for submitting the amount of solid waste they manage for disposal via the internet.~~ Based on this and the information available ~~by~~from other regulatory agencies (including DRS data from counties receiving Los Angeles County's waste exports), ~~the~~ Public Works ~~Department of Public Works~~ has a continuing process of collecting and projecting data on waste disposal demand and available capacity.

However, ~~T~~the dynamics of the existing solid waste management system in Los Angeles County also result in the projection process being very dynamic. Consequently, the projections of waste disposal demand and available capacity are based on reasonable assumptions that reflect past experience, and use of a conservative approach, and various projection scenarios.

4.9.2 Disposal Capacity Need Analysis Methodology

The Disposal Capacity Need Analysis allows a comparison of the projected date when a shortfall in the daily permitted disposal capacity is expected to occur along for the various scenarios. ~~with the date additional daily capacity can be permitted.~~ To accurately predict when a shortfall in total ~~combined~~ disposal capacity will be experienced, one must compare the maximum permitted daily capacity available with the County's daily disposal requirements, with full consideration of the facilities' restrictions/constraints.

The disposal capacity need analysis is presented in six scenarios described in **Section 4.11**, analyzed in **Tables 4-11~~2~~ to 4-~~18~~16,** and summarized in **Tables 4-~~19~~17 and 4-~~20~~18.** The analysis ~~takes into consideration~~ considers factors listed and discussed ~~previously~~in this Chapter ~~and considers~~the disposal capacity needs for the County as a whole, and the total disposal capacity at all disposal facilities

countywide. Also, as previously indicated, the two transformation facilities in the County are expected to continue operating through the 15-year planning period, and there is currently adequate inert debris/waste landfill capacity in the County. Therefore, the disposal capacity need analysis primarily evaluates the need for additional Class III landfill capacity.

~~Past experience has shown that it takes three to seven years (or more) to permit an expansion of an existing Class III landfill and between seven and ten years (or more) to site a new Class III landfill facility. Additionally, as discussed above in **Subsection 4.6.2** and in Chapter 5, the development of new transformation facilities and status of new CT facilities is still uncertain at this time. Thus, when a shortfall in permitted daily capacity at Class III landfills is predicted to occur in less time than it takes to permit new capacity, immediate action is necessary to ensure disposal services continue to be provided to residents and businesses without interruption and at reasonable cost.~~

4.9.3 ~~Disposal Facility~~Class III Landfill Restrictions

Factors which severely hinder the accessibility of available Class III landfill permitted disposal capacity include: expiration of the Land Use Permit, Waste Discharge Requirements Permit, Solid Waste Facility Permit, air quality permits; restrictions on the acceptance of waste generated outside jurisdictional and/or wasteshed boundaries; permit restrictions on the amount of waste that can be accepted daily and/or weekly; geographic barriers; and/or limitations on the amount of waste that can be handled by a facility on a daily basis due to the lack of manpower and equipment.

One of the critical limiting factors is the wasteshed restrictions including restriction on origin of waste by the host jurisdiction~~. of origin of the waste.~~ For example, as discussed in Chapter 3 and further summarized in **Table 4-9~~10~~**, Savage Canyon (Whittier) Landfill can only receive solid waste generated within the City of Whittier; Burbank Landfill only accepts waste generated within the City of Burbank, which is collected by City crews; Puente Hills Landfill is prohibited from receiving any waste originating from the City of Los Angeles and Orange County. Also, as previously indicated in section 4.7.2, Puente Hills Landfill may experience a reduction in permitted daily capacity if CSD fails to comply with Puente Hills Landfills CUP Condition No. 58. Moreover~~Also~~, Calabasas and Scholl Canyon Landfills only accept solid waste generated within their defined wastesheds, and Brand Park and San Clemente Landfills are not open to the public.

Other critical factors which greatly impact a landfill operation, include the daily quantity of solid waste that a ~~disposal~~ landfill facility can accept (permitted daily capacity), and permitted disposal capacity as established by local jurisdictions/regulatory agencies. ~~For example, in 1995, there were 11 major and six minor class III landfills in operation at the county. However, as of January 1, 2006, there are only eight major and four minor Class III landfills in operation, resulting from capacity limitations, expiration of land use permit, other operational permits, and/or Court decisions.~~ Under these circumstances, if no expansions of existing facilities occur ~~or no new disposal~~ or alternative technology facilities are developed, and waste disposal continue to increase, the County will experience shortfalls in permitted daily disposal capacity.

4.10 DISPOSAL CAPACITY NEED ANALYSIS SCENARIOS

The disposal capacity need analysis presented below considers ~~seven~~ six scenarios (see **Tables 4-1~~2~~, 1~~2~~3, 1~~3~~4, 1~~4~~5, 1~~5~~6, and 1~~6~~7 ~~and 18~~**), which are briefly described and summarized in **Table 4-1~~0~~1**, ~~summarized in **Table 4-11**~~ and graphed in **Figures 4-2, ~~and 4-3~~ to 4-5**.

The following assumptions are made in all the six scenarios:

- No new Class III landfill within Los Angeles County during the planning period.
- Full implementation of AB 939 waste diversion programs and the achievement of the waste diversion mandate of 50 percent during the planning period.
- Transformation facilities are assumed to operate at their average permitted daily capacity and their combined total capacity is shown in the scenario analysis tables.
- Based on SWIMS and landfill survey data, there was no remaining daily disposal capacity need (shortfall) in 2006 and 2007.
- The actual disposal, import, export, average daily intake, etc., data obtained from SWIMS and the landfill surveys were used for the year 2006 and 2007. The actual export tonnage for 2006 is 854 tpd and for 2007 is 754 tpd.
- The County Sanitation Districts of Los Angeles County (CSD) anticipates that the Puente Hills Intermodal Facility will be operational in 2011/2012.

However, for the purposes of the disposal capacity need analysis in this Chapter, the 8,000 tpd to Mesquite landfill via the CSD□s Waste-By-Rail system is conservatively assumed to be fully effective in 2014 after the closure of Puente Hills Landfill.

- The solid waste exports from Los Angeles County will continue during the planning period regardless of the adequacy of in-County disposal capacity.

- The tons per day is assumed as the average daily tonnage, operating six days per week.

- Scenarios 3, 4, 5, and 6 assume increased recycling efforts to achieve a 60 percent diversion rate by 2021.

- Scenarios 4, 5, and 6 include the use of alternative technology facilities (e.g., conversion technology facilities) from 1,200 tpd in 2010 to up to 10,000 tpd in the year 2021. Whether conversion technology facilities are considered disposal or non-disposal facilities will not affect the result of the disposal capacity need analysis or the remaining daily disposal need (shortfall).

~~– The seven scenarios provide disposal capacity need analysis for the County based on the projected transformation and Class III landfill capacity needs as shown in Table 4-7.~~

~~–~~

~~The analysis assumes full implementation of AB 939 waste diversion programs and the achievement of the waste diversion mandate of 50 percent for the year 2005 and thereafter. In addition, Scenarios 4, 5, 6 and 7 assumes increased recycling efforts that achieve a 60 percent diversion rate by 2020. Scenarios 5, 6 and 7 include the use of conversion technologies and up to 10,000 tpd in the year 2020. Except for Scenario 1 (worst case) an available export capacity that is provided by out-of-County class III landfills is also assumed.~~

- Columns numbered 1 through 13 in Scenario **Tables 4-113 to 4-167** lists how solid waste tonnages are distributed to each ~~one~~ of the Class III landfills and the transformation facilities existing as of December 31, 20065.

- The remaining permitted capacity at the end of each year of the planning period for each Class III landfill is also shown in the columns numbered 1 through 13.

- The 20065 remaining permitted capacity is based on data presented in **Table 4-910**.

- The last sets of columns in **Tables 4-112 through 4-168** shows the export need and projected remaining daily disposal capacity need (shortfall) with excess capacity shown in parenthesis. and export need (excess capacity figures are shown in parentheses).

4.10.1 Scenario No. 1 (Worst Case Scenario) – Utilization of only existing in-County cClass III landfills and transformation facilities during the planning period

Scenario No. 1 assumes the following during the planning period: (1) use of only existing in-County permitted disposal facilities (excluding disposal at inert waste landfills);, (2) no utilization of out-of-County landfill disposal capacity;, (3) no new and/or proposed expansions of existing cClass III landfills and/or transformation facilities will become operational within the County;, (4) no increase in diversion rate beyond 50 percent;, and (5) no capacity through conversion and/or alternative technologies. The analysis is presented in **Table 4-112** and summarized in **Tables 4-17 and 4-18.**

Solid Waste Imports

The Scenario No. 1 analysis also makes the following assumptions with respect to solid waste imports and exports:

- The actual average waste import for the years 2006 and 2007 are 854 tpd and 764 tpd, respectively. The import quantities are assumed at 900 tpd for subsequent years through 2021.

  Solid Waste Import: The analysis shows the average waste import for the year 2005 as 756 tpd (six days per week). The import quantities are assumed at 800 tpd for subsequent years through 2020.

Solid Waste Exports

Scenario No. 1 analysis also makes the following assumptions with respect to solid waste exports:

- Currently Available Export Capacity

~~b.Solid Waste Export:~~ The analysis assumes no export of solid waste out of Los Angeles County to out-of-County disposal facilities during the 15-year planning period except for 2006 and 2007 in which the actual export data (5,713 tpd and 5,715 tpd, respectively) are used.

Solid Waste Diversion Rate

Scenario No. 1 analysis also makes the following assumptions with respect to solid waste diversion rate:

- AB 939 Mandate

~~Furthermore, t~~The analysis assumes ~~considers~~ the achievement of ~~the~~ AB 939 waste diversion mandate of 50 percent ~~for the year 2005 and thereafter~~ throughout the ~~year 2020.~~planning period. However, for 2006 and 2007, the diversion rate was adjusted to maintain consistency with the generation rate of 23,807,137 tons presented in **Table 4-5**, since there was no remaining daily disposal capacity need (shortfall) in 2006 and 2007.

Remaining Daily Disposal Capacity Need (Shortfall)

The remaining daily disposal capacity need (shortfall) is listed in the last column of **Table 4-11.** Based on this analysis, there was no remaining daily disposal capacity need (shortfall) in 2006 and 2007. However, the remaining daily disposal capacity need (shortfall) increases from 5,825 tpd in 2008 to 44,326 tpd in 2021.

Therefore, additional disposal capacity (either in-County or out-of-County) would be necessary to provide for the solid waste disposal needs of the 88 cities and unincorporated County areas through the end of the 15-year planning period.

~~Moreover, as in all the scenarios, transformation facilities are assumed to operate at their maximum permitted daily capacity and their combined capacity is shown in the scenario analysis tables. The resulting Class III landfill disposal capacity shortfall (with excess shown in parenthesis) is listed in the last column of **Table 4-12.**~~

~~Based on this analysis, a shortfall in daily permitted disposal capacity of 7,734 tpd (six days per week) was experienced in 2005. The shortfall decreases until 2008 (6,294 tpd) then it starts and continues to increase to the end of the 15-year~~

~~planning period, where it becomes approximately 41,028 tpd.~~

4.10.2 Scenario No. 2 (Status Quo) – Utilization of existing in-County ~~c~~Class III landfills and transformation facilities, and utilization of currently available out-of-County disposal capacity during the planning period.

Scenario No. 2 assumes the following during the planning period: (1) use of ~~only~~ existing in-County permitted disposal facilities (excluding disposal at inert waste landfills);~~,~~ (2) utilization of currently available out-of-County landfill disposal capacity;~~,~~ (3) no new and/or proposed expansions of existing ~~c~~Class III landfills and/or transformation facilities will become operational within the County;~~,~~ (4) no increase in diversion rate beyond 50 percent;~~,~~ and (5) no capacity through alternative technologies (e.g., conversion technologies). ~~The~~ analysis is presented in **Tables 4-1~~2~~3** and summarized in Tables 4-7 and 4-18**.**

Solid Waste Imports

~~The~~ Scenario No. 2 analysis also makes the following assumptions with respect to solid waste imports ~~and exports~~:

- The actual average waste import for the years 2006 and 2007 are 854 tpd and 764 tpd, respectively. The import quantities are assumed at 900 tpd for subsequent years through 2021.

  ~~Solid Waste Import: The analysis shows the average waste import for the year 2005 as 756 tpd (six days per week). The import quantities are assumed at 800 tpd for subsequent years through 2020.~~

Solid Waste Exports

Scenario No. 2 analysis also makes the following assumptions with respect to solid waste exports:

- Currently Available Export Capacity

  ~~Solid Waste Exports – The analysis assumes that (1) solid waste exports from Los Angeles County will continue during the planning period regardless of the adequacy of in-County disposal capacity, and (2) the current and/or projected future waste exports (i.e., export need) are part of out-of-County disposal portion of the daily disposal capacity need shortfall.~~

The currently available out-of-County disposal capacity (i.e., export capacity) is assumed to include ~~as~~ (1) the amount of Los Angeles County solid waste currently exported to the available existing out-of-County ~~c~~Class III landfills~~,~~; (2) less the export amount due to the expiration of the export agreements to Orange County landfills (i.e., Olinda Alpha Sanitary landfill in 2013 and 2015, and both Frank R. Bowerman Sanitary landfill and Prima Deshecha Canada Sanitary Landfills in 2015) subject to any future export agreements by Orange County;~~,~~ and (3) the ~~plus~~ additional 8,000 tpd in export via the ~~from~~ CSD's waste-by-rail system to Mesquite Regional Landfill by 2014[9].

~~Moreover, it is assumed that no other new and/or proposed expansions of existing out-of-County class III landfills and/or transformation facilities will become operational during the 15-year planning period.~~

Based on the available export capacity analysis (see **Alternative B in Table 4-~~23~~20**) the currently available solid waste export capacity is approximately ~~6,854~~5,713 tpd (six days per week) in ~~2005~~ 2006 and 5,715 tpd in 2007 ~~but drops to 6,533 tpd in 2006~~ and remains at that level until 2013. Despite the expiration of the export agreement with Orange County landfills, ~~T~~the available export capacity increases to ~~12,873~~12,873 tpd in 2014 due to the additional 8,000 tpd in export via the CSD's waste-by-rail to Mesquite Regional Landfill. ~~via the CSD waste-by-rail system.~~ In 2016, the export capacity will drop~~s~~ to ~~11,751~~11,206 tpd and remain~~s~~ at that level through the end of the planning period (2021~~0~~).

Solid Waste Diversion Rate

Scenario No. 2 analysis also makes the following assumptions with respect to solid waste diversion rate:

- AB 939 Mandate

~~Furthermore, t~~The analysis assumes ~~considers~~ achievement of the AB 939 waste diversion mandate of 50 percent ~~for the year 2005 and thereafter~~ throughout the planning period ~~year 2020~~. However, for 2006 and 2007, the diversion rate was adjusted to maintain consistency with the generation rate of 23,807,137 tons presented in **Table 4-5**, since there was no disposal capacity shortfall in 2006 and 2007.

[9] Even though, Condition 58 of Puente Hills Landfill requires CSD waste-by-rail system to become operational by December 31, 2009, CSD has indicated that the waste-by-rail system will not become operational until 2011/2012. Also, it is further assumed, that the actual shipping of 8,000 tpd to Mesquite Regional Landfill from Puente Hills Intermodal Facility will not occur until the closure of Puente Hills by 2013.

Remaining Daily Disposal Capacity Need (Shortfall)

The remaining daily disposal capacity need (shortfall) is listed in the last column of **Table 4-12.** Based on this analysis, there was no remaining daily disposal capacity need (shortfall) in 2006 and 2007. However, the remaining daily disposal capacity need (shortfall) increases from 110 tpd in 2008 to a maximum of 33,120 tpd in 2021.

Therefore, additional disposal capacity (either in-County or out-of-County) would be necessary to provide for the solid waste disposal needs of the 88 cities and unincorporated County areas through the end of the 15-year planning period.

~~Moreover, as in all the scenarios, transformation facilities are assumed to operate at their maximum permitted daily capacity and their combined capacity is shown in the scenario analysis tables. The resulting Class III landfill disposal capacity shortfall (with excess shown in parenthesis) is listed in the last column of **Table 4-13.** Based on this analysis, a shortfall in daily permitted disposal capacity of 880 tpd (six days per week) was experienced in 2005 and 520 tpd will be experienced in 2006. Generally, the shortfall would continue to increase to the end of the 15-year planning period, where it becomes approximately 29,277 tpd. However, an excess capacity of 239 tpd would be experienced in 2008.~~

~~4.10.3 Scenario 3 -- Utilization of existing in-County class III landfills and transformation facilities, utilization of out-of-County disposal capacity, and development of all proposed in-County class III landfill expansions during the planning period.~~

~~Scenario 3 assumes during the planning period: (1) use of only existing in-County permitted disposal facilities (excluding disposal at inert waste landfills), (2) utilization of out-of-County landfill disposal capacity, (3) no new class III landfills within the County, (4) development of all proposed in-County class III landfill expansions, (5) no increase in diversion rate beyond 50 percent, and (5) no capacity through conversion technologies. The analysis is presented in **Table 4-14**.~~

~~The analysis makes the following assumptions with respect to solid waste imports and exports:~~

~~a. Solid Waste Imports - The analysis shows the waste import average for the year 2005 is 756 tpd (six days per week). The import quantities are assumed at 800 tpd for subsequent years through 2020.~~

b.Solid Waste Exports – The analysis assumes that (1) solid waste exports from Los Angeles County will continue during the planning period regardless of the in-County disposal capacity, and (2) the current and/or projected future waste exports (i.e., export need) are part of out-of-County disposal portion of the daily disposal capacity need shortfall.

The currently available out-of-County disposal capacity (i.e., export capacity) is assumed as (1) the amount of Los Angeles County solid waste currently exported to the existing out-of-County class III landfills, (2) with expiration of the export agreements to Orange County landfills (Olinda Alpha Sanitary landfill in 2014 and both Frank R. Bowerman Sanitary landfill and Prima Deshecha Canada Sanitary Landfills in 2015), (3) plus additional 8,000 tpd from CSD's waste-by-rail system to Mesquite Regional Landfill by 2014, (4) but no other new and/or proposed expansions of existing out-of-County class III landfills and/or transformation facilities will become operational during the 15-year planning period.

Based on the export capacity analysis (see **Table 4-23**) the currently available solid waste export capacity is approximately 6,854 tpd (six days per week) in 2005 but drops to 6,533 tpd in 2006 and remains at that level until 2013. The export capacity increases to 12,873 tpd in 2014 due to export to Mesquite Regional Landfill via the CSD waste-by-rail system. In 2016, the export capacity drops to 11,751 tpd and remains at that level through the end of the planning period (2020).

Furthermore, the analysis considers achievement of the AB 939 waste diversion mandate of 50 percent for the year 2005 and thereafter through the year 2020.

Moreover, as in all the scenarios, transformation facilities are assumed to operate at their maximum permitted daily capacity and their combined capacity is shown in the scenario analysis tables. The resulting Class III landfill disposal capacity shortfall (with excess shown in parenthesis) is listed in the last column of **Table 4-14.**

Based on this analysis, a shortfall in daily permitted disposal capacity of 880 tpd (six days per week) was experienced in 2005 and 520 tpd will be experienced in 2006. An excess disposal capacity is experienced in 2007 (470 tpd) and increases to 6,506 tpd in 2009, after which it starts and continues to drop until it reached 4,464 tpd in 2013. A shortfall of 2,948 tpd occurs in 2014 and continues to increase to the end of the 15-year planning period, where it becomes approximately 8,477 tpd.

Therefore, additional disposal capacity (either in-County or out-of-County) would be necessary to provide for the solid waste disposal needs of the 88 cities and

~~unincorporated County areas through the end of the 15-year planning period.~~

~~4.10.4~~4.10.3 Scenario No. ~~4~~ 3 – Utilization of existing ~~i~~In-County ~~c~~Class III landfills and transformation facilities, utilization of currently available out-of-County disposal capacity, and ~~development of all proposed in-County class III landfill expansions, and~~ increase~~ing~~ the diversion rate during the planning period.

Scenario ~~4~~ 3 assumes the following during the planning period: (1) use of ~~only~~ existing in-County permitted disposal facilities (excluding disposal at inert waste landfills);~~,~~ (2) utilization of currently available out-of-County landfill disposal capacity;~~,~~ (3) no new and/or proposed expansions of existing ~~c~~Class III landfills within the County;~~, (4) development of all proposed in-County class III landfill expansions,~~ (~~5~~4) increase in diversion rate beyond 50 percent, and (5) no capacity through conversion technologies. The analysis is presented in **Table 4-~~15~~13**, and summarized in **Tables 4-17 and 4-18**.

Solid Waste Imports

~~The~~ Scenario No. 3 analysis also makes the following assumptions with respect to solid waste imports ~~and exports~~:

- The actual average waste import for the years 2006 and 2007 are 854 tpd and 764 tpd, respectively. The import quantities are assumed at 900 tpd for subsequent years through 2021.

~~Solid Waste Imports – The analysis shows the waste import average for the year 2005 is 756 tpd (six days per week). The import quantities are assumed at 800 tpd for subsequent years through 2020.~~

Solid Waste Exports

Scenario No. 3 analysis also makes the following assumptions with respect to solid waste exports:

- Currently Available Export Capacity

~~Solid Waste Exports – The analysis assumes that (1) solid waste exports from Los Angeles County will continue during the planning period regardless of the in-County disposal capacity, and (2) the current and/or projected future waste exports (i.e., export need) are part of out-of-County disposal portion of the daily disposal capacity need shortfall.~~

The currently available out-of-County disposal capacity (i.e., export capacity) is assumed to include ~~as~~ (1) the amount of Los Angeles County solid waste currently exported to the existing out-of-County ~~c~~Class III landfills;~~,~~ (2) the ~~with~~ expiration of the export agreements to Orange County landfills (Olinda Alpha Sanitary landfill in 2013, and both Frank R. Bowerman Sanitary landfill and Prima Deshecha Canada Sanitary ~~L~~landfills in 2015) subject to any future export agreements by Orange County;~~,~~ (3) the ~~plus~~ additional 8,000 tpd in export via the ~~from~~ CSD's waste-by-rail system to Mesquite Regional Landfill by 2014.~~,~~

~~(4) but no other new and/or proposed expansions of existing out-of-County class III landfills and/or transformation facilities will become operational during the 15-year planning period.~~

Based on the available export capacity analysis (see **Alternative B in Table 4-~~23~~20**) the currently available solid waste export capacity is approximately ~~6,854~~5,713 tpd (six days per week) in ~~2005~~ 2006 and 5,715 tpd in 2007 ~~but drops to 6,533 tpd in 2006~~ and remains at that level until 2013. Despite the expiration of the export agreement with Orange County landfills, ~~T~~the available export capacity increases to ~~12,873~~12,873 tpd in 2014 due to the additional 8,000 tpd in export via the CSD's waste-by-rail system to Mesquite Regional Landfill. ~~via the CSD waste-by-rail system.~~ In 2016, the export capacity drops to ~~11,751~~11,206 tpd and remains at that level through the end of the planning period (~~2020~~2021).

Solid Waste Diversion Rate

Scenario No. 3 analysis also makes the following assumptions with respect to solid waste diversion rate:

- AB 939 Mandate

~~This scenario demonstrates the effect an increase in diversion would have on the County's disposal needs.~~The analysis assumes the ~~considers~~ achievement of AB 939 waste diversion mandate of 50 percent ~~in the year 2005 and thereafter through the year 2020.~~ throughout the planning period. However, for 2006 and 2007, the diversion rate was adjusted to maintain consistency with the generation rate of 23,807,137 tons presented in **Table 4-5**, since there was no disposal capacity need (shortfall) in 2006 and 2007.

- Increase in Diversion Rate

  This scenario demonstrates the effect an increase in diversion would have on the County's disposal needs. ~~However, beginning~~Starting from ~~in~~ 2011, the diversion rate is assumed to increase~~d~~ to 51 percent and subsequently increase~~ing~~ by one percent each year, reaching 60 percent by the end of the planning period. An increase in diversion would be a tool the County may use to more easily meet its disposal needs. This increase in diversion represents a general trend of major jurisdictions within the County and State as a whole, but does not reflect any particular jurisdiction's policy. Future programs geared toward diversion are expected to take on greater significance, as the County nears the end of the planning period.

Remaining Daily Disposal Capacity Need (Shortfall)

The remaining daily disposal capacity need (shortfall) is listed in the last column of **Table 4-13.** Based on this analysis, there was no remaining daily disposal capacity need (shortfall) in 2006 and 2007. However, the remaining daily disposal capacity need (shortfall) varies from 110 tpd in 2008 to a maximum of 23,399 tpd in 2021.

Therefore, except for the years 2006~~5~~ and 2007~~6~~, additional disposal capacity (either in-County or out-of-County), would ~~not~~ be required in order to adequately provide for the solid waste disposal needs of the 88 cities and unincorporated County areas during the 15-year planning period.

~~Moreover, as in all the scenarios, transformation facilities are assumed to operate at their maximum permitted daily capacity and their combined capacity is shown in the scenario analysis tables. The resulting Class III landfill disposal capacity shortfall (with excess shown in parenthesis) is listed in the last column of **Table 4-15.** Based on this analysis, a shortfall in daily permitted disposal capacity of 880 tpd (six days per week) was experienced in 2005, and 520 tpd will be experienced in 2006. However, an excess disposal capacity will be experienced from 2007 (470 tpd) to the end of the 15-year planning period, where it becomes approximately 2,150 tpd. The excess disposal capacity varies from 2007 to 2020 with a maximum excess disposal capacity of 6,929 tpd in 2013.~~

4.10.4 Scenario No. 4 – Utilization of existing in-County Class III landfills and transformation facilities, utilization of currently available out-of-County disposal capacity, increase the diversion rate and development of alternative technology facilities capacity (up to 10,000 tpd) during the planning period.

Scenario 4 assumes the following during the planning period: (1) use of existing in-County permitted disposal facilities (excluding disposal at inert waste landfills); (2) utilization of currently available out-of-County landfill disposal capacity; (3) no new and/or proposed expansion of existing Class III landfills and/or transformation facilities will become operational within the County; (4) increase in diversion rate beyond 50 percent; and (5) development of up to 10,000 tpd in alternative technology facilities (e.g. conversion technology) capacity by 2021. The analysis is presented in **Table 4-14** and summarized in **Tables 4-17 and 4-18**.

Solid Waste Imports

Scenario No. 4 analysis also makes the following assumptions with respect to solid waste imports:

- The actual average waste import for the years 2006 and 2007 are 854 tpd and 764 tpd, respectively. The import quantities are assumed at 900 tpd for subsequent years through 2021.

Solid Waste Exports

Scenario No. 4 analysis also makes the following assumptions with respect to solid waste exports:

- Currently Available Export Capacity

  The currently available out-of-County disposal capacity (i.e., export capacity) is assumed to include (1) the amount of Los Angeles County solid waste currently exported to the existing out-of-County Class III landfills; (2) the expiration of the export agreements to Orange County landfills (Olinda Alpha Sanitary landfill in 2013 and 2015, and both Frank R. Bowerman Sanitary landfill and Prima Deshecha Canada Sanitary Landfills in 2015) subject to any future export agreements by Orange County; and (3) the additional 8,000 tpd in export via the CSD□s waste-by-rail system to Mesquite Regional Landfill by 2014.

  Based on the available export capacity analysis (see **Alternative B in Table 4-20**) the currently available solid waste export capacity is approximately 5,713 tpd (six days per week) in 2006 and 5,715 tpd in 2007, and remains at that level until 2013. Despite the expiration of the export agreement with Orange County landfills, the available export capacity

increases to 12,873 tpd in 2014 due to the additional 8,000 tpd in export via the CSD's waste-by-rail system to Mesquite Regional Landfill. In 2016, the export capacity drops to 11,206 tpd and remains at that level through the end of the planning period (2021).

Solid Waste Diversion Rate

The Scenario No. 4 analysis also makes the following assumptions with respect to solid waste diversion rate:

- AB 939 Mandate

  The analysis assumes the achievement of AB 939 waste diversion mandate of 50 percent throughout the planning period. However, for 2006 and 2007, the diversion rate was adjusted to maintain consistency with the generation rate of 23,807,137 tons presented in **Table 4-5**, since there was no disposal capacity need in 2006 and 2007.

- Increase in Diversion Rate

  This scenario demonstrates the effect an increase in diversion would have on the County's disposal needs. Starting from 2011, the diversion rate is assumed to increase to 51 percent and subsequently increase by one percent each year, reaching 60 percent by the end of the planning period. An increase in diversion would be a tool the County may use to better meet its disposal needs. This increase in diversion represents a general trend of major jurisdictions within the County and State as a whole, but does not reflect any particular jurisdiction's policy. Future programs geared toward diversion are expected to take on greater significance, as the County nears the end of the planning period.

Alternative Technology Capacity

The Scenario No. 4 analysis also makes the following assumptions with respect to alternative technology capacity:

- The scenario assumes that conversion and other alternative technology facilities will be used to manage about 1,200 tpd starting 2010 and up to 10,000 tpd by 2021.

Remaining Daily Disposal Capacity Need (Shortfall)

The remaining daily disposal capacity need (shortfall) is listed in the last column of **Table 4-14.** Based on this analysis, there was no remaining daily disposal capacity need (shortfall) in 2006 and 2007. However, the remaining daily disposal capacity need (shortfall) varies from 110 tpd in 2008 to 13,399 tpd in 2021 with a maximum of 17,105 tpd in 2016.

Therefore, except in 2006 and 2007, additional disposal capacity (either in-County or out-of-County), would be required in order to adequately provide for the solid waste disposal needs of the 88 cities and unincorporated County areas during the 15-year planning period.

4.10.5 Scenario No. 5 – Utilization of existing in-County cClass III landfills and transformation facilities, utilization of currently available out-of-County disposal capacity, increase of the diversion rate, development of alternative technologies (e.g., conversion technology facility) capacity (up to 10,000 tpd) and development of all proposed in-County cClass III landfill expansions, increasing the diversion rate, and development of conversion technology facilities capacities (up to 3,000 tpd) during the planning period.

Scenario 5 assumes the following during the planning period: (1) use of only existing in-County permitted disposal facilities (excluding disposal at inert waste landfills);, (2) utilization of currently available out-of-County landfill disposal capacity;, (3) no new cClass III landfills within the County;, (4) increase in diversion rate beyond 50 percent; (5) development of alternative technology facilities (e.g., conversion technology) capacity by 2021; and (46) development of all proposed in-County cClass III landfill expansions., (5) increase in diversion rate beyond 50 percent, and (6) development of up to 3,000 tpd conversion technology facilities capacity by 2020. The analysis is presented in **Table 4-15** and summarized in **Tables 4-17 and 4-186**.

Solid Waste Imports

The Scenario No. 5 analysis also makes the following assumptions with respect to solid waste imports and exports:

- The actual average waste import for the years 2006 and 2007 are 854 tpd and 764 tpd, respectively. The import quantities are assumed at 900 tpd for subsequent years through 2021.

~~Solid Waste Imports - The analysis shows the waste import average for the year 2005 is 756 tpd (six days per week). The import quantities are assumed at 800 tpd for subsequent years through 2020.~~

Solid Waste Exports

Scenario No. 5 analysis also makes the following assumptions with respect to solid waste exports:

- Currently Available Export Capacity

~~b. Solid Waste Exports – The analysis assumes that (1) solid waste exports from Los Angeles County will continue during the planning period regardless of the in-County disposal capacity, and (2) the current and/or projected future waste exports (i.e., export need) are part of out-of-County disposal portion of the daily disposal capacity need shortfall.~~

The currently available out-of-County disposal capacity (i.e., export capacity) is assumed to include ~~as~~ (1) the amount of Los Angeles County solid waste currently exported to the existing out-of-County ~~c~~Class III landfills~~;~~, (2) the ~~with~~ expiration of the export agreements with ~~to~~ Orange County landfills (Olinda Alpha Sanitary landfill in 2013 and 2015, and both Frank R. Bowerman Sanitary landfill and Prima Deshecha Canada Sanitary Landfills in 2015) subject to any future export agreements by Orange County;~~,~~ and (3) the ~~plus~~ additional 8,000 tpd in export via the ~~from~~ CSD's waste-by-rail system to Mesquite Regional Landfill by 2014.~~,~~

~~(4) but no other new and/or proposed expansions of existing out-of-County class III landfills and/or transformation facilities will become operational during the 15-year planning period.~~

Based on the available export capacity analysis (see **Alternative B in Table 4-~~23~~20**) the currently available solid waste export capacity ~~is~~was approximately ~~6,854~~5,713 tpd (six days per week) in ~~2005~~ 2006 and 5,715 in 2007, ~~but drops to 6,533 tpd in 2006~~ and remains at that level until 2013. Despite the expiration of the export agreement with Orange County landfills, ~~T~~the available export capacity increases to ~~12,873~~12,873 tpd in 2014 due to the additional 8,000 tpd in export via the CSD's waste-by-rail system to Mesquite Regional Landfill. ~~via the CSD waste-by-rail system.~~ In 2016, the export capacity drops to ~~11,751~~11,206 tpd and remains at that level through the end of the planning period (~~2020~~2021).

Solid Waste Diversion Rate

Scenario No. 5 analysis also makes the following assumptions with respect to solid waste diversion rate:

- AB 939 Mandate

  The analysis assumes the~~considers~~ achievement of AB 939 waste diversion mandate of 50 percent throughout the planning period. However for 2006 and 2007, the diversion rate was adjusted to maintain consistency with the generation rate of 23,807,137 tons presented in **Table 4-5**, since there was no disposal capacity need in 2006 and 2007.~~in the year 2005 and thereafter through the year 2020.~~

- Increase in Diversion Rate

  This scenario demonstrates the effect an increase in diversion would have on the County's disposal needs. Starting from ~~However, beginning in 2011~~2011, the diversion rate is assumed to increase~~d~~ to 51 percent and subsequently increase~~ing~~ by one percent each year, reaching 60 percent by the end of the planning period. An increase in diversion would be a tool the County may use to more easily meet its disposal needs. This increase in diversion represents a general trend of major jurisdictions within the County and State as a whole, but does not reflect any particular jurisdiction's policy. Future programs geared toward diversion are expected to take on greater significance, as the County nears the end of the planning period.

Alternative Technology Capacity

Scenario No. 5 analysis also makes the following assumptions with respect to alternative technology capacity:

- The scenario assumes that conversion and other alternative technology facilities will be used to manage about 1,200 tpd starting 2010 and up to 10,000 tpd by 2021.

In-County Class III landfill expansion

Scenario No. 5 analysis also makes the following assumptions with respect to in-County Class III landfill expansion:

- The scenario also assumes that all proposed expansions of existing in-County Class III landfills as identified in Chapter 7 (see **Section 7.5.2 and Table 7-3)** will be successfully permitted and developed to their full capacity, as proposed.

Remaining Daily Disposal Capacity Need (Shortfall)

The remaining daily disposal capacity need (shortfall) is listed in the last column of **Table 4-15.** Based on this analysis, there was no remaining daily disposal capacity need (shortfall) in 2006 and 2007. However, an excess in remaining daily disposal capacity will be experienced from 2008 (325 tpd) to the end of the 15-year planning period, where it becomes approximately 9,019 tpd.The excess in remaining daily disposal capacity varies from 325 tpd in 2008 to a maximum excess of 9,019 tpd in 2021.

Therefore, except for the years 2006~~5~~ and ~~-~~2007~~6,~~ additional disposal capacity (either in-County or out-of-County), would not be required in order to adequately provide for the solid waste disposal needs of the 88 cities and unincorporated County areas during the 15-year planning period.

~~Moreover, as in all the scenarios, transformation facilities are assumed to operate at their maximum permitted daily capacity and their combined capacity is shown in the scenario analysis tables. The resulting Class III landfill disposal capacity shortfall (with excess shown in parenthesis) is listed in the last column of **Table 4-16.** Based on this analysis, a shortfall in daily permitted disposal capacity of 880 tpd (six days per week) was experienced in 2005, and 520 tpd will be experienced in 2006. However, an excess disposal capacity will be experienced from 2007 (470 tpd) to the end of the 15-year planning period, where it becomes approximately 5,150 tpd. The excess disposal capacity varies from 2007 to 2020 with a maximum excess disposal capacity of 6,929 tpd in 2013.~~

~~In addition, the analysis also assumes that up to 3,000 tpd will be managed at the facilities utilizing conversion technologies. These facilities would not become operational until the year 2014. The conversion capacity is assumed to remain at 1,500 tpd through the year 2015, increase to 2,000 tpd in 2016, and increase to 3,000 tpd in 2018. The conversion capacity is assumed to remain at that level through the end of the planning period (2020).~~

~~**4.10.6 Scenario 6 – Utilization of existing in-County class III landfills and transformation facilities, utilization of out-of-County disposal capacity,**~~

development of all proposed in-County class III landfill expansions, increasing the diversion rate, and increasing development of conversion technology facilities capacities (up to 10,000 tpd) during the planning period.

Scenario 6 assumes during the planning period: (1) use of only existing in-County permitted disposal facilities (excluding disposal at inert waste landfills), (2) utilization of out-of-County landfill disposal capacity, (3) no new class III landfills within the County, (4) development of all proposed in-County class III landfill expansions, (5) increase in diversion rate beyond 50 percent, and (6) increase in development of conversion technology facilities capacities up to 10,000 tpd by 2020. The analysis is presented in **Table 4-17.**

The analysis makes the following assumptions with respect to solid waste imports and exports:

a. Solid Waste Imports - The analysis shows the waste import average for the year 2005 is 756 tpd (six days per week). The import quantities are assumed at 800 tpd for subsequent years through 2020.

b. Solid Waste Exports - The analysis assumes that (1) solid waste exports from Los Angeles County will continue during the planning period regardless of the in-County disposal capacity, and (2) the current and/or projected future waste exports (i.e., export need) are part of out-of-County disposal portion of the daily disposal capacity need shortfall.

The currently available out-of-County disposal capacity (i.e., export capacity) is assumed as (1) the amount of Los Angeles County solid waste currently exported to the existing out-of-County class III landfills, (2) with expiration of the export agreements to Orange County landfills (Olinda Alpha Sanitary landfill in 2014 and both Frank R. Bowerman Sanitary landfill and Prima Deshecha Canada Sanitary Landfills in 2015), (3) plus additional 8,000 tpd from CSD's waste-by-rail system to Mesquite Regional Landfill by 2014, (4) but no other new and/or proposed expansions of existing out-of-County class III landfills and/or transformation facilities will become operational during the 15-year planning period.

Based on the export capacity analysis (see **Table 4-23**) the currently available solid waste export capacity is approximately 6,854 tpd (six days per week) in 2005 but drops to 6,533 tpd in 2006 and remains at that level until 2013. The export capacity increases to 12,873 tpd in 2014 due to export to Mesquite Regional Landfill via the CSD waste-by-rail system. In 2016, the export

~~capacity drops to 11,751 tpd and remains at that level through the end of the planning period (2020).~~

~~The analysis considers achievement of AB 939 waste diversion mandate of 50 percent in the year 2005 and thereafter through the year 2020. However, beginning in 2011, the diversion rate is assumed to increased to 51 percent and subsequently increasing by one percent each year, reaching 60 percent by the end of the planning period. An increase in diversion would be a tool the County may use to more easily meet its disposal needs. This increase in diversion represents a general trend of major jurisdictions within the County and State as a whole, but does not reflect any particular jurisdiction's policy. Future programs geared toward diversion are expected to take on greater significance, as the County nears the end of the planning period.~~

~~In addition, the analysis also assumes an increase in capacity from 3,000 tpd up to 10,000 tpd will be managed utilizing conversion technologies. It is also assumed that the conversion technology facilities would not become operational until the year 2010. The conversion technology capacity is assumed to gradually increase from 1,500 tpd in 2010 to 10,000 tpd at the end of the planning period (2020).~~

~~Moreover, as in all the scenarios, transformation facilities are assumed to operate at their maximum permitted daily capacity and their combined capacity is shown in the scenario analysis tables. The resulting Class III landfill disposal capacity shortfall (with excess shown in parenthesis) is listed in the last column of **Table 4-17.**~~

~~Based on this analysis, a shortfall in daily permitted disposal capacity of 880 tpd (six days per week) was experienced in 2005, and 520 tpd will be experienced in 2006. However, an excess disposal capacity will be experienced from 2007 (470 tpd) to the end of the 15-year planning period, where it becomes approximately 10,597 tpd. The excess disposal capacity varies from 2007 to 2020 with a maximum excess disposal capacity of 10,597 tpd in 2020.~~

~~Therefore, except for the year 2005 and 2006, additional disposal capacity (either in-County or out-of-County), would not be required in order to adequately provide for the solid waste disposal needs of the 88 cities and unincorporated County areas during the 15-year planning period.~~

4.10.~~7~~6 Scenario ~~7~~No. ~~-~~ 6 (Best-Case Scenario) □ Utilization of existing in-County ~~c~~Class III landfills and transformation facilities, ~~increasing~~ utilization of currently available out-of-County disposal capacity, increase of the diversion rate, development of alternative technologies (e.g., conversion technology

facilities) capacity (up to 10,000 tpd), development of all proposed in-County ~~c~~Class III landfill expansions, ~~increasing the diversion rate, and increasing development of conversion technology facilities (up to 10,000 tpd)~~ and utilization of future available out-of-County disposal facility capacity during the planning period.

Scenario 6 assumes the following during the planning period: (1) use of ~~only~~ existing in-County permitted disposal facilities (excluding disposal at inert waste landfills);~~,~~ (2) ~~increase in~~ utilization of currently available out-of-County landfill disposal capacity by including out-of-County disposal capacities from proposed implementation of waste-by-truck to Mesquite Regional Landfill and proposed expansions of the out-of-County landfills;~~,~~ (3) no new ~~c~~Class III landfills within the County;~~,~~ (4) increase in diversion rate beyond 50 percent; (5) development of up to 10,000 tpd alternative technology facilities (e.g., conversion technology) capacity by 2021; (~~4~~6) development of all proposed in-County ~~c~~Class III landfill expansions;~~, (5) increase in diversion rate beyond 50 percent, and (6) increase in development of conversion technology facilities capacities up to 10,000 tpd by 2020~~ and (7) utilization of additional future available out-of-County disposal facility capacity. The analysis is presented in **Table 4-~~18~~16** and summarized in **Tables 4-17 and 4-18.**

Solid Waste Imports

~~The~~ Scenario No. 6 analysis makes the following assumptions with respect to solid waste imports ~~and exports~~:

- The actual average waste import for the years 2006 and 2007 are 854 tpd and 764 tpd, respectively. The import quantities are assumed at 900 tpd for subsequent years through 2021.

~~a. Solid Waste Imports - The analysis shows the waste import average for the year 2005 is 756 tpd (six days per week). The import quantities are assumed at 800 tpd for subsequent years through 2020.~~

Solid Waste Exports

Scenario No. 6 analysis makes the following assumptions with respect to solid waste exports:

- Currently Available Export Capacity

~~b. Solid Waste Exports – The analysis assumes that (1) solid waste exports from Los Angeles County will continue during the planning period regardless of the in-County disposal capacity, and (2) the current and/or projected future waste exports (i.e., export need) are part of out-of-County disposal portion of the daily disposal capacity need shortfall.~~

The currently available out-of-County disposal capacity (i.e., export capacity) is assumed to include ~~as~~ (1) the amount of Los Angeles County solid waste currently exported to the existing out-of-County ~~c~~Class III landfills~~;~~, (2) the ~~with~~ expiration of the export agreements to Orange County landfills (Olinda Alpha Sanitary landfill in 2013 and 2015, and both Frank R. Bowerman Sanitary landfill and Prima Deshecha Canada Sanitary Landfills in 2015) subject to any future export agreements by Orange County;~~,~~ and (3) the ~~plus~~ additional 8,000 tpd in export via the ~~from~~ CSD's waste-by-rail system to Mesquite Regional Landfill by 2014.~~,~~

- Future Available Export Capacity

The currently available export capacity is also assumed to increase through (4a) ~~plus~~ additional 4,000 tpd from CSD's waste-by-truck to Mesquite Regional Landfill by 2010, and (b~~5~~) assuming development of proposed expansions of existing out-of-County ~~c~~Class III landfills and/or transformation facilities will become operational during the 15-year planning period.

Based on the available export capacity analysis (see **Alternative D in Table 4-~~23~~20**) the currently available solid waste export capacity is approximately ~~6,854~~5,713 tpd (six days per week) in ~~2005~~ 2006 and 5,715 tpd in 2007, ~~but drops to 6,533 tpd in 2006~~ and remains at that level until ~~2010~~2010. The export capacity increases to ~~10,533~~9,715 tpd in 2010 due to the additional 4,000 tpd from waste-by-truck to Mesquite Regional Landfill, and remains at same level until 2013. Despite the expiration of the export agreement with Orange County landfills, ~~T~~the available export capacity increases to ~~16,873~~16,873 tpd in 2014 due to the additional 8,000 tpd in export via the CSD's waste-by-rail system to Mesquite Regional Landfill. ~~via the CSD waste-by-rail system.~~ In 2016, the export capacity drops to ~~15,751~~15,206 tpd and remains at that level through the end of the planning period (~~2020~~2021).

Solid Waste Diversion Rate

The Scenario No. 6 analysis makes the following assumptions with respect to solid waste diversion rate:

- AB 939 Mandate

  The analysis assumes the ~~considers~~ achievement of AB 939 waste diversion mandate of 50 percent throughout the planning period. However, for 2006 and 2007, the diversion rate was adjusted to maintain consistency with the generation rate of 23,807,137 tons presented in **Table 4-5**, since there was no disposal capacity need in 2006 and 2007.~~in the year 2005 and thereafter through the year 2020.~~

- Increase in Diversion Rate

  This scenario demonstrates the effect an increase in diversion would have on the County's disposal needs. Starting from ~~However, beginning in~~ 2011, the diversion rate is assumed to increase~~d~~ to 51 percent and subsequently increase~~ing~~ by one percent each year, reaching 60 percent by the end of the planning period. An increase in diversion would be a tool the County may use to more easily meet its disposal needs. This increase in diversion represents a general trend of major jurisdictions within the County and State as a whole, but does not reflect any particular jurisdiction's policy. Future programs geared toward diversion are expected to take on greater significance, as the County nears the end of the planning period.

Alternative Technology Capacity

The Scenario No. 6 analysis also makes the following assumptions with respect to alternative technology capacity:

- This scenario assumes that conversion and other alternative technology facilities will be used to manage about 1,200 tpd starting 2010 and up to 10,000 tpd by 2021.

In-County Class III landfill expansion

The Scenario No. 6 analysis also makes the following assumptions with respect to in-County Class III landfill expansions:

- The scenario also assumes that all proposed expansions of existing in-County Class III landfills as identified in Chapter 7 (see **Section 7.5.2 and Table 7-3)** will be successfully permitted and developed to their full capacity, as proposed.

Remaining Daily Disposal Capacity Need (Shortfall)

The remaining daily disposal capacity need (shortfall) is listed in the last column of **Table 4-16.** Based on this analysis, there was no remaining daily disposal capacity need (shortfall) in 2006 and 2007. However, an excess in remaining daily disposal capacity will be experienced from 2008 (325 tpd) to the end of the 15-year planning period, where it becomes approximately 13,019 tpd. The excess in remaining daily disposal capacity varies from 325 tpd in 2008 to a maximum excess of 13,019 tpd in 2021.

Therefore, ~~except for the year 2005 and 2006,~~ additional disposal capacity (either in-County or out-of-County)~~,~~ would not be required in order to adequately provide for the solid waste disposal needs of the 88 cities and unincorporated County areas during the 15-year planning period.

~~Moreover, as in all the scenarios, transformation facilities are assumed to operate at their maximum permitted daily capacity and their combined capacity is shown in the scenario analysis tables. The resulting Class III landfill disposal capacity shortfall (with excess shown in parenthesis) is listed in the last column of **Table 4-18.** Based on this analysis, a shortfall in daily permitted disposal capacity of 880 tpd (six days per week) was experienced in 2005, and 520 tpd will be experienced in 2006. However, an excess disposal capacity will be experienced from 2007 (470 tpd) to the end of the 15-year planning period, where it becomes approximately 14,597 tpd. The excess disposal capacity varies from 2007 to 2020 with a maximum excess disposal capacity of 14,597 tpd in 2020.~~

~~In addition, the analysis also assumes an increase in capacity from 3,000 tpd up to 10,000 tpd will be managed utilizing conversion technologies. It is also assumed that the conversion technology facilities would not become operational until the year 2010. The conversion technology capacity is assumed to gradually increase from 1,500 tpd in 2010 to 10,000 tpd at the end of the planning period (2020).~~

4.10.7 Impact of Closure of Puente Hills Landfills Green Waste Alternative Daily Cover Program on the Disposal Capacity Need Analysis

Upon closure of Puente Hills Landfill~~s~~ (PHL) in 2013, the green waste which~~that~~ is

diverted (e.g., ~~318,634~~284,800 tons in ~~2005~~2006) ~~at Puente Hills Landfill~~ under the PHL's Alternative and Intermediate Daily Cover (ADC) Program ~~(see **Table 4-22**)~~ may have to re-enter into the waste stream and count as disposal tonnage, unless an alternative diversion program is developed to handle the green waste. Consequently, the in-~~c~~County disposal need and remaining daily disposal capacity need (shortfall) may increase by a proportional amount.

Based on the historical data of green waste intake at Puente Hills Landfill for ADC and other beneficial use since 1990, the current intake of 331,300 tons per year in 2006 is projected to increase to 391,312 tons per year by 2021.

Similarly, a comparison of the projected remaining daily disposal capacity need (shortfall) in the worst case scenario of 44,326 tpd or 13.8 million tons per year by 2021, establishes that in the worst case, the closure of Puente Hills Landfill ADC program will increase the disposal shortfall in Los Angeles County by average of three percent.

~~The historical and projected green waste intake at Puente Hills Landfill was 318,634 tons per year (tpy) in 2005 and projected as 376,351 tpy (or 1,206 tpd) by 2020 (see **Table 4-22**), whereas the projected disposal shortfall in Los Angeles County under the worst case scenario is 7,734 tpd in 2005 or 41,028 tpd (or 12.8 million tpy) by 2020 (see **Tables 4-12 and 4-20**). In the worst-case scenario, the closure of Puente Hills Landfill ADC program will increase the disposal shortfall in Los Angeles County by an average of three percent.~~

Therefore, the impact of termination of Puente Hills Landfill ADC program to the overall in-County remaining daily disposal capacity need (shortfall) is relatively minimal and/or~~, and~~ would not have a significant impact on the County's disposal strategy. As such~~Therefore~~, no Disposal Capacity Need Analysis Scenario is devoted ~~included~~ in this Chapter for this impact.

However, the impact to the diversion rate of the jurisdictions that send green-waste to Puente Hills Landfill for ADC credit will be significant, since it could be the difference between meeting or failing to meet the 50 percent diversion mandate of AB 939~~AB 939 50 percent diversion mandate~~. As a result, affected jurisdictions would have to devise alternative means of recycling the green waste, such as by supporting the development and use of conversion and other alternative technology facilities within the region.

4.11 SUMMARY

The preceding section analyzed the County's disposal need under ~~seven~~ six scenarios. ~~The t~~This Section summarizes the analysis and its findings:

The description of the variables in each scenario is summarized in **Table 4-10~~1~~**. The export need under each scenario is summarized in **Table 4-17~~19~~** and Figure **4-2**. The remaining daily disposal capacity need (shortfall) under each scenario is summarized in **Table 4-18~~20~~** and **Figure 4-3**.

In all the scenarios, ~~the~~ solid waste exports are considered part of the out-of-County disposal regardless of whether the export occurred during a period of adequate or inadequate in-County disposal capacity (see **Table 4-10~~1~~**). As a result, (1) "export need" represents the estimated amount of solid waste that could not be managed ~~disposed~~ at in-County ~~c~~Class III landfills, transformation facilities, and alternative technology facilities due to lack of in-County ~~c~~Class ~~III landfill~~ disposal capacity (see **Table 4-17 and Figure 4-2**), (2) "available export capacity" represents the anticipated amount of out-of-County ~~c~~Class III landfill disposal capacity available for Los Angeles County waste exports, and (3) the remaining daily disposal capacity need ~~"~~(shortfall)~~"~~ represents the amount of solid waste that cannot be managed both in-County and out-of-County. (See **Table ~~4-19 and~~ 4-18~~20~~,** and **Figures 4-2 ~~and 4-3~~**).

This ~~shortfall~~ remaining daily disposal capacity need (shortfall) would have to be managed by a combination of various means such as increasing use of out-of-County disposal capacity, increasing ~~recycling~~ the diversion rate, using ~~conversion~~ alternative(e.g., conversion) technology facilities, etc., to meet the Siting Element requirement of providing 15-years of adequate disposal capacity.

Furthermore, the ~~c~~Class III landfill disposal capacity need described in the various scenarios (**Tables 4-11~~2~~ to 4-16~~18~~**) ~~do not~~ excludes the current and projected future exports under the status quo. Therefore~~However~~, unlike the disposal capacity need analysis in the 1997 CSE, the daily disposal capacity export need in these scenarios represent the total amount of solid waste that needs to be exported out of the County, and the ~~shortfall~~ remaining daily disposal capacity need (shortfall) represents the amount that still needs to be disposed even after taking into account the currently available out-of-County disposal export capacity.

Under all the Scenarios, there is an ~~existing~~ export need in ~~2005~~ 2006 and throughout majority of the planning period with a spike in the export need in 2014 reflecting the closure of Puente Hills Landfill. Since there was adequate out-of-

County Class III landfill existing for the current export need, there is no remaining daily disposal capacity need (shortfall) in 2006 and 2007. ~~There is a disposal shortfall in 2005 and 2006 for all the scenarios and throughout the planning period for Scenarios 1 and 2.~~ However, there was a remaining daily disposal capacity need (shortfall) in Scenarios 1 through 4 for the remainder of the planning period. ~~For Scenario 3, there is a mixture of disposal shortfall and excess capacity during the rest of the planning period.~~ There is a diminishing of the export need and remaining daily disposal capacity need (shortfall) from Scenarios 1 (Worst Case Scenario) to 6 (Best Case Scenario) as other waste management alternatives are progressively incorporated into the analysis. There is also an excess disposal capacity for ~~the rest of~~ the planning period for Scenarios 5 ~~4~~ to 6 ~~7~~. ~~There is a diminishing of the export need and disposal shortfall from Scenarios 1 (Worst Case Scenario) to 7 (Best Case Scenario) as other waste management alternatives are progressively incorporated into the analysis.~~

~~Therefore, u~~Under Scenarios Nos. 1, 2, ~~and~~ 3, and 4, the solid waste disposal capacity needs of all 88 cities and the unincorporated County areas could not be met in-County (or out-of-County) during the 15-year planning period (see **Table 4-17 and 4-18**).

However, the ~~D~~development of conversion technology facilities within the County (Scenario No. 3), and a gradual increase in the Countywide diversion rate to 60 percent (Scenario No. 4,) would assist the County's ability to meet its disposal needs. ~~as demonstrated in Scenario 4, 5, 6, and 7~~. Since, ~~W~~when taken together, these measures would substantially reduce the amount of waste exported to a level that can more likely be accommodated by out-of-County landfills. ~~and the available transportation infrastructure.~~

Furthermore, Scenario Nos. 5 and 6 ~~3~~ demonstrates that the County would ~~not~~ be able to meet its disposal needs through the 15-year planning period by successfully permitting and developing all proposed in-County landfill expansions, and utilizing up to 15,206 ~~11,751~~ tpd out-of-County disposal capacity by 2021 in addition to increase in diversion rate to 60 percent by 2021 and utilization of up to 10,000 tpd of alternative technology capacity.

Out-of-County landfills (see Tables **4-201~~, Figures~~Tables 9-1 and 9-2**) have been identified which could provide the capacity needed to meet these needs. However, it remains uncertain whether such capacity will be fully accessible to waste originating in Los Angeles County (see **Table 9-5 and 9-6**). Moreover, ~~A~~adequate transportation infrastructure (e.g., a waste-by-rail system capable of handling up to 8,000 tpd or more) must be developed in order to access the~~at~~ capacity. Also,

~~such~~these out-of-County landfills may receive waste from other cities and counties, with whom Los Angeles County jurisdictions would be competing for their~~at~~ capacity.

However, as indicated in **Fact Sheet 9-1**, **Fact Sheet 9-2**, and **Table 4-20~~1~~ and 9-3**, the County Sanitation Districts of Los Angeles County (CSD) completed acquisition of the Mesquite Regional Landfill in Imperial County. The Mesquite Regional Landfill has a permitted daily capacity of 20,000 tpd (out of which 19,000 tons could be received from out-of-County sources such as Los Angeles County) and with an expected 100-year lifespan. The CSD has also entered into a purchase agreement for the site of Eagle Mountain Landfill in Riverside County. However, Eagle Mountain Landfill (also with a permitted daily capacity of 20,000 tpd) remains in litigation and its future is uncertain. In addition, CSD is~~are~~ in the process of planning, designing and developing a Waste-by-Rail (WBR) system that could transport up to 8,000 tpd to Mesquite Regional Landfill. Additionally, CSD is also negotiating export of about 4,000 tpd of Los Angeles County solid waste by truck to Mesquite Regional Landfill for disposal.

Projecting future shortfalls or excess disposal capacity is an estimate at best. It is a very difficult undertaking due to various factors~~,~~; for example, ~~including~~ the dynamic nature of the solid waste management system in the County which is heavily impacted by the decisions of 89 jurisdictions and their waste management service providers, and other factors such as changes in regulatory requirements, disposal rates, fuel costs, and traffic congestion. ~~As a result, lack of realistic and proper solid waste management planning in the County could have serious health and safety, economic, and environmental consequences.~~ Therefore, development of any type of solid waste management facility~~ies~~ (e.g., a transfer/processing facility, composting facility, conversion technology facilities, etc.) continue to become more difficult and siting a disposal facility much more complex and costly. As a result, lack of realistic and proper solid waste management planning in the County could have serious health and safety, economic, and environmental consequences.

The ~~preceding~~ disposal capacity need analysis (See Section 4.9), demonstrates the need and importance of pursuing a multi-faceted approach that incorporates:

- Continued reliance on in-County disposal.
- Continued utilization of currently available out-of-County disposal facilities capacity.

- Continued enhancement of jurisdictions diversion efforts (gradually increasing Countywide diversion rate from 50 to 60 percent).

~~Expansion of existing in-County Class III landfills~~.

- Aggressively pursuing development and use of conversion and other alternative technologies.~~,~~

- Successful permitting and development of expansion of existing in-County Class III landfills

- Use and development of out-of-County ~~c~~Class III landfills located in California (or equivalent Subtitle D landfills located outside California).

- Aggressively pursuing development of the in-County infrastructure (e.g., transfer stations/material recovery facilities, rail-access inter-modal facilities, etc.) necessary to access out-of-County landfill capacity.

4.12 CONCLUSIONS

The preceding discussions have demonstrated that the combination of increased diversion rate, development of alternative technologies, potential expansion of existing in-County Class III landfills, and use of out-of-County Class III landfills (identified in Chapters 3, 5,7 and 9) would address the disposal need ~~requirements~~ of all the jurisdictions in Los Angeles County for the 15-year planning period (2006-2021).

However, based on past and current experiences in siting new or ~~expanded capacity~~ expanding existing solid waste management facilities, it must be recognized that many (or all) of the ~~sites~~ facilities identified may encounter strong opposition during the permitting process, and that not all of the ~~sites~~ facilities may be approved. And that ~~E~~even if a ~~site~~ facility is successfully permitted, the total approved capacity and daily capacity may be substantially less than its capacity requested by the project proponent.

~~Therefore, b~~Based on the Disposal Capacity Need/~~Shortfall~~ analyses and the foregoing discussion, the following can be concluded:

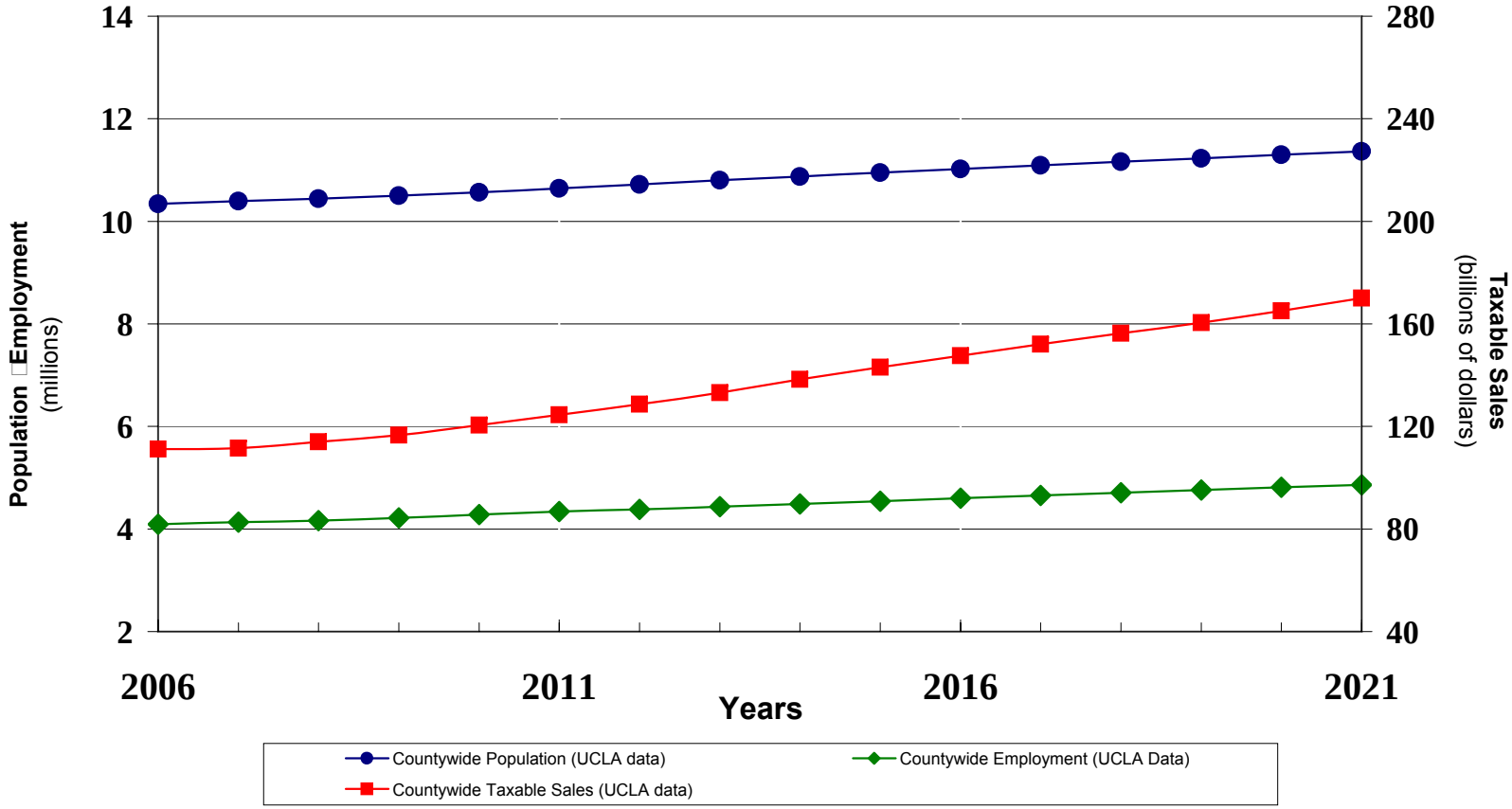
- The planning process must incorporate adequate reserve daily capacity to handle unanticipated disposal needs as well as daily and seasonal variations in waste quantities.

- The planning process should include a variety of alternatives that will ensure that the provision of solid waste disposal services remain uninterrupted during the planning period and beyond. This must ~~may~~ include increased recycling and other diversion efforts, creation/expansion of markets for the recycled materials and products with recycled content, development of alternative facilities (e.g., conversion technology and other alternative technology facilities, out-of-County disposal facilities), and development of the in-County/out-of-County infrastructure necessary for access to out-of-County disposal facilities including MRF/TS, intermodal facilities, waste-by-rail system, and other transportation modes.

- The anticipated disposal needs of Los Angeles County cannot be met by pursuing a single alternative (i.e., landfill expansions, ~~new landfills,~~ transformation technologies, out-of-County disposal, etc.). Jurisdictions in Los Angeles must work on all fronts simultaneously in order to avert the remaining daily disposal capacity need (shortfall~~s~~) in the short, medium and long term. As a part of this effort, economic incentives must be formulated to promote development of conversion technology and other viable alternatives to landfill technology.

- Since it takes up to 10 years or more to fully permit ~~new or~~ expanded solid waste management facility capacity, the planning process must begin now in order to ensure the uninterrupted availability of solid waste disposal services, at reasonable cost, to serve the disposal need of all residents and businesses in Los Angeles County.

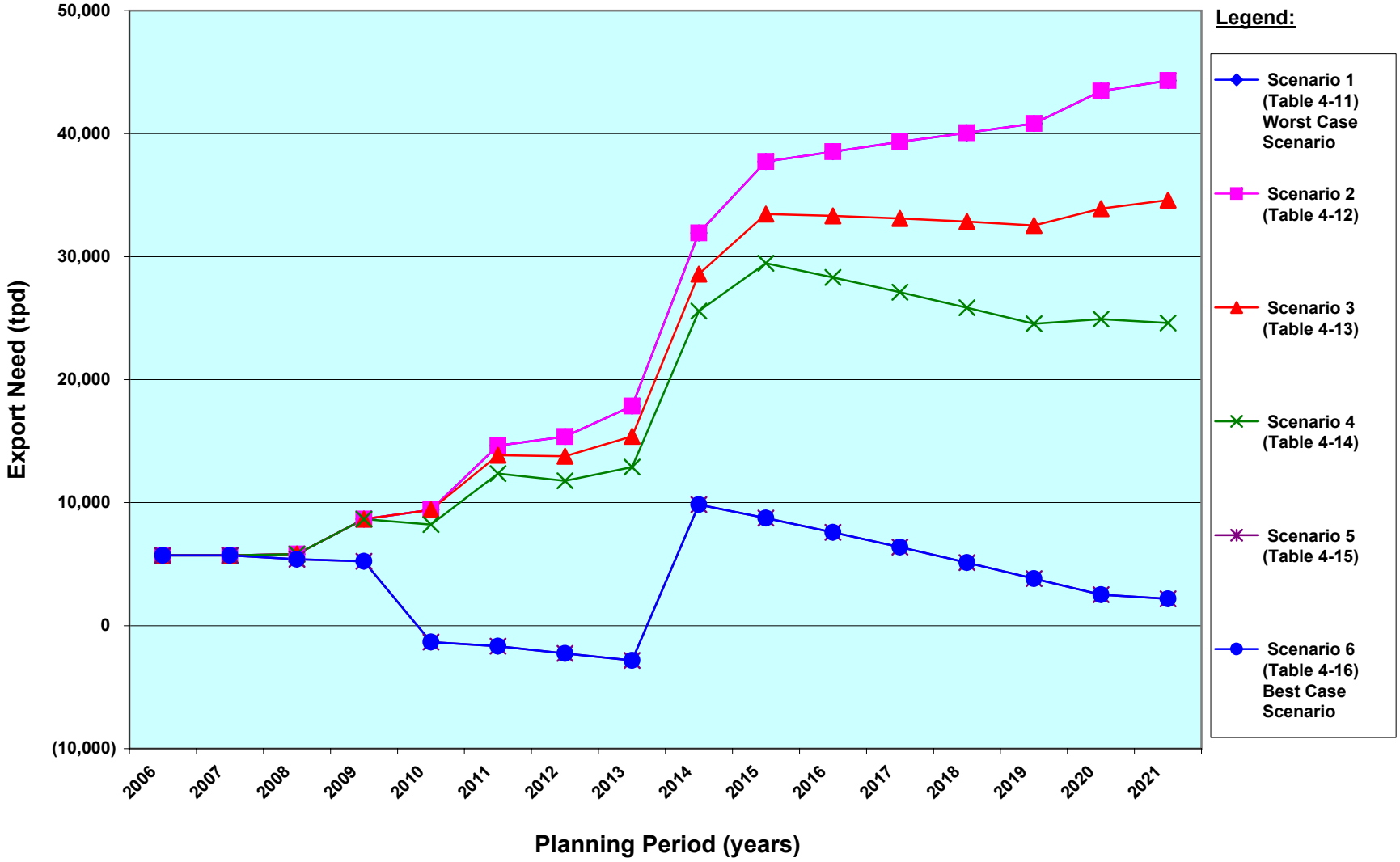
Figure 4-1
Graph of Population, Employment, and Taxable Sales
in Los Angeles County



Notes:

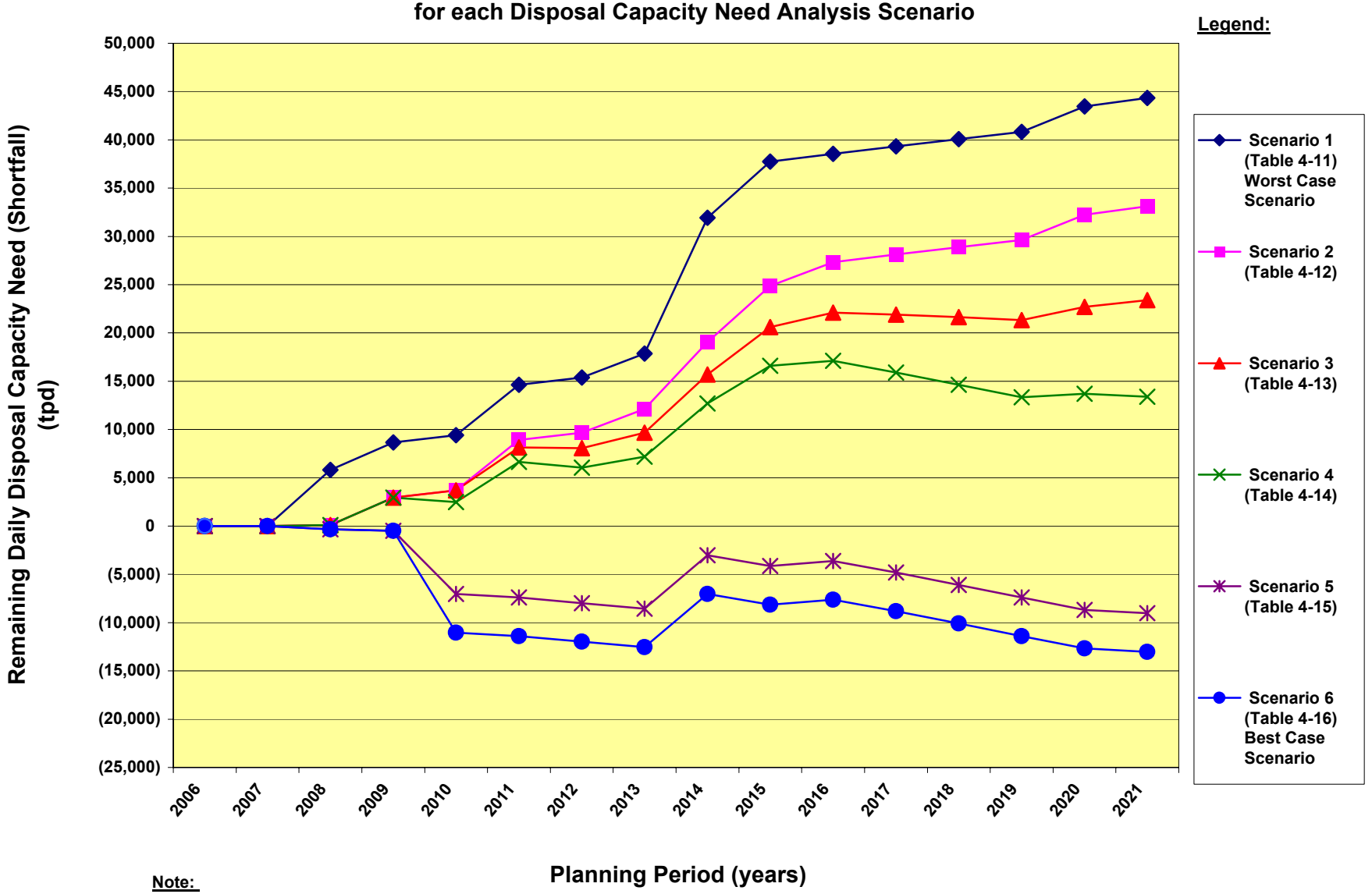
1. Population, Employment and Taxable Sales are based on Countywide Population, Employment and Taxable Sales Projection from the UCLA, Long Term Forecast of Los Angeles County, dated June 2007.
2. See Table 4-6 for projection data.

Figure 4-2
Los Angeles County Solid Waste Disposal Export Need
for each Disposal Capacity Need Analysis Scenario



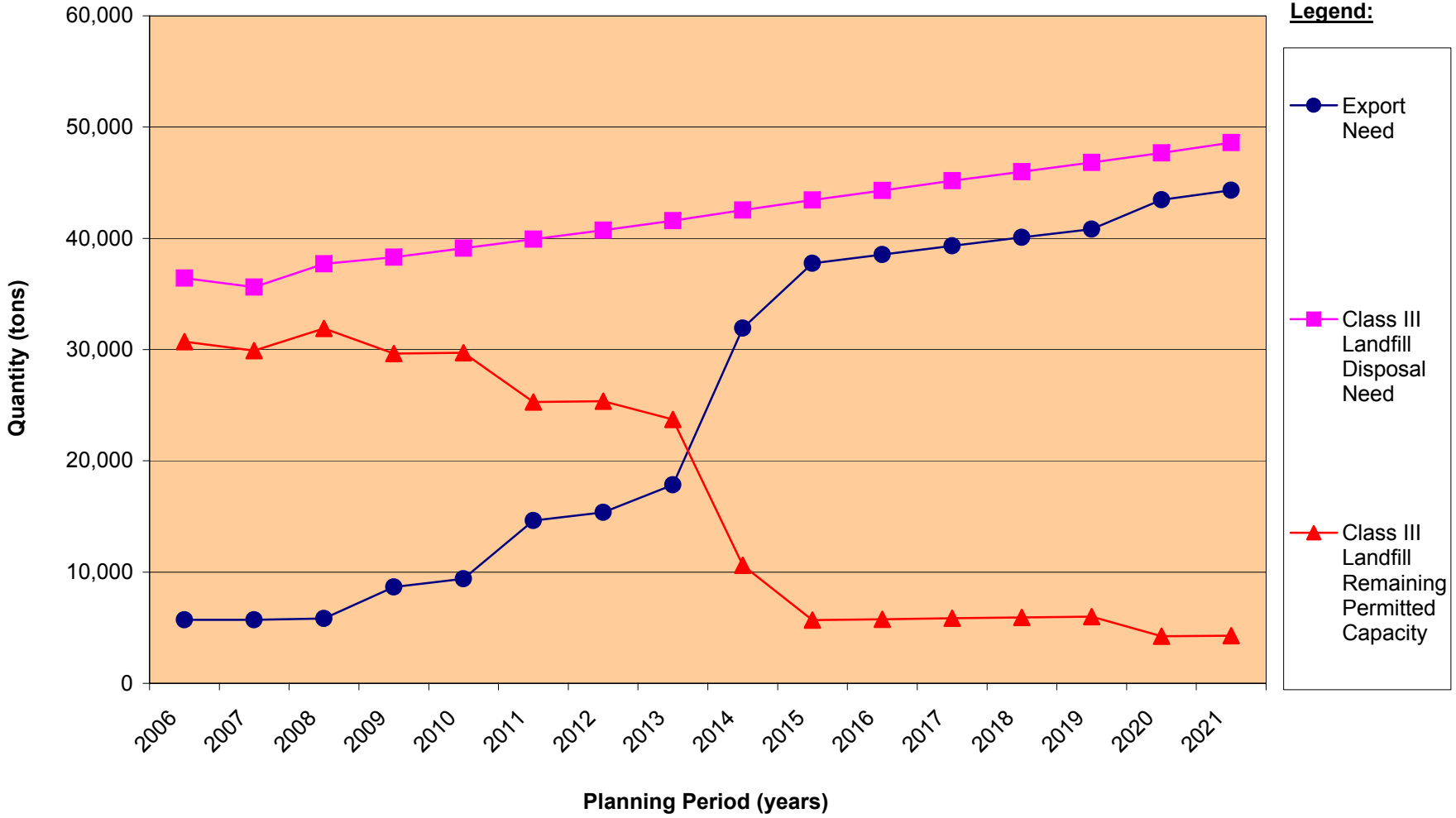
Notes:
1. The export need in Scenario No. 1 is the same as in Scenario No. 2; and the export need in Scenario No. 5 is almost identical to Scenario No. 6.
2. "Tpd" means tons per day.

Figure 4-3
Los Angeles County
Remaining Solid Waste Daily Disposal Capacity Need (Shortfall) for each Disposal Capacity Need Analysis Scenario



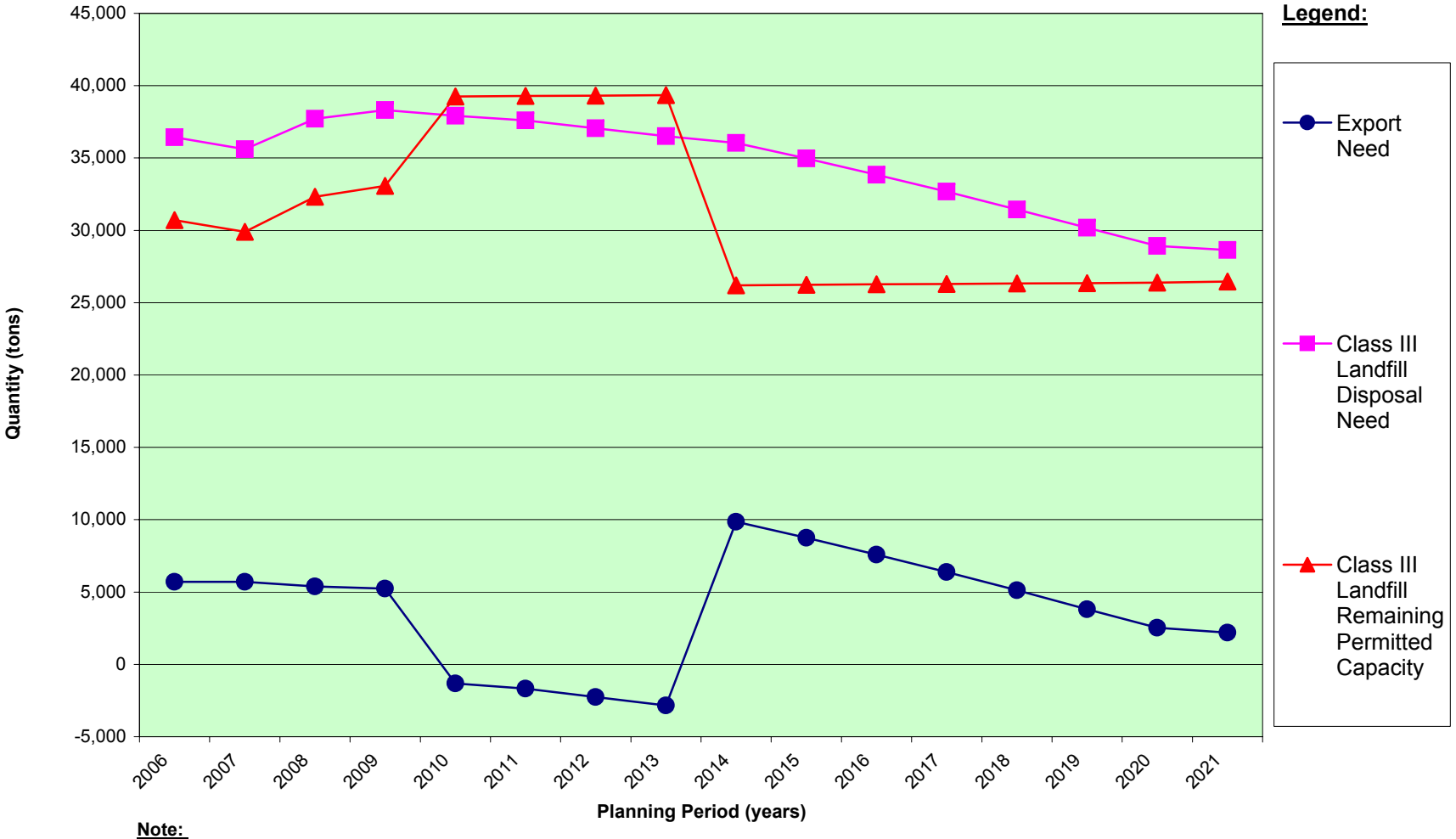
Note:
1. "Tpd" means tons per day.

Figure 4-4
Los Angeles County Class III Landfill Disposal Need,
Class III Landfill Remaining Permitted Disposal Capacity, and Export Need
for the Disposal Capacity Analysis Worst Case Scenario (Scenario 1)



Note:
1. The Disposal Capacity Need Analysis Worst-Case Scenario assumes utilization of only the exisitng in-County Class III landfills and transformation facilities during the planning period.

Figure 4-5
Los Angeles County Class III Landfill Disposal Need, Class III Landfill Remaining Permitted Disposal Capacity, and Export Need for the Disposal Capacity Analysis Best Case Scenario (Scenario 6)



Note:

1. The Disposal Capacity Need Analysis Best Case Scenario assumes (a) utilization of exisitng in-County Class III landfills and transformation facilities, (b) utilization of currently available out-of-County disposal capacity, (c) increase of diversion rate up to 60□ by 2021, (d) development of conversion technology facilities capacity (from 1,200 tpd in 2010 and upto 10,000 tpd by 2021), (e) development of all proposed in-County Class III landfill expansions, and (f) utilization of additional future available out-of-County disposal facility capacity, during the planning period.

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TABLE 4-1

REMAINING PERMITTED COMBINED DISPOSAL CAPACITY OF EXISTING SOLID WASTE CLASS III LANDFILLS IN LOS ANGELES COUNTY (As of January 1990 and January 1991)

Class III Landfills	SWIS No. ~~Solid Waste Facility Permit~~	Days in Operation (per week)	Jan. 1991 SWFP Daily Capacity	CUP/LUP Daily Capacity	1990 Average Daily Tonnage (6 days/wk)	Quantity of Municipal Solid Waste Disposed in Year 1990	Projected remaining permitted capacity (effective Jan. 1, 1991)		Estimated remaining permitted capacity (effective Jan. 1, 1990)	
			Tons	Tons	Tons	~~Million~~ Tons (Millions)	~~Million~~ Tons (Millions)	~~Million~~ Cubic Yards (d) (Millions)	~~Million~~ Tons (Millions)	~~Million~~ Cubic Yards (d) (Millions)
Antelope Valley	19-AA-0009	7	350	-	400	0.125	0.925	2.6	1.050	3.0
Azusa Land Reclamation	19-AA-0013	6	6,500	6,500	2,756	0.86	0	0	0.86	1.23
BKK	19-AF-0001	6	12,000(a)	-	9,744	3.04	15.96	23.8	19.00	28.3
Bradley West	19-AR-0008	6	7,000	9,500	1,923	0.6	11.8	19.7	12.4	20.7
Brand Park	19-AA-0006	5	104	-	48	0.015	0.306	0.875	0.321	0.918
Burbank	19-AA-0040	5	240	-	196	0.061	11.44	22.0	11.30	22.1
Calabasas	19-AA-0056	6	3,500	-	2,724	0.85	15.155	21.6	16.005	22.8
Chiquita Canyon	19-AA-0052	7	5,000	-	1,763	0.55	1.78	2.2	2.33	2.9
Lancaster	19-AA-0050	6	450	-	295	0.092	0.15	0.5	0.24	0.8
Lopez Canyon	19-AA-0820	5	4,100(b)	4,000	3,109	0.97	4.2	7.0	5.2	8.6
Pebbly Beach	19-AA-0061	6	30	-	10	0.003	0.097	0.16	0.100	0.16
Pitchess Honor Rancho	19-AA-0057	5	23	-	17	0.0054	2.24	3.73	2 .25	3.74
Puente Hills	19-AA-0053	6	12,000	13,200	11,859	3.7	7.5	10.7	11.2	0.16
San Clemente	19-AA-0063	5	1	-	1	0.002	0.024	0.034	0.026	0.037
Scholl Canyon	19-AA-0012	6	3,400	-	2,179	0.68	13.32	19	14.00	20
Spadra	19-AA-0015	6	3,000	-	2,724	0.85	6.95	9.93	7.80	11.14
Sunshine Canyon	19-AR-0002	6	7,000	6,000	3,141	0.98	0.4	1.64	1.4	5.66
Two Harbors	19-AA-0062	5	3.5	-	3.5	0.000088	0.0073	0.0104	0.0074	0.0105
Whitter (Savage Canyon)	19-AH-0001	6	350	-	353	0.11	6.39	10.6	6.50	10.8
TOTAL			**63,950(c)**		**43,245**	**13.49**	**98.65**	**156.08**	**112.15**	**177.42**

FOOTNOTES:
(a) Daily capacity established in June 1990~~6/90~~; Notice and Order as amended by the City of West Covina's Local Enforcement Agency.
(b) Daily capacity established by Report of Disposal Site Information and Courts.
(c) Average daily tonnage, Monday through Friday.
(d) Based on in-place solid waste density provided by landfill operators.

NOTES:
1. ~~This~~ Table (4-1) is based ~~upon~~ on a table that is included in the Task Force's March 28, 1991, report to the CIWMB, (See Appendix 4A, Los Angeles County Countywide Siting Element).
2. "SWFP" means Solid Waste Facility Permit
3. "CUP" means Conditional Use Permit
4. "LUP" means Land Use Permit

Source: Los Angeles County Department of Public Works, January 1997.

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TABLE 4-2 ~~(PAGE 1 OF 2)~~

SUMMARY OF YEARLY SOLID WASTE DISPOSAL QUANTITIES[1] (in TONS) FOR LOS ANGELES COUNTY

FROM 1990 TO ~~1995~~-2006 ~~IN TONS~~

Year~~ly~~	In-County Disposal at Class III Landfills	In-County Disposal at Transformation Facilities	Exports	Imports	~~In-County Unclassified Landfill~~ Disposal at in-County Permitted Inert Waste Landfills	Total Disposal at Class III Landfills and Transformation Facilities, Including Exports	Total Disposal at Class III Landfills and Transformation Facilities, Including Exports and Excluding Imports	Total Disposal at Class III Landfills, Transformation Facilities, and ~~Unclassified landfill~~ Inert Waste Landfills, Including Exports and Excluding Imports
	A	B	C	D	E	F A B C	G A B C-D	H A B C E-D
1990	13,492,000	312,000	N/A[2]	N/A	2,108,000	13,804,000	13,804,000	15,912,000
1991	12,230,000	465,000	N/A	N/A	867,000	12,695,000	12,695,000	13,562,000
1992	11,922,000	523,000	22,000	N/A	867,000	12,467,000	12,467,000	13,334,000
1993	11,300,000	518,000	122,000	N/A	739,000	11,940,000	11,940,000	12,679,000
1994	11,590,000[3]	526,000	128,000	305,000	522,000	12,244,000	11,939,000	12,461,000
1995	11,646,000	573,000	52,000	774,000	530,000	12,271,000	11,497,000	12,027,000
1996	11,356,744	497,735	N/A	801,308	1,100,405	N/A	N/A	N/A
1997	10,389,210	439,673	N/A	374,318	869,542	N/A	N/A	N/A
1998	11,212,563	427,725	N/A	339,762	1,197,460	N/A	N/A	N/A
1999	9,950,602	455,245	738,323	210,600	1,010,000	11,144,170	10,933,570	11,943,570
2000	10,078,989	510,455	794,910	229,320	1,332,572	11,384,354	11,155,034	12,487,606
2001	9,825,357	547,466	1,095,711	182,832	1,296,425	11,468,534	11,285,702	12,582,127
2002	8,973,755	539,542	2,009,845	158,496	1,045,960	11,523,142	11,364,646	12,410,606
2003	9,152,334	539,188	2,207,873	153,504	919,600	11,899,395	11,745,891	12,665,491
2004	9,110,298	548,249	2,308,181	156,000	1,247,500	11,966,728	11,810,728	13,058,228
2005	9,574,072	535,225	2,177,097	235,872	85,678	12,286,394	12,050,522	12,136,200
2006	9,583,227	537,733	1,782,609	266,448	101,748	11,903,569	11,637,121	11,738,869

Notes/Assumptions:

Column A: Total Disposal at Class III landfills in Los Angeles County. Data for the period 1990-1995 includes waste imported from jurisdictions outside the County Data for the period. 1996-2005 does not include waste imported from jurisdictions outside the County.

Column B: Total disposal at transformation facilities in Los Angeles County. Data for the period 1990-1995 includes waste imported from jurisdictions outside the County Data for the period. 1996-2005 does not include waste imported from jurisdictions outside the County. 1990 excludes 500 tons/day of ash which were landfilled; ~~,~~ for other years, ash has been diverted from disposal.

Column C: Waste exported by jurisdictions in Los Angeles County to disposal facilities located outside the County.

Column D: Waste which originated outside Los Angeles County but disposed at Class III landfills and transformation facilities located in Los Angeles County which originated outside the County.

Column E: Total inert waste disposed by jurisdictions in Los Angeles County at permitted~~, unclassified~~ inert waste landfills (i.e, Registration and Full Solid Waste Facility Permit tier).

Column F: Includes disposal by jurisdictions in Los Angeles County at in-County Class III landfills and transformation facilities, and the waste exported to disposal facilities located outside the County.

Column G: ~~F~~Includes disposal by jurisdictions in Los Angeles County at Class III landfills, Transformation facilities, and the waste exported to disposal facilities located outside the County. For 1994 and 1995, the total excludes waste imported from jurisdictions outside the Los Angeles County. Data for the period 1999-2005 does not include waste imported from jurisdictions outside the County.

Column H: ~~G~~ Includes disposal at Class III landfills, transformation facilities, permitted Inert waste ~~Unclassified~~ landfills, and the waste exported for disposal at landfills outside Los Angeles County. For 1994 and 1995, the total excludes waste imported from jurisdictions outside the Los Angeles County. Data for the period 1999-2005 also does not include waste imported from jurisdictions outside the County.

[1] See Chapter 4, ~~Section~~ ~~Subs~~Sections ~~4.3.2 and 4.3.3~~ 4.4 for discussion.
[2] N/A means ~~.Not~~ not available
[3] Excludes debris generated as a result of Northridge Earthquake.
Source: Los Angeles County Department of Public Works, September~~January~~ 1997.

TABLE 4-23 (PAGE 2 OF 2)

SUMMARY OF YEARLY SOLID WASTE DISPOSAL QUANTITIES[1] (in CUBIC YARDS) FOR LOS ANGELES COUNTY

FROM 1990 TO 19952006 IN TONS

Yearly	In-County Disposal at Class III Landfills	In-County Disposal at Transformation Facilities	Exports	Imports	In-County Unclassified Landfill Disposal at in-County Permitted Inert Waste Landfills	Total Disposal at Class III Landfills and Transformation Facilities, Including Exports	Total Disposal at Class III Landfills and Transformation Facilities, Including Exports and Excluding Imports	Total Disposal at Class III Landfills, Transformation Facilities, and Unclassified landfill Permitted Inert Waste Landfills, Including Exports and Excluding Imports
	A	B	C	D	E	F A B C	G A B C-D	H A B C E-D
1990	22,486,667	520,000	N/A[2]	N/A	3,513,333	23,006,667	23,006,667	26,520,000
1991	20,383,333	775,000	N/A	N/A	1,445,000	21,158,333	21,158,333.	13,562,000 22,603,333
1992	19,870,000	871,667	36,667	N/A	1,445,000	20,778,333	20,778,333	13,334,000 22,223,333
1993	18,833,333	863,333	203,333	N/A	1,231,667	19,900,000	19,900,000	12,679,000 21,131,667
1994	19,316,667[3]	876,667	213,333	508,333	870,000	20,406,667	11,939,000 19,898,333	12,461,000 20,768,333
1995	19,410,000	955,000	86,667	1,290,000	883,333	20,451,667	19,161,667	20,045,000
1996	18,927,907	829,558	N/A	N/A	N/A	N/A	N/A	N/A
1997	17,315,350	732,788	N/A	N/A	N/A	N/A	N/A	N/A
1998	18,687,605	712,875	N/A	N/A	N/A	N/A	N/A	N/A
1999	16,584,337	758,742	1,230,538	351,000	1,683,333	18,573,617	18,222,617	19,905,950
2000	16,798,315	850,758	1,324,850	382,200	2,220,953	18,973,923	18,591,723	20,812,677
2001	16,375,595	912,443	1,826,185	304,720	2,160,708	19,114,223	18,809,503	20,970,212
2002	14,956,258	899,237	3,349,742	264,160	1,743,267	19,205,237	18,941,077	20,684,343
2003	15,253,890	898,647	3,679,788	255,840	1,532,667	19,832,325	19,576,485	21,109,152
2004	15,183,830	913,748	3,846,968	260,000	2,079,167	19,944,547	19,684,547	21,763,713
2005	15,956,787	892,042	3,628,495	393,120	142,797	20,477,323	20,084,203	20,227,000
2006	15,972,045	896,222	2,971,015	444,080	169,580	19,839,282	19,395,202	19,564,782

Notes/Assumptions:

Column A: Total Disposal at Class III landfills in Los Angeles County. Data for the period 1990-1995 includes waste imported from jurisdictions outside the County Data for the period. 1996-2005 does not include waste imported from jurisdictions outside the County.

Column B: Total disposal at transformation facilities in Los Angeles County. Data for the period 1990-1995 includes waste imported from jurisdictions outside the County Data for the period. 1996-2005 does not include waste imported from jurisdictions outside the County. 1990 excludes 500 tons/day of ash which were landfilled; for other years, ash has been diverted from disposal.

Column C: Waste exported by jurisdictions in Los Angeles County to disposal facilities located outside the County.

Column D: Waste which originated outside Los Angeles County but disposed at Class III landfills and transformation facilities located in Los Angeles County which originated outside the County.

Column E: Total inert waste disposed by jurisdictions in Los Angeles County at permitted, unclassified inert waste landfills (i.e, Registration and Full Solid Waste Facility Permit tier).

Column F: Includes disposal by jurisdictions in Los Angeles County at in-County Class III landfills and transformation facilities, and the waste exported to disposal facilities located outside the County.

Column G: FIncludes disposal by jurisdictions in Los Angeles County at Class III landfills, Transformation facilities, and the waste exported to disposal facilities located outside the County. For 1994 and 1995, the total excludes waste imported from jurisdictions outside the Los Angeles County. Data for the period 1999-2005 does not include waste imported from jurisdictions outside the County.

Column H: GIncludes disposal at Class III landfills, transformation facilities, permitted Iinert waste Unclassified landfills, and the waste exported for disposal at landfills outside Los Angeles County. For 1994 and 1995, the total excludes waste imported from jurisdictions outside the Los Angeles County. Data for the period 1999-2005 also does not include waste imported from jurisdictions outside the County.

Source: Los Angeles County Department of Public Works

[1] See Chapter 4, Section Subsections 4.3.2 and 4.3.3 4.4 for discussion. A conversion factor of 1,200 pounds per cubic yard was assumed for converting quantities from tons to cubic yards.
[2] "N/A" means not Not available
[3] Excludes debris generated as a result of Northridge Earthquake.

Source: Los Angeles County Department of Public Works

TABLE 4-4
DISPOSAL CAPACITY OF INERT WASTE LANDFILLS LOCATED IN LOS ANGELES COUNTY
(As of December 31, 2006)

No.	Facility	Location (City)	SWIS No.	Type of Solid Waste Facility Permit	Type of Operation	Operation days/week	SWFP Maximum Daily Capacity	LUP/CUP Maximum Daily Capacity	2006 Average Daily Disposal Rate 6 days/week (See Note 1)	Amount Disposed in 2006 (See Note 2)	Amount Disposed in 2007 (See Note 2)	Estimated Remaining Permitted Capacity (as of January 1, 2006) (See Note 3)	
							tons per day	tons per day	tons per day	Tons (millions)	Tons (millions)	Tons (millions)	Tons (millions)
	Permitted Inert Waste Landfills												
1	**Azusa Land Reclamation**	Asuza	19-AA-0013	Full	CDI Waste Disposal Facility	6	6,500	TBD	538	0.17	0.124	36.54	44.56
2	**Peck Road Gravel Pit**	Monrovia	19-AA-0838	Full	CDI Waste Disposal Facility	6	1,210	TBD	2	0.00	0.00	9.79	6.53
	Subtotal						**7,710**	**---**	**540**	**0.17**	**0.124**	**46.33**	**51.09**
	Inert Debris Engineered Fill Operation												
3	**Chandler's Palos Verdes Sand & Gravel**	Rolling Hills Estates	19-AA-0004	Enforcement Agency Notification	Inert Debris Engineered Fill Operation	6	75	TBD	0	0.12	0.02	N/A	N/A
4	**Hanson Aggregates (Livingston-Graham)**	Irwindale	19-AA-0044	Enforcement Agency Notification	Inert Debris Engineered Fill Operation	6	1,600	TBD	628	0.20	0.12	N/A	N/A
5	**Lower Azusa Reclamation Project**	Arcadia	19-AA-0868	Enforcement Agency Notification	Inert Debris Engineered Fill Operation	6	6,000	TBD	2062	0.64	0.53	N/A	N/A
6	**Nu-Way Arrow Reclamation**	Irwindale	19-AA-1074	Enforcement Agency Notification	Inert Debris Engineered Fill Operation	6	7,500	TBD	3279	1.03	0.92	N/A	N/A
7	**Nu-Way Live Oak Reclamation**	Irwindale	19-AA-0849	Enforcement Agency Notification	Inert Debris Engineered Fill Operation	6	6,000	TBD	5660	1.77	0.24	N/A	N/A
8	**Reliance Pit #2 (CalMat) Vulcan**	Irwindale	19-AA-0854	Enforcement Agency Notification	Inert Debris Engineered Fill Operation	6	6,000	TBD	14	0.00	0.00	N/A	N/A
9	**Sun Valley (CalMat/Vulcan)**	Los Angeles	19-AR-1160	Enforcement Agency Notification	Inert Debris Engineered Fill Operation	6	1,823	TBD	1298	0.40	0.57	N/A	N/A
	Subtotal						**21,498**	**---**	**12,940**	**4.17**	**2.40**	**N/A**	**N/A**
	Inert Waste Landfill with Pending Classification												
10	**Atkinson Brick Company**	Los Angeles	N/A	None	N/A	6	-	TBD	87	0.03	0.10	N/A	N/A
11	**Montebello Land & Water Co.**	Montebello	19-AA-0019	None	N/A	6	20	TBD	0	0.00	0.00	N/A	N/A
12	**Strathern Landfill**	Sun Valley	19-AR-1016	None	N/A	6	2,700	TBD	1,243	0.39	0.35	N/A	N/A
	Subtotal						**2,720**	**---**	**1,330**	**0.42**	**0.45**	N/A	N/A
	GRAND TOTAL						**31,928**	**---**	**14,811**	**4.76**	**2.97**	**N/A**	**N/A**

NOTES:

1. Disposal quantities for 2006 are based on actual tonnages reported by owners/operators for inert waste generated within Los Angeles County and imported from outside Los Angeles County. Information is also based on the Solid Waste Management Fee invoices, the State Disposal Reporting System, and/or the Annual Tonnage Reports to the LEA.
2. Conversion factors are based on the in-place solid waste density provided by landfill operators, otherwise a conversion factor of 3,000 pound per cubic yard is used.
3. Estimated Remaining Permitted Capacity is based on landfill owner/operators responses to a written survey conducted by Los Angeles County Department of Public Works in August 2006, as well as a review of site specific permit criteria established by local land use agencies (e.g., the LEAs, CRWQCBs, and the SCAQMD).
4. Amount disposed in 2007 is shown for information only.
4. "N/A" means data is not available.
5. "TBD" means data is to be determined.
6. Totals do not include data indicated as "N/A" or "TBD".
7. Strathern Landfill is currently operating as an inert waste landfill with a permit from City of Los Angeles. The operator is in the process of obtaining an Enforcement Agency Notification from the City of Los Angeles to operate as an Inert Debris Engineered Fill Operation.

Source : Los Angeles County Department of Public Works, SWIMS (May 2008), and 2006 Annual Report on the Los Angeles County Countywide Siting Element, June 2008

TABLE 4-5
SOLID WASTE GENERATION BY LOS ANGELES COUNTY JURISDICTIONS IN 2006
BASED ON CLASS III LANDFILLS AND TRANSFORMATION FACILITIES DISPOSAL QUANTITIES
(Excluding Inert Waste Landfills)

	A	B	C	D	E	F
	In-County Disposal					
Year	Class III Landfills	Transformation Facilities	Out-of-County Disposal (Exports)	Total Disposal A+B+C	State Mandated Diversion Rate	Calculated Solid Waste Generation for 2006
	(Tons)	(Tons)	(Tons)	(Tons)	(Percent)	(Tons)
2006	9,583,227	537,733	1,782,609	11,903,569	50	23,807,137

+Excludes disposal at inert waste landfills.

Notes:

Column A : Total disposal at Class III landfills located in Los Angeles County. Does not include waste imported from jurisdictions outside Los Angeles County.

Column B : Total disposal at transformation facilities in Los Angeles County. Does not include waste imported from jurisdictions outside Los Angeles County.

Column C : Waste exported by jurisdictions in Los Angeles County to disposal facilities (Class III landfills only) located outside Los Angeles County.

Column D : Columns A + B + C

Column E : State mandated diversion rate of 50 percent was achieved in the year 2006.

Column F : Solid waste generation in 2006 is derived from the actual disposal amount of 11,903,569 tons and assumptions of 50 percent diversion rate. The 2006 generation rate is used as the base, data year to project the County's Class III landfill and transformation disposal needs through the year 2021. Disposal at inert waste landfills is excluded from these calculations.

Source : Los Angeles County Department of Public Works, SWIMS (May 2008), and 2006 Annual Report on the Los Angeles County Countywide Siting Element, June 2008

Table 4-6

LOS ANGELES COUNTY SOLID WASTE GENERATION PROJECTIONS FOR THE PLANNING PERIOD (2006-2021)

YEAR	POPULATION	EMPLOYMENT	TAXABLE SALES	B-Y RWG	B-Y NWG	RAF	NAF	TOTAL GENERATION (TONS)
2006	10,338,000	4,092,600	□111,200,000,000	9,998,998	13,808,139			23,807,137
2007	10,395,000	4,132,900	□111,500,000,000	9,998,998	13,808,139	1.00589304	1.006272441	23,952,672
2008	10,444,000	4,166,400	□114,000,000,000	9,998,998	13,808,139	1.015929818	1.021606201	24,264,761
2009	10,498,000	4,219,000	□116,600,000,000	9,998,998	13,808,139	1.027599981	1.039723082	24,631,611
2010	10,563,000	4,283,900	□120,500,000,000	9,998,998	13,808,139	1.043476181	1.065187998	25,141,980
2011	10,640,000	4,338,700	□124,500,000,000	9,998,998	13,808,139	1.059540617	1.08986862	25,643,402
2012	10,722,000	4,385,200	□128,700,000,000	9,998,998	13,808,139	1.075789506	1.114434497	26,145,084
2013	10,800,000	4,434,400	□133,200,000,000	9,998,998	13,808,139	1.092684327	1.140679159	26,676,405
2014	10,875,000	4,487,500	□138,400,000,000	9,998,998	13,808,139	1.111246028	1.170547772	27,274,433
2015	10,949,000	4,541,900	□143,100,000,000	9,998,998	13,808,139	1.128714674	1.198327008	27,832,682
2016	11,020,000	4,598,100	□147,600,000,000	9,998,998	13,808,139	1.145698539	1.225426872	28,376,702
2017	11,090,000	4,653,300	□152,100,000,000	9,998,998	13,808,139	1.162572953	1.252404564	28,917,941
2018	11,160,000	4,706,000	□156,300,000,000	9,998,998	13,808,139	1.178620192	1.277727906	29,428,066
2019	11,229,000	4,759,200	□160,500,000,000	9,998,998	13,808,139	1.194649608	1.303112333	29,938,855
2020	11,296,000	4,813,500	□165,100,000,000	9,998,998	13,808,139	1.211548769	1.330429711	30,485,032
2021	11,364,000	4,863,500	□170,100,000,000	9,998,998	13,808,139	1.229132907	1.359020312	31,055,639

Population: Countywide Population Projection (UCLA, Long Term Forecast for Los Angeles County, June 2007)
Employment: Countywide Employment Projection (UCLA, Long Term Forecast for Los Angeles County, June 2007)
Employment data from UCLA only accounts for non-farm employment.
Taxable Sales: Countywide Taxable Sales (Source of information is UCLA, Long Term Forcast of Los Angeles County, June 2007).
Taxable Sales data from UCLA considers the real dollar value.
B-Y RWG □ Base Year Residential Waste Generation. Calculation based on 1990 Residential Waste Generation factor (42 percent of total waste generation).
B-Y NWG □ Base Year Non-Residential Waste Generation. Calcuation based on 1990 Non-residential Waste Generation factor (58 percent of total waste
RAF □ Residential Adjustment Factor □ {(PR/PB)□[ER/EB□(CB/CR□TR/TB)]/2}/2
NAF □ Non-Residential Adjustment Factor □ [ER/EB□(CB/CR□TR/TB)]/2

The Adjustment Methodology Formula as adopted by the CIWMB is expressed as follows:

Estimated Solid Waste Generation for the Reporting Year □ [(B-Y RWG) (RAF)] □ [(B-Y NWG)(NAF)]

PR□ Population in the Reporting Yea
PB□ Population in the Base Year
ER□ Employment in the Reporting Year
EB□ Employment in the Base Year
CR□ Consumer Price Sales in the Reporting Year
CB□ Consumer Price Index in the Base Year
TR□ Taxable Sales in the Reporting Year
TB□ Taxable Sales in the Base Year

Source : Los Angeles County Department of Public Works, SWIMS (May 2008), and 2006 Annual Report on the Los Angeles County Countywide Siting Element, June 2008

TABLE 4-7

LOS ANGELES COUNTY SOLID WASTE DISPOSAL CAPACITY REQUIREMENTS FOR THE PLANNING PERIOD (2006-2021)

(Excluding Disposal Capacity Provided By Permitted Inert Waste Landfills)

A	B	C	D	E	F	G	H	I	J
YEAR	TOTAL GENERATION (TONS)	PERCENT DIVERSION (ASSUMED)	TOTAL DIVERSION (TONS)	PROJECTED TRANSFORMATION CLASS III LANDFILL DISPOSAL (TONS)	AVAILABLE TRANSFORMATION CAPACITY (TONS)	CLASS III LANDFILL DISPOSAL NEED			
						ANNUAL		CUMULATIVE (YEAR'S END)	
						TONS	CUBIC YARDS	TONS	CUBIC YARDS
2006	23,807,137	50	11,903,569	11,903,569	645,600	- - -	- - -	- - -	- - -
2007	23,952,672	50	11,976,336	11,976,336	645,600	11,330,736	18,884,560	11,330,736	18,884,560
2008	24,264,761	50	12,132,380	12,132,380	645,600	11,486,780	19,144,634	22,817,516	38,029,194
2009	24,631,611	50	12,315,805	12,315,805	645,600	11,670,205	19,450,342	34,487,722	57,479,537
2010	25,141,980	50	12,570,990	12,570,990	645,600	11,925,390	19,875,650	46,413,112	77,355,187
2011	25,643,402	50	12,821,701	12,821,701	645,600	12,176,101	20,293,502	58,589,213	97,648,688
2012	26,145,084	50	13,072,542	13,072,542	645,600	12,426,942	20,711,570	71,016,155	118,360,258
2013	26,676,405	50	13,338,202	13,338,202	645,600	12,692,602	21,154,337	83,708,757	139,514,595
2014	27,274,433	50	13,637,217	13,637,217	645,600	12,991,617	21,652,694	96,700,374	161,167,290
2015	27,832,682	50	13,916,341	13,916,341	645,600	13,270,741	22,117,901	109,971,115	183,285,191
2016	28,376,702	50	14,188,351	14,188,351	645,600	13,542,751	22,571,252	123,513,866	205,856,443
2017	28,917,941	50	14,458,970	14,458,970	645,600	13,813,370	23,022,284	137,327,236	228,878,727
2018	29,428,066	50	14,714,033	14,714,033	645,600	14,068,433	23,447,388	151,395,669	252,326,115
2019	29,938,855	50	14,969,428	14,969,428	645,600	14,323,828	23,873,046	165,719,497	276,199,161
2020	30,485,032	50	15,242,516	15,242,516	645,600	14,596,916	24,328,193	180,316,413	300,527,354
2021	31,055,639	50	15,527,819	15,527,819	645,600	14,882,219	24,803,699	195,198,632	325,331,053

NOTES:

1. The Waste Generation quantities (Column B) were estimated using the CIWMB's Adjustment Methodology, and utilizing the employment, population, and taxable sales projections from the UCLA long-term forecast for Los Angeles County, dated June 2007
2. The waste generation estimate for 2006 is based on actual disposal quantities at transformation facilities and Class III landfill's located in and out-of-County by jurisdictions in Los Angeles County. A 50 percent diversion rate is assumed throughout the planning period (2006-2021). These tonnages do not include inert waste disposed of at inert waste landfills. The cumulative Class III landfill disposal need does not include the quantites managed through export and alternative technologies.
3. The 2006 transformation and Class III landfill disposal quantity (Column E) is based on tonnages reported by permitted solid waste disposal facility operators in Los Angeles County and export quantities reported by other counties to the Los Angeles County Department of Public Works as part of the 2006 Disposal Quantity Reporting data.
4. Columns I and J (Cumulative Disposal Need) are the sum of the projected Class III landfill disposal needs of jurisdictions in Los Angeles County, beginning January 2006 through the end of 2021.
5. The quantities in Columns H and J were obtained from Columns G and I, respectively, using an in-place solid waste (landfill) density of 1,200 pounds per cubic yard.

Source : Los Angeles County Department of Public Works, SWIMS (May 2008), and 2006 Annual Report on the Los Angeles County Countywide Siting Element, June 2008

TABLE 4-8

SOLID WASTE TRANSFER FACILITY CAPACITY
OF PERMITTED MAJOR[1] MATERIAL RECOVERY FACILITIES TRANSFER STATIONS IN LOS ANGELES COUNTY

No.	Facility Name	SWIS[2]	Location	Owner	Operator	Thomas Guide Location	Site Acreage	Average Daily Tonnage[3] (tpd-6)[4]	Permitted Capacity[5] (tpd-6) [cy day][6]
1.	American Waste Transfer Station	19-AA-0001	1449 West Rosecrans Avenue Gardena, CA 90247	Republic Services of California	Republic Services of California	733-F3	2	1,600	4,032
2.	Angelus Western Paper Fibers, Inc.	19-AR-1185	2474 Porter Street Los Angeles, CA 90021	Bloom Investment	Angelus Western Paper Fibers, Inc.	634-H7	1	650	700
3.	Athens Services	19-AA-0863	14048 East Valley Boulevard Industry, CA 91746	Arakelian Enterprises, Inc.	Athens Services	637-H4	14	1,920	4,000~~1,920~~
4.	Bel-Art Waste Transfer Station	19-AK-0001	2501 East 68th Street Long Beach, CA 90805	Consolidated Disposal Services, LLC	Consolidated Disposal Services, LLC	735-F6	3	1,500	1,500
5.	Browning Ferris Industries Recycling and Transfer Station	19-AA-0048	2509 West Rosecrans Avenue Compton, CA 90220	BFI Waste Systems of North America, Inc.	BFI Waste Systems of North America, Inc.	734-E3	3	1,100	4,000
6.	California Waste Services	19-AR-1225	621 West 152nd Street Gardena, CA 90247	Harbor Redondo, LLC	California Waste Services, LLC	734-B4	6	242	1,000
7.	Carson Transfer Station and Materials Recovery Facility	19-AQ-0001	321 West Francisco Street Carson, CA 90745	USA Waste of California, Inc.	USA Waste of California, Inc.	764-B4	6	3,000	5,300

1 A major MRF/Transfer Station is a large volume solid waste transfer/processing facility with a daily permitted capacity of at least 100 tons per day (tpd).
2 The SWIS (Solid Waste Information System) number is the same as the SWFP number.
3 Average daily tonnage is based on a March 2006 survey conducted by Department of Public Works or most current available information.
4 tpd-6 means tons per day, six days per week.
5 Permitted capacity is the total quantity of solid waste the facility is allowed to receive in accordance to the terms, conditions, and limitations of relevant permits. The maximum permitted capacity listed is based on information from the Waste Board's web site.
6 In instances where the intake tonnages are reported in cubic yard per day in SWIS or by the operator, a conversion factor of 900 pounds per cubic yard (for uncompacted loads) is being used to convert quantities into tons per day.
7 "N/A" means not available.

TABLE 4-8

SOLID WASTE TRANSFER FACILITY CAPACITY
OF PERMITTED MAJOR[1] MATERIAL RECOVERY FACILITIES TRANSFER STATIONS IN LOS ANGELES COUNTY

No.	Facility Name	SWIS[2]	Location	Owner	Operator	Thomas Guide Location	Site Acreage	Average Daily Tonnage[3] (tpd-6)[4]	Permitted Capacity[5] (tpd-6)[6]
8.	Central Los Angeles Recycling Center and Transfer Station	19-AR-1182	2201 Washington Boulevard Los Angeles, CA 90034	City of Los Angeles Bureau of Sanitation	City of Los Angeles Bureau of Sanitation	566-F2	9	1,330	5,500
9.	City of Inglewood Transfer Station	19-AA-0067	222 West Beach Avenue Inglewood, CA 90302	City of Inglewood	City of Inglewood	703-C3	8	~~N/A~~25	100
10.	City of Lancaster Maintenance Yard, MVTS	19-AA-1053	46008 North 7th Street West Lancaster, CA 93534	City of Lancaster Public Works	City of Lancaster Public Works	4015-G2	16	15	100
11.	City of Santa Monica Transfer Station	19-AA-0008	2500 Michigan Avenue Santa Monica, CA 90404	City of Santa Monica	City of Santa Monica	631-H7	N/A[7]	250	600
12.	City Terrace Recycling Transfer Station	19-AA-0859	1511-1525 Fishburn Avenue City Terrace, CA 90063	Robert M. Arsenian	Robert M. Arsenian	635-D3	1	200	200
~~13.~~	~~Coastal Material Recovery Facility and Transfer Station~~	~~19-AA-0857~~	~~357 West Compton Boulevard Gardena, CA 90248~~	~~Phoenix Waste and Recycling Services~~	~~Phoenix Waste and Recycling Services~~	~~734-C4~~	~~2~~	~~150~~	~~500~~
13~~4~~.	Community Recycling/Resource Recovery, Inc.	19-AR-0303	9147 De Garmo Avenue Sun Valley, CA 91352	Thomas Fry	Community Recycling and Resource Recovery	533-B1	4	1,460	1,700
14~~5~~.	Culver City Transfer and Recycling Station	19-AA-0404	9255 West Jefferson Boulevard Culver City, CA 90232	City of Culver City-Sanitation Division of Public Works Department	City of Culver City-Sanitation Division of Public Works Department	672-J1	1	220	500
15	Direct Disposal	19-AR-1228	3720 Noakes Street Los Angeles, CA 90023	Daniel and Tamara Agajanian	Direct Disposal	675-C2	1	37	200

TABLE 4-8

SOLID WASTE TRANSFER FACILITY CAPACITY
OF PERMITTED MAJOR[1] MATERIAL RECOVERY FACILITIES TRANSFER STATIONS IN LOS ANGELES COUNTY

No.	Facility Name	SWIS[2]	Location	Owner	Operator	Thomas Guide Location	Site Acreage	Average Daily Tonnage[3] (tpd-6)[4]	Permitted Capacity[5] (tpd-6) [cy day][6]
16.	Downey Area Recycling and Transfer Station (DART)	19-AA-0801	9770 Washburn Road Downey, CA 90241	Los Angeles County Sanitation District of Los Angeles County	LA County Sanitation District of Los Angeles County	706-C7	6	1,2005,000	5,000
17.	Downtown Diversion	19-AR-1224	2424 Olympic Boulevard Los Angeles, CA 90021	Southern California Gas Company	Looney Bins, Inc./Downtown Diversion, Inc.	634-H7	5	700	1,500
18.	East Los Angeles Recycling and Transfer Station	19-AA-0845	1512 N. Bonnie Beach Place City Terrace, CA 90063	Perdomo/BLT Enterprises, LLC c/o Consolidated Services, Inc.	Perdomo/BLT Enterprises, LLC c/o Consolidated Services, Inc.	635-E2	1	690	700
19.	East Street Maintenance District Yard	19-AA-0816	452 San Fernando Road Los Angeles, CA 90065	City of Los Angeles Bureau of Street Maintenance	City of Los Angeles Bureau of Street Maintenance	594-J7	3	64	459
20.	Falcon Refuse Center, Inc.	19-AR-0302	3031 East Street Wilmington, CA 90744	BFI Waste Systems of North America	BFI Waste Systems of North America	795-A6	5	1,200	3,500
21	First Street Transfer Station	19-AA-1065	1730 East 1st Street Pomona, CA 91769	City of Pomona	City of Pomona	600-D4	4	150	150
22.	Granada Hills Street Maintenance District Yard	19-AA-0817	10210 Etiwanda Avenue Northridge, CA 91325	City of Los Angeles Bureau of Street Maintenance	City of Los Angeles Bureau of Street Maintenance	500-J4	3	43	459

TABLE 4-8

SOLID WASTE TRANSFER FACILITY CAPACITY
OF PERMITTED MAJOR[1] MATERIAL RECOVERY FACILITIES TRANSFER STATIONS IN LOS ANGELES COUNTY

No.	Facility Name	SWIS[2]	Location	Owner	Operator	Thomas Guide Location	Site Acreage	Average Daily Tonnage[3] (tpd-6)[4]	Permitted Capacity[5] (tpd-6)[6]
23.	Grand Central Recycling and Transfer Station	19-AA-1042	999 Hatcher Avenue City of Industry, CA 91748	Grand Central Recycling and Transfer Station Inc.	Grand Central Recycling and Transfer Station Inc.	678-G3	10	1,100	5,000
24.	H C Disposal Co.	19-AA-1041	3249 W. El Segundo Boulevard Hawthorne, CA 90250	H C Disposal Co.	H C Disposal Co.	733-B2	1	120	150
25.	Innovative Waste Control	19-DE-0001	4133 Bandini Boulevard Vernon, CA 90023	Innovative Waste Control, Inc.	Innovative Waste Control, Inc.	675-E4	2	1,250	1,250
26.	Interior Removal Specialists, Incorporated, CDI	19-AA-1077	9309 Rayo Avenue South Gate, CA 90280	Interior Removal Specialists, Incorporated	City of Los Angeles Department of Water and Power	705-F3	7	130	174
27.	Looney Bins/East Valley Diversion	19-AR-1223	11616 Sheldon Street Sun Valley, CA 91352	~~City of Los Angeles Department of Water and Power~~ Waste Management, Inc.	~~City of Los Angeles Department of Water and Power~~ Waste Management, Inc.	502-H5	2	400	750
28.	Mission Road Recycling and Transfer Station	19-AR-1183	840 South Mission Road Los Angeles, CA 90033	Waste Management Collection and Recycling Inc.~~- Bradley Landfill Miss~~	Waste Management Collection and Recycling Inc.~~- Bradley Landfill Miss~~	634-J6	3	1,350	1,785

TABLE 4-8

SOLID WASTE TRANSFER FACILITY CAPACITY
OF PERMITTED MAJOR[1] MATERIAL RECOVERY FACILITIES TRANSFER STATIONS IN LOS ANGELES COUNTY

No.	Facility Name	SWIS[2]	Location	Owner	Operator	Thomas Guide Location	Site Acreage	Average Daily Tonnage[3] (tpd-6)[4]	Permitted Capacity[5] (tpd-6) [cy-day][6]
29.	Paramount Resource Recycling Facility	19-AA-0840	7230 Petterson Lane Paramount, CA 90723	Metropolitan Waste Disposal Corporation	Paramount Resource Recycling, Inc.	735-F2	4	2,400	2,400
30.	Puente Hills Materials Recovery Facility	19-AA-1043	2800 Workman Mill Road Whittier, CA 90601	County of Los Angeles Sanitation District of Los Angeles County	County of Los Angeles Sanitation District of Los Angeles County	637-D7	25	400	4,400
31.	Road Maintenance Division 4, Small Volume Transfer Station	19-AA-0398	11282 South Garfield Avenue Downey, CA 90201	County of Los Angeles Department of Public Works	County of Los Angeles Department of Public Works	705-G7	10	18	100
32.	Rob's Roll-off and Recycling	19-AA-1051	416 West 130th Street Los Angeles, CA 90061	Robert A. Perez	Robert A. Perez	734-C2	0.5	80	2,500
33.	Salt Lake Transfer Station	19-AA-0837	9599 Salt Lake Avenue South Gate, CA 90280	City of South Gate	City of South Gate	705-F4	.75	81	[148.5]
34.	Silverlake Maintenance Station	19-AA-0824	2187 Riverside Drive Los Angeles, CA 90039	California Department of Transportation – Sacramento	California Department of Transportation – Sacramento	563-F3	5	46.5	[150]
353.	South Gate Transfer Station	19-AA-0005	9530 South Garfield Avenue South Gate, CA 90280	County of Los Angeles Sanitation District of Los Angeles County	County of Los Angeles Sanitation District of Los Angeles County	705-G4	4	1,000	2,200

TABLE 4-8

SOLID WASTE TRANSFER FACILITY CAPACITY OF PERMITTED MAJOR[1] MATERIAL RECOVERY FACILITIES TRANSFER STATIONS IN LOS ANGELES COUNTY

No.	Facility Name	SWIS[2]	Location	Owner	Operator	Thomas Guide Location	Site Acreage	Average Daily Tonnage[3] (tpd-6)[4]	Permitted Capacity[5] (tpd-6) [cy day][6]
364.	Southern California Disposal Co. Recycling and Transfer Station	19-AA-0846	1908 Frank Street Santa Monica, CA 90404	Southern California Disposal Co. Recycling and Transfer Station	Southern California Disposal Co. Recycling and Transfer Station	671-H1	N/A	1,056	2,112
375.	Southwest Street Maintenance District Yard	19-AA-0818	5860 South Wilton Place Los Angeles, CA 90047	City of Los Angeles Bureau of Street Maintenance	City of Los Angeles Bureau of Street Maintenance	673-H6	3	76	459
386.	Sun Valley Paper Stock Materials recovery Facility and Transfer Station	19-AR-1227	8701 N. San Fernando Road Sun Valley, CA 91352	Stephen Young	Stephen Young	532-H2	4	300	1,250
397.	Van Nuys Street Maintenance District Yard	19-AA-0814	15145 Oxnard Street Van Nuys, CA 91411	City of Los Angeles Bureau of Street Maintenance	City of Los Angeles Bureau of Street Maintenance	561-H1	3	17	225
403	Waste Management South Gate Transfer Station	19-AA-0856	4489 Ardine Street South Gate, CA 90280	H.B.J.J. Inc. Subsidiary of USA Waste	H.B.J.J. Inc. Subsidiary of USA Waste	705-D3	2	700	2,000
413 9.	Waste Resources Recovery	19-AA-0857	357 West Compton Boulevard Gardena, CA 90247	Waste Resources Recovery, Incorporated	Waste Resources Recovery, Incorporated	704-C4	2	150	500
							TOTALS	28,271 32,038	68,754 66,725

TABLE 4-9
REMAINING PERMITTED COMBINED DISPOSAL CAPACITY OF EXISTING SOLID WASTE DISPOSAL FACILITIES IN LOS ANGELES COUNTY
As of December 31, 2006

Facility	Solid Waste Facility Permit Number	Location: City or County Unincorporated Area	Operation days/week	12/31/2006 SWFP Maximum Daily Capacity (Tons)	LUP/CUP Maximum Daily Capacity (Tons)	2006 Average Daily Disposal 6 days/week (Tons) (See Note 1): In-County	Out-of-County	Total	MSW Disposed in 2006 (Million Tons): In-County	Out-of-County	Total	Estimated Remaining Permitted Capacity (as of December 31, 2006) (See Note 2): Million Tons	Million (a) Cubic Yards	Comments and flow waste restrictions
MAJOR AND MINOR CLASS III LANDFILLS														
Antelope Valley Landfill I	19-AA-0009	Palmdale	6	1,400		977	2.09	979	0.305	0.001	0.305	9.19	11.07	Remaining permitted capacity does not include the expansion in the bridge area between Landfill Unit1 and Landfill Unit 2. See footnote (c).
Landfill I	19-AA-5624	Palmdale		1800 (b)	1,800.00									
Bradley	19-AR-0008	Los Angeles	6	10,000	---	1,447	5.20	1,452	0.451	0.002	0.453	0.09	0.11	Landfill closed (upon expiration of LUP in 4/14/2007).
Burbank[h]	19-AA-0040	Burbank	5	240	---	125	0.00	125	0.039	0.000	0.039	3.00	5.00	Limited to the City of Burbank's use only and provided waste is collected by the City's crews.
Calabasas	19-AA-0056	Unincorporated Area	6	3,500	---	1,492	130.74	1,623	0.466	0.041	0.506	7.89	17.16	Limited to the Calabasas Wasteshed as defined by Los Angeles County Ordinance 91-0003.
Chiquita Canyon	19-AA-0052	Unincorporated Area	6	6,000	6,000.00	4,853	79.54	4,933	1.514	0.025	1.539	11.05	14.87	Proposed new expansion in 2008. Current LUP limits waste disposal to 30,000 tons per week. LUP expires 11/24/2019. New CUP pending.
Lancaster	19-AA-0050	Unincorporated Area	6	1,700	1,700.00	1,221	22.47	1,243	0.381	0.007	0.388	13.48	17.28	LUP expires 8/1/2012.
Pebbly Beach[i]	19-AA-0061	Unincorporated Area	7	49	49.00	9	0.00	9	0.003	0.000	0.003	0.09	0.10	LUP expires 07/29/2028
Puente Hills	19-AA-0053	Unincorporated Area	6	13,200	13,200.00	12,079	174.38	12,253	3.769	0.054	3.823	26.60	48.36	CUP limits waste disposal to 72,000 tons per week. Does not accept waste generated from the City of Los Angeles and Orange County. Landfill closes on 01/2013. An intermodal facility with a design capacity of 8,000 tpd, is being developed by County Sanitation Districts of Los Angeles County (CSD) as part of a waste-by-rail system, to transport waste to Mesquite Regional and Eagle Mountain Landfills. However, Puente Hills landfill (PHL) has to meet specified milestones or demonstrate best faith efforts as specified in Condition 58 of the CUP. The milestones are as follows: (1) To begin development of at least one remote landfill by December 31, 2007, or be assessed a penalty of 2,000 tpd in PHL's daily maximum permitted refuse intake capacity (i.e., 13,200 tpd); (2) For at least one remote landfill to become operational by December 31, 2008, or CSD would be assessed a penalty of 1,000 tpd reduction in PHL's daily maximum permitted refuse intake capacity; and (3) For th waste-by-rail system to become operational by December 31, 2009, or CSD would be assessed a penalty of 2,000 tpd reduction every year thereafter in PHL's maximum permitted refuse intake capacity.
San Clemente[i]	19-AA-0063	Unincorporated Area	2	10	---	3	0.00	3	0.001	0.000	0.001	0.04	0.33	Landfill owned and operated by the U. S. Navy.
Scholl Canyon	19-AA-0012	Glendale	6	3,400	---	1,431	0.00	1,431	0.447	0.000	0.447	6.40	14.22	Limited to the Scholl Canyon Wasteshed as defined by City of Glendale Ordinance 4782. Based on the remaining capacity of 6.4 million tons as of December 31, 2006, the landfill will exhaust the exisiting capacity in 2020 based on 1,400 tpd disposal rate (308 operating days and 0.45 tons per cu.yd. density). The proposed expansion will add an additional 5 or 6 million tons of capacity and extend its life to 12 or 15 years, respectively. Proposed expansion will not increase the daily disposal rate beyond the permitted disposal rate of 3,400 tpd.
Sunshine Canyon (County side)	19-AA-0853	Unincorporated Area	6	6,600	6,600.00	2,693	0.00	2,693	0.840	0.000	0.840	1.38	1.85	County LUP limits the weekly net tonnage to 36,000 tons. City of Los Angeles granted a LUP for the expansion of the landfill into the City on 12/8/99. City LUP limits the weekly tonnage to 30,000 tons. Total expansion capacity (County and City) will provide an additional 72.4 million tons as of May 24, 2007. Under the Replacement CUP that became effective May 24, 2007, Sunshine Canyon Landfill is prohibitted from accepting out-of-County waste.
Sunshine Canyon (City side)	19-AR-0002-2	Los Angeles	6	5,500	5,500.00	4,118	-	4,118	1.285	0.000	1.285	4.26	5.72	
Whittier (Savage Canyon)[i]	19-AH-0001	Whittier	6	350	---	268	2.23	270	0.084	0.001	0.084	4.36	7.26	Limited to waste from the City of Whittier or waste haulers contracted with the city.
TOTAL FOR CLASS III LANDFILLS				51,949		30,715	416.65	31,132	9.583	0.130	9.713	87.83	143.33	
INERT WASTE LANDFILLS (PERMITTED INERT WASTE LANDFILLS ONLY)														
Azusa Land Reclamation	19-AA-0013	Azusa	6	6,500	---	324	213.90	538	0.101	0.067	0.168	36.54 (d)	44.56	No comment
Brand Park[h]	19-AA-0006	Glendale	5	100	---	0	0.00	0	0.000	0.000	0.000	0.69	0.35	Limited to use by City of Glendale Department of Public Works only.
Peck Road Gravel Pit	19-AA-0838	Monrovia	6	1,210	---	2	0.00	2	0.001	0.000	0.001	9.79	6.53	No comment
TOTAL FOR PERMITTED INERT WASTE LANDFILLS				7,810		326	213.90	540	0.102	0.067	0.168	36.54	51.43	
WASTE-TO-ENERGY FACILITIES														
Commerce Refuse-To-Energy Facility	19-AA-0506	Commerce	5	1,000	---	321	13	334	0.100	0.004	0.104	466.64 (e)	777.73	Assumed to remain operational during the 15 - year planning period.
Southeast Resource Recovery Facility	19-AK-0083	Long Beach	7	2,240	---	1,402	210	1,612	0.438	0.065	0.503	1602.45 (f)	2,670.75	Assumed to remain operational during the 15 - year planning period.
TOTAL FOR WASTE-TO-ENERGY FACILITIES (g)				3,240		1,723	223	1,947	0.538	0.070	0.607	2,069.09	3,448.48	
GRAND TOTAL				62,999		32,765	854	33,619	10.223	0.266	10.489	N/A	N/A	
OUT-OF-COUNTY DISPOSAL	**Waste Exported in 2006 by jurisdictions in Los Angeles County to Out-of-County Class III Disposal Facilities**			**1,782,609**	**tons at**	5,713	tpd (average daily rate)							

NOTES:

1. Disposal quantities are based on actual tonnages reported by owners/operators of permitted solid waste disposal facilities to the Department of Public Works through the State Disposal Reporting System. The 2006 disposal tonnages listed above are based on tonnage figures for the period of January 1 through December 31, 2006.
2. Estimated Remaining Permitted Capacity based on landfill owner/operator responses to the written survey conducted by DPW in August 2007 as well as a review of site specific permit criteria established by local land use agencies, LEAs, CRWQCBs, and the SCAQMD.

FOOTNOTES:

(a) Conversion factor based on in-place solid waste density/compaction rate if provided by landfill operators, otherwise a conversion factor of 1,200 lb/cy was used for class III landfill and for permitted inert waste landfill.
(b) Antelope Valley Landfill's daily capacity of 1,800 tons is based on the SWFP issued on 12/26/95 for the unincorporated County landfill area (expansion capacity included).
(c) The portion of the landfill within the previously unincorporated County area was annexed to the City of Palmdale on August 27, 2003.
(d) By Court order, on 10/2/96, the CRWQCB-Los Angeles region ordered the Azusa Land Reclamation Landfill to stop accepting MSW. Permitted daily capacity of 6,500 tpd consists of 6,000 tpd of refuse and 500 tpd of inert waste. Facility currently accepts inert waste only.
(e) Based on SWFP limit of 2,800 tons per week, expressed as a daily average, six days/week.
(f) Based on EPA limit of 500,000 tons per year, expressed as a daily average, six days/week.
(g) Tonnage expressed as a daily average, six days/week.
(h) Brand Park Landfill is permitted as a Minor Class III Landfill but currently only accepts inert waste.
(i) Minor Class III landfills are landfills with permitted daily intake capacity of less than 800 tpd.

Abbreviations:

CRWQCB	California Regional Water Quality Control Board
DQRD	Disposal Quantity Reporting Data
DPW	Los Angeles County Department of Public Works
LUP	Land Use Permit or Conditional Use Permit
MSW	Municipal Solid Waste
SCAQMD	South Coast Air Quality Management District
SWFP	Solid Waste Facility Permit
tpd-6	Tons per day, 6 days/ week

Source : Los Angeles County Department of Public Works, SWIMS (May 2008), and 2006 Annual Report on the Los Angeles County Countywide Siting Element, June 2008

Table 4-10

Summary of Disposal Capacity Need Analysis Scenarios
~~and~~ Assuming AB 939 Diversion is fully Implemented and No New Class III Landfills in Los Angeles County during the Planning Period

Scenarios	Utilization of Existing Permitted In-County Class III Landfill Capacity	~~Continued~~ Utilization of Currently Available Out-of-County Disposal Facilities Capacity[1]	Assuming Increased Diversion Rate to 60% in ~~2020~~ 2021	Utilization of Proposed ~~Conversion~~ Alternative Technology~~ies~~ facilities capacity	Assuming Development of all Proposed Expansions of in-County Class III Landfills	Utilization of Future[2] Available Out-of-County Disposal Facility Capacity[3~~2~~]	Description of the Disposal Capacity Need Analysis Scenarios
Scenario 1 (Worst Case)	Y	N	N	N	N	N	- Use of existing in-~~c~~County ~~c~~Class III landfills and transformation facilities only. - No utilization of out-of-County disposal facilities capacity .
Scenario 2 (Status Quo)	Y	Y	N	N	N	N	- Use of existing in-County ~~c~~Class III landfills and transformation facilities only. - Plus utilization of currently available out-of-County disposal facilities capacity.
Scenario 3	Y	Y	Y	N	N	N	- Use of existing in-County Class III landfills and transformation facilities only. - Plus utilization of currently available out-of-County disposal facilities capacity. - Plus increase diversion rate from 50% in 2011 to 60% in 2021.
Scenario 4	Y	Y	Y	Y	N	N	- Use of existing in-County Class III landfills and transformation facilities only. - Plus utilization of currently available out-of-County disposal facilities capacity. - Plus increase diversion rate from 50% in 2011 to 60% in 2021. - Plus development of alternative technology facilities (1,000 tpd in 2010 to 10,000 tpd in 2021).
Scenario 5	Y	Y	Y	Y	Y	N	- Use of existing in-County ~~c~~Class III landfills and transformation facilities only. - Plus utilization of currently available out-of-County disposal facilities capacity. ~~- Plus development of all proposed in-county landfill expansions~~ - Plus increase diversion rate from 50% in 2011 to 60% in 2021~~0~~. - Plus development of ~~conversion~~alternative technology facilities (~~1,500~~1,000 tpd in ~~2014~~2010 to ~~3,000~~10,000 tpd in ~~2020~~2021). - Plus development of all proposed in-County class III landfill expansions.
Scenario ~~7~~6 (Best Case)	Y	Y	Y	Y	Y	Y	- Use of existing in-County ~~c~~Class III landfills and transformation facilities only. - Plus ~~increased~~ utilization of currently available out-of-County disposal facilities capacity. ~~- Plus development of all proposed in-county landfill expansions~~ - Plus increase diversion rate from 50% in 2011 to 60% in 2021~~0~~. - Plus development of ~~conversion~~ alternative technology~~ies~~ facilities (~~1,200~~1,000 tpd in 2010 to 10,000 tpd in ~~2020~~2021). - Plus development of all proposed in-County Class III landfill expansions. - Plus utilization of future available out-of-County disposal facility capacity.

Footnotes:

1 The currently available out-of-County disposal facilities capacity ~~includes: (1) export~~(1) includes the disposal capacity of the out-of-County ~~c~~Class III landfills that are currently providing the out-of-County disposal capacity for solid waste that are currently exported from Los Angeles County jurisdiction ~~providing the currently available export capacity~~ (i.e., Frank R. Bowerman Sanitary Landfill, Olinda Alpha Sanitary Landfill, Prima Deshecha Canada Sanitary Landfill, El Sobrante Landfill, Mid-Valley Sanitary Landfill and Simi Valley Landfill and Recycling Center); ~~.~~ (2) takes into consideration of the decrease in the available out-of-County disposal capacity upon the expiration of the export agreements with Orange County. (Note: The additional export capacity from proposed expansion of the out-of-County landfills are not included); ~~(2)~~ and (3) includes the 8,000 tpd out-of-County disposal capacity that can be accessed at Mesquite Regional Landfill through the CSD Waste-by-Rail system. ~~export capacity via the waste-by-rail system (8,000 tpd) to Mesquite Regional Landfill, (3) consideration of the expiration of the export agreements with Orange County. Additional export capacity from proposed expansion of the Out-of-County landfills are not included.~~

2 The Future available ~~O~~out-of-County disposal facilities capacity includes: (1) The currently available out-of-County disposal facility capacity (see Footnote No. 1 above); ~~those providing currently available export capacity (i.e., Frank R. Bowerman Sanitary Landfill, Olinda Alpha Sanitary Landfill, Prima Deshecha Canada Sanitary Landfill, El Sobrante Landfill, Mid-Valley Sanitary Landfill and Simi Valley Landfill and Recycling Center,~~ (2) the 4,000 tpd through CSD's waste-by-truck program to Mesquite Regional Landfill; ~~including waste-by-rail (8,000 tpd), (3) including expiration of the export agreements with Orange County, (4) including (4,000 tpd~~ and, (3) expansion of the available out-of-County Class III Landfills;

~~**Note:**~~
~~1~~3. It should be noted that the impact of the expansions of the various out-of-County landfills would not result in a net increase in available daily export capacity, but would result only in extension of the life of Simi Valley Landfill and Recycling Center from 2026 to 2100. Though expansion of Olinda Alpha Sanitary Landfill and Frank R. Bowerman Sanitary Landfill will result in increase in their lifespan from 2013 to 2031 and 2022 to 2053 respectively, the additional disposal capacity due to the expansion will not be available until after the export agreement with Burrtec/EDCC, CSD, and Republic Industries (for Los Angeles County waste) to Orange County Landfills has expired.

TABLE 4-11
SCENARIO 1 (WORST CASE SCENARIO)
DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)
UTILIZATION OF ONLY EXISTING IN-COUNTY CLASS III LANDFILLS AND TRANSFORMATION FACILITIES
DURING THE PLANNING PERIOD
(Based on January 1, 2006 through December 31, 2006 six-day average tonnages and assuming AB 939 diversion is fully implemented)

Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Imported Waste	Maximum Daily Transformation Capacity	Maximum Available Alternative Technology Capacity	Class III Landfill Disposal Need	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total Expected Daily Tonnage and Remaining Permitted Landfill Capacity □□□□□□□ tpd-6 Milion Tons	Export Need	Available Out-of-County Disposal Capacity	**Remaining Daily Disposal Capacity Need: Shortfall** (Excess)
								Antelope Valley	Bradley	Burbank R	Calabasas R	Chiquita	Lancaster	Pebbly Beach	Puente Hills L	San Clemente R	Scholl R	Sunshine County R	Sunshine City R	Combined Sunshine City/County R	Whittier R				
								Expected daily tonnage 6-day average (tpd-6)																	
								Remaining permitted landfill capacity at year's end, Million Tons																	
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)																(tpd-6)	(tpd-6)	(tpd-6)
2006	76,305	49□	37,298	854	1,724	0	36,428	977	1,447	125	1,492	4,853	1,221	8.64	12,079	2.7	1,431	2,693	4,118		268	30,715	5,713	N/A	0
								9.2	0.1	3.0	7.9	11.0	13.5	0.09	26.6	0.04	6.4	1.4	4.3		4.4	87.8			
2007	76,771	48□	36,918	764	2,069	0	35,613	1,400	200	126	1,501	5,000	1,700	8.70	12,500	2.7	1,440	3,685	2,065		269	29,898	5,715	N/A	0
								8.8	C	3.0	7.4	9.5	12.9	0.08	22.7	0.04	6.0	0.2	3.6		4.3	78.5			
2008	77,772	50□	38,886	900	2,069	0	37,717	1,800		127	1,521	5,000	1,700	8.80	12,500	2.7	1,459	3,000	4,500		273	31,892	5,825	N/A	**5,825**
								8.2		2.9	7.0	7.9	12.4	0.08	18.8	0.04	5.5	C	2.2		4.2	69.2			
2009	78,947	50□	39,474	900	2,069	0	38,305	1,800		129	1,544	5,000	1,700	8.93	13,200	2.7	1,481		4,500		277	29,643	8,662	N/A	**8,662**
								7.6		2.9	6.5	6.4	11.9	0.08	14.7	0.04	5.0		0.8		4.1	60.0			
2010	80,583	50□	40,292	900	2,069	0	39,123	1,800		132	1,576	5,000	1,700	9.12	13,200	2.8	1,512		4,500		283	29,714	9,408	N/A	**9,408**
								7.1		2.8	6.0	4.8	11.4	0.08	10.6	0.04	4.6		C		4.0	51.3			
2011	82,190	50□	41,095	900	2,069	0	39,926	1,800		134	1,607	5,000	1,700	9.30	13,200	2.9	1,542				289	25,284	14,642	N/A	**14,642**
								6.5		2.8	5.5	3.2	10.8	0.07	6.4	0.04	4.1				3.9	43.4			
2012	83,798	50□	41,899	900	2,069	0	40,730	1,800		137	1,639	5,000	1,700	9.48	13,200	2.9	1,572				294	25,354	15,376	N/A	**15,376**
								5.9		2.8	5.0	1.7	C	0.07	2.3	0.04	3.6				3.8	25.2			
2013	85,501	50□	42,751	900	2,069	0	41,582	1,800		140	1,672	5,000		9.67	13,200	3.0	1,604				300	23,729	17,853	N/A	**17,853**
								5.4		2.7	4.4	0.1		0.07	C	0.03	3.1				3.7	19.6			
2014	87,418	50□	43,709	900	2,069	0	42,540	1,800		143	1,710	5,000		9.89		3.0	1,640				307	10,612	31,928	N/A	**31,928**
								4.8		2.7	3.9	C		0.06		0.03	2.6				3.6	17.7			
2015	89,207	50□	44,604	900	2,069	0	43,435	1,800		146	1,745			10.09		3.1	1,674				313	5,690	37,744	N/A	**37,744**
								4.3		2.6	3.4			0.06		0.03	2.1				3.5	15.9			
2016	90,951	50□	45,475	900	2,069	0	44,306	1,800		149	1,779			10.29		3.2	1,706				319	5,766	38,540	N/A	**38,540**
								3.7		2.6	2.8			0.06		0.03	1.5				3.4	14.1			
2017	92,686	50□	46,343	900	2,069	0	45,174	1,800		151	1,813			10.49		3.2	1,739				325	5,842	39,332	N/A	**39,332**
								3.1		2.5	2.2			0.05		0.03	1.0				3.3	12.3			
2018	94,321	50□	47,160	900	2,069	0	45,991	1,800		154	1,845			10.67		3.3	1,769				331	5,913	40,078	N/A	**40,078**
								2.6		2.5	1.7			0.05		0.03	0.4				3.2	10.5			
2019	95,958	50□	47,979	900	2,069	0	46,810	1,800		157	1,877			10.86		3.3	1,800				337	5,985	40,825	N/A	**40,825**
								2.0		2.4	1.1			0.05		0.03	C				3.1	9			
2020	97,708	50□	48,854	900	2,069	0	47,685	1,800		160	1,911			11.06		3.4					343	4,228	43,457	N/A	**43,457**
								1.5		2.4	0.5			0.04		0.03					3.0	7.4			
2021	99,537	50□	49,769	900	2,069	0	48,600	1,800		163	1,947			11.26		3.5					349	4,273	44,326	N/A	**44,326**
								0.9		2.3	C			0.04		0.03					2.9	6.2			

NOTES ASSUMPTIONS:

1.- The Waste Generation Rate (excluding the inert waste being handled at inert waste landfills) was estimated using the CIWMB's adjustment methodology, utilizing population projection, employment and taxable sales projections available from UCLA Longterm Forecast for Los Angeles County, dated June 2007.

2.- There is no remaining daily disposal capacity need (shortfall) for 2006 and 2007 because the total export need of 5,713 tpd and 5,715 tpd, respectively, were actually exported to out-of-County landfills. Since there was zero remaining daily disposal capacity need in 2006 and 2007, the diversion rate is calculated to be 49□ and 48□, respectively, in order to maintain consistency of this analysis with the 2006 generation rate of 23,807,137 tons (see Table 4-5). However, the actual unofficial Waste Board's diversion rate for Los Angeles County in 2006 is 54.7□. This uses the default diversion rate for all jurisdictions plus the Taxable Sales deflator Index value. The rate does not include transformation credit, or disposal modifications requested by jurisdictions. Also, a 50□ diversion rate is assumed from 2008 through 2021.

3.- Expected daily tonnage rates are based on the permitted daily capacity for the Antelope Valley, Chiquita, Lancaster, Puente Hills, and Sunshine Canyon landfills. The expected daily tonnage rate for Burbank, Calabasas, Pebbly Beach, San Clemente, Scholl, and Whittier (Savage) landfills are based on the average daily tonnages fo

4.- "tpd-6" means tons per day, 6-day per week average.

5.- Class III Landfill Disposal Need refers to the amount of solid waste generated in or imported into Los Angeles County that needs to be disposed in Class III Landfills located within Los Angeles County.

6.- Class III Landfill Export Need refers to the daily amount of solid waste in need of disposal that exceeds the combined daily permitted and expected capacity of all in-County Class III landfills and transformation facilities. The amount shown for each year were taken care of by the currently available out-of-County class III landfill capaci

7.- Available out-of-County disposal capacity refers to the amount of solid waste generated in Los Angeles County that can be accepted by the out-of-County Class III landfills which are currently accepting solid waste from Los Angeles County.

8.- Remaining daily disposal capacity need (shortfall) refers to the daily amount of solid waste in need of disposal that exceeds (in excess) of the available in-County and out-of-County (export) disposal capacity.

9.- Existing export quantities are considered part of the Class III landfill export need and are considered in determining the remaining daily disposal capacity need (shortfall).

10.- 2006 import waste quantities are based on the 2007 Landfill Survey for the period of 1/1/06 to 12/31/06. Import waste quantities for 2006 (854) and 2007 (764) are based on SWIMS data, import waste quantities for 2008 and beyond are assumed to be 900 tpd.

11.- Use of existing in-County Class III landfill and transformation facilities only (Worst Case).

LEGEND:

C - Closure due to exhausted capacity
E - Potential expansion of existing class III landfill
L - Does not accept waste from the City of Los Angeles and Orange County
R - Restricted Wasteshed
CIWMB - California Integrated Waste Management Board

Source : Los Angeles County Department of Public Works, SWIMS (May 2008), and 2006 Annual Report on the Los Angeles County Countywide Siting Element, June 2008

TABLE 4-12
SCENARIO 2

DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)
UTILIZATION OF EXISTING IN-COUNTY CLASS III LANDFILLS AND TRANSFORMATION FACILITIES
AND UTILIZATION OF CURRENTLYAVAILABLE OUT-OF-COUNTY DISPOSAL CAPACITY
DURING THE PLANNING PERIOD
(Based on January 1, 2006 through December 31, 2006 six-day average tonnages and assuming AB 939 diversion is fully implemented)

Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Imported Waste	Maximum Daily Transformation Capacity	Maximum Available Alternative Technology Capacity	Class III Landfill Disposal Need	1 Antelope Valley	2 Bradley	3 R Burbank	4 R Calabasas	5 Chiquita	6 Lancaster	7 Pebbly Beach	8 L Puente Hills	9 R San Clemente	10 R Scholl	11 R Sunshine County	12 R Sunshine City	13 R Combined Sunshine City/County	14 R Whittier	Total Expected Daily Tonnage and Remaining Permitted Landfill Capacity □□□□□□□□ tpd-6 Milion Tons	Export Need	Available Out-of-County Disposal Capacity	**Remaining Daily Disposal Capacity Need/ Shortfall** (Excess)
								Expected daily tonnage 6-day average (tpd-6)																	
								Remaining permitted landfill capacity at year's end, Million Tons																	
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)																(tpd-6)	(tpd-6)	(tpd-6)
2006	76,305	49□	37,298	854	1,724	0	36,428	977	1,447	125	1,492	4,853	1,221	8.6	12,079	2.7	1,431	2,693	4,118		268	30,715	5,713	5,713	**0**
								9.2	0.1	3.0	7.9	11.0	13.5	0.09	26.6	0.04	6.4	1.4	4.3		4.4	87.8			
2007	76,771	48□	36,918	764	2,069	0	35,613	1,400	200	126	1,501	5,000	1,700	8.7	12,500	2.7	1,440	3,685	2,065		269	29,898	5,715	5,715	**0**
								8.8	**C**	3.0	7.4	9.5	12.9	0.08	22.7	0.04	6.0	0.2	3.6		4.3	78.5			
2008	77,772	50□	38,886	900	2,069	0	37,717	1,800		127	1,521	5,000	1,700	8.8	12,500	2.7	1,459	3,000	4,500		273	31,892	5,825	5,715	**110**
								8.2		2.9	7.0	7.9	12.4	0.08	18.8	0.04	5.5	**C**	2.2		4.2	69.2			
2009	78,947	50□	39,474	900	2,069	0	38,305	1,800		129	1,544	5,000	1,700	8.9	13,200	2.7	1,481		4,500		277	29,643	8,662	5,715	**2,947**
								7.6		2.9	6.5	6.4	11.9	0.08	14.7	0.04	5.0		0.8		4.1	60.0			
2010	80,583	50□	40,292	900	2,069	0	39,123	1,800		132	1,576	5,000	1,700	9.1	13,200	2.8	1,512		4,500		283	29,714	9,408	5,715	**3,693**
								7.1		2.8	6.0	4.8	11.4	0.08	10.6	0.04	4.6		**C**		4.0	51.3			
2011	82,190	50□	41,095	900	2,069	0	39,926	1,800		134	1,607	5,000	1,700	9.3	13,200	2.9	1,542				289	25,284	14,642	5,715	**8,927**
								6.5		2.8	5.5	3.2	10.8	0.07	6.4	0.04	4.1				3.9	43.4			
2012	83,798	50□	41,899	900	2,069	0	40,730	1,800		137	1,639	5,000	1,700	9.5	13,200	2.9	1,572				294	25,354	15,376	5,715	**9,661**
								5.9		2.8	5.0	1.7	**C**	0.07	2.3	0.04	3.6				3.8	25.2			
2013	85,501	50□	42,751	900	2,069	0	41,582	1,800		140	1,672	5,000		9.7	13,200	3.0	1,604				300	23,729	17,853	5,715	**12,138**
								5.4		2.7	4.4	0.1		0.07	**C**	0.03	3.1				3.7	19.6			
2014	87,418	50□	43,709	900	2,069	0	42,540	1,800		143	1,710	5,000		9.9		3.0	1,640				307	10,612	31,928	12,873	**19,055**
								4.8		2.7	3.9	**C**		0.06		0.03	2.6				3.6	17.7			
2015	89,207	50□	44,604	900	2,069	0	43,435	1,800		146	1,745			10.1		3.1	1,674				313	5,690	37,744	12,873	**24,871**
								4.3		2.6	3.4			0.06		0.03	2.1				3.5	15.9			
2016	90,951	50□	45,475	900	2,069	0	44,306	1,800		149	1,779			10.3		3.2	1,706				319	5,766	38,540	11,206	**27,334**
								3.7		2.6	2.8			0.06		0.03	1.5				3.4	14.1			
2017	92,686	50□	46,343	900	2,069	0	45,174	1,800		151	1,813			10.5		3.2	1,739				325	5,842	39,332	11,206	**28,126**
								3.1		2.5	2.2			0.05		0.03	1.0				3.3	12.3			
2018	94,321	50□	47,160	900	2,069	0	45,991	1,800		154	1,845			10.7		3.3	1,769				331	5,913	40,078	11,206	**28,872**
								2.6		2.5	1.7			0.05		0.03	0.4				3.2	10.5			
2019	95,958	50□	47,979	900	2,069	0	46,810	1,800		157	1,877			10.9		3.3	1,800				337	5,985	40,825	11,206	**29,619**
								2.0		2.4	1.1			0.05		0.03	**C**				3.1	8.7			
2020	97,708	50□	48,854	900	2,069	0	47,685	1,800		160	1,911			11.1		3.4					343	4,228	43,457	11,206	**32,251**
								1.5		2.4	0.5			0.04		0.03					3.0	7.4			
2021	99,537	50□	49,769	900	2,069	0	48,600	1,800		163	1,947			11.3		3.5					349	4,273	44,326	11,206	**33,120**
								0.9		2.3	**C**			0.04		0.03					2.9	6.2			

NOTES/ASSUMPTIONS:

1.- The Waste Generation Rate (excluding the inert waste being handled at inert waste landfills) was estimated using the CIWMB's adjustment methodology, utilizing population projection, employment and taxable sales projections available from UCLA Longterm Forecast for Los Angeles County, dated June 2007.
2.- There is no remaining daily disposal capacity need (shortfall) for 2006 and 2007 because the total export need of 5,713 tpd and 5,715 tpd, respectively, were actually exported to out-of-County landfills. Since there was zero remaining daily disposal capacity need in 2006 and 2007, the diversion rate is calculated to be 49□ and 48□ , respectively, in order to maintain consistency of this analysis with the 2006 generation rate of 23,807,137 tons (see Table 4-5). However, the actual unofficial Waste Board's diversion rate for Los Angeles County in 2006 is 54.7□ . This uses the default diversion rate for all jurisdictions plus the Taxable Sales deflator Index value. The rate does not include transformation credit, or disposal modifications requested by jurisdictions. Also, a 50□ diversion rate is assumed from 2008 through 2021.
3.- Expected daily tonnage rates are based on the permitted daily capacity for the Antelope Valley, Chiquita, Lancaster, Puente Hills, and Sunshine Canyon landfills. The expected daily tonnage rate for Burbank, Calabasas, Pebbly Beach, San Clemente, Scholl, and Whittier (Savage) landfills are based on the average daily tonnages for the period of 1/1/06 to 12/31/06. Expected daily tonnage rate for Bradley Landfill is based on the fact that the Landfill remained open through April 14, 2007. Puente Hills Landfill's permitted daily capacity is based on the CUP requirement and the daily disposal capacity will be reduced if waste-by-rail is not implemented during the specified benchmark dates.
4.- "tpd-6" means tons per day, 6-day per week average.
5.- Class III Landfill Disposal Need refers to the amount of solid waste generated in or imported into Los Angeles County that needs to be disposed in Class III Landfills located within Los Angeles County.
6.- Class III Landfill Export Need refers to the daily amount of solid waste in need of disposal that exceeds the combined daily permitted and expected capacity of all in-County Class III landfills and transformation facilities. The amount shown for each year were taken care of by the currently available out-of-County class III landfill capacity.
7.- Available out-of-County disposal capacity refers to the amount of solid waste generated in Los Angeles County that can be accepted by the out-of-County Class III landfills which are currently accepting solid waste from Los Angeles County.
8.- Remaining daily disposal capacity need (shortfall) refers to the daily amount of solid waste in need of disposal that exceeds (in excess) of the available in-County and out-of-County (export) disposal capacity.
9.- Existing export quantities are considered part of the Class III landfill export need and are considered in determining the remaining daily disposal capacity need (shortfall).
10.- 2006 import waste quantities are based on the 2007 Landfill Survey for the period of 1/1/06 to 12/31/06. Import waste quantities for 2006 (854) and 2007 (764) are based on SWIMS data, import waste quantities for 2008 and beyond are assumed to be 900 tpd.
11.- Use of existing in-County Class III landfill and transformation facilities, and utilization of currently available out-of-County disposal facilities capacity (Status Quo).

LEGEND:

C - Closure due to exhausted capacity
E - Potential expansion of existing class III landfill
L - Does not accept waste from the City of Los Angeles and Orange County
R - Restricted Wasteshed
CIWMB - California Integrated Waste Management Board

Source : Los Angeles County Department of Public Works, SWIMS (May 2008), and 2006 Annual Report on the Los Angeles County Countywide Siting Element, June 2008

TABLE 4-13
SCENARIO 3

DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)
UTILIZATION OF EXISTING IN-COUNTY CLASS III LANDFILLS AND TRANSFORMATION FACILITIES,
UTILIZATION OF CURRENTLY AVAILABLE OUT-OF-COUNTY DISPOSAL CAPACITY, AND INCREASE IN THE DIVERSION RATE
DURING THE PLANNING PERIOD
(Based on January 1, 2006 through December 31, 2006 six-day average tonnages and assuming AB 939 diversion is fully implemented)

Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Imported Waste	Maximum Daily Transformation Capacity	Maximum Available Alternative Technology Capacity	Class III Landfill Disposal Need	1 Antelope Valley	2 Bradley	3 R Burbank	4 R Calabasas	5 Chiquita	6 Lancaster	7 Pebbly Beach	8 L Puente Hills	9 R San Clemente	10 R Scholl	11 R Sunshine County	12 R Sunshine City	13 R Combined Sunshine City/County	14 R Whittier	Total Expected Daily Tonnage and Remaining Permitted Landfill Capacity □□□□□□□□ tpd-6 Milion Tons	Export Need	Available Out-of-County Disposal Capacity	**Remaining Daily Disposal Capacity Need□ Shortfall** (Excess)
								Expected daily tonnage 6-day average (tpd-6) / Remaining permitted landfill capacity at year's end, Million Tons																	
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)																(tpd-6)	(tpd-6)	(tpd-6)
2006	76,305	49□	37,298	854	1,724	0	36,428	977 9.2	1,447 0.1	125 3.0	1,492 7.9	4,853 11.0	1,221 13.5	8.6 0.09	12,079 26.6	2.7 0.04	1,431 6.4	2,693 1.4	4,118 4.3		268 4.4	30,715 87.8	5,713	5,713	**0**
2007	76,771	48□	36,918	764	2,069	0	35,613	1,400 8.8	200 **C**	126 3.0	1,501 7.4	5,000 9.5	1,700 12.9	8.7 0.08	12,500 22.7	2.7 0.04	1,440 6.0	3,685 0.2	2,065 3.6		269 4.3	29,898 78.5	5,715	5,715	**0**
2008	77,772	50□	38,886	900	2,069	0	37,717	1,800 8.2		127 2.9	1,521 7.0	5,000 7.9	1,700 12.4	8.8 0.08	12,500 18.8	2.7 0.04	1,459 5.5	3,000 **C**	4,500 2.2		273 4.2	31,892 69.2	5,825	5,715	**110**
2009	78,947	50□	39,474	900	2,069	0	38,305	1,800 7.6		129 2.9	1,544 6.5	5,000 6.4	1,700 11.9	8.9 0.08	13,200 14.7	2.7 0.04	1,481 5.0		4,500 0.8		277 4.1	29,643 60.0	8,662	5,715	**2,947**
2010	80,583	50□	40,292	900	2,069	0	39,123	1,800 7.1		132 2.8	1,576 6.0	5,000 4.8	1,700 11.4	9.1 0.08	13,200 10.6	2.8 0.04	1,512 4.6		4,500 **C**		283 4.0	29,714 51.3	9,408	5,715	**3,693**
2011	82,190	51□	40,273	900	2,069	0	39,104	1,800 6.5		133 2.8	1,592 5.5	5,000 3.2	1,700 10.8	9.2 0.07	13,200 6.4	2.8 0.04	1,527 4.1				286 3.9	25,249 43.4	13,855	5,715	**8,140**
2012	83,798	52□	40,223	900	2,069	0	39,054	1,800 5.9		134 2.8	1,607 5.0	5,000 1.7	1,700 **C**	9.3 0.07	13,200 2.3	2.9 0.04	1,541 3.6				288 3.8	25,283 25.2	13,771	5,715	**8,056**
2013	85,501	53□	40,186	900	2,069	0	39,017	1,800 5.4		136 2.7	1,623 4.5	5,000 0.1		9.4 0.07	13,200 **C**	2.9 0.03	1,557 3.1				291 3.7	23,620 19.7	15,397	5,715	**9,682**
2014	87,418	54□	40,212	900	2,069	0	39,043	1,800 4.8		137 2.7	1,644 4.0	5,000 **C**		9.5 0.06		2.9 0.03	1,577 2.6				295 3.6	10,465 17.8	28,578	12,873	**15,705**
2015	89,207	55□	40,143	900	2,069	0	38,974	1,800 4.3		139 2.6	1,661 3.4			9.6 0.06		2.9 0.03	1,593 2.1				298 3.6	5,503 16.1	33,471	12,873	**20,598**
2016	90,951	56□	40,018	900	2,069	0	38,849	1,800 3.7		140 2.6	1,677 2.9			9.7 0.06		3.0 0.03	1,608 1.6				301 3.5	5,539 14.4	33,311	11,206	**22,105**
2017	92,686	57□	39,855	900	2,069	0	38,686	1,800 3.1		141 2.5	1,692 2.4			9.8 0.06		3.0 0.03	1,623 1.1				304 3.4	5,573 12.6	33,113	11,206	**21,907**
2018	94,321	58□	39,615	900	2,069	0	38,446	1,800 2.6		142 2.5	1,705 1.9			9.9 0.05		3.0 0.03	1,635 0.6				306 3.3	5,601 10.9	32,844	11,206	**21,638**
2019	95,958	59□	39,343	900	2,069	0	38,174	1,800 2.0		143 2.5	1,717 1.3			9.9 0.05		3.0 0.03	1,647 **C**				308 3.2	5,629 9.0	32,544	11,206	**21,338**
2020	97,708	60□	39,083	900	2,069	0	37,914	1,800 1.5		145 2.4	1,732 0.8			10.0 0.05		3.1 0.03					311 3.1	4,000 7.8	33,914	11,206	**22,708**
2021	99,537	60□	39,815	900	2,069	0	38,646	1,800 0.9		147 2.4	1,764 **C**			10.2 0.05		3.1 0.03					317 3.0	4,041 6.3	34,605	11,206	**23,399**

NOTES ASSUMPTIONS:

1.- The Waste Generation Rate (excluding the inert waste being handled at inert waste landfills) was estimated using the CIWMB's adjustment methodology, utilizing population projection, employment and taxable sales projections available from UCLA Longterm Forecast for Los Angeles County, dated June 2007.
2.- There is no remaining daily disposal capacity need (shortfall) for 2006 and 2007 because the total export need of 5,713 tpd and 5,715 tpd, respectively, were actually exported to out-of-County landfills. Since there was zero remaining daily disposal capacity need in 2006 and 2007, the diversion rate is calculated to be 49□ and 48□, respectively, in order to maintain consistency of this analysis with the 2006 generation rate of 23,807,137 tons (see Table 4-5). However, the actual unofficial Waste Board's diversion rate for Los Angeles County in 2006 is 54.7□. This uses the default diversion rate for all jurisdictions plus the Taxable Sales deflator Index value. The rate does not include transformation credit, or disposal modifications requested by jurisdictions. Also, a 50□ diversion rate is assumed from 2008 through 2021.
3.- Expected daily tonnage rates are based on the permitted daily capacity for the Antelope Valley, Chiquita, Lancaster, Puente Hills, and Sunshine Canyon landfills. The expected daily tonnage rate for Burbank, Calabasas, Pebbly Beach, San Clemente, Scholl, and Whittier (Savage) landfills are based on the average daily tonnages for the period of 1/1/06 to 12/31/06. Expected daily tonnage rate for Bradley Landfill is based on the fact that the Landfill remained open through April 14, 2007. Puente Hills Landfill's permitted daily capacity is based on the CUP requirement and the daily disposal capacity will be reduced if waste-by-rail is not implemented during the specified benchmark dates.
4.- "tpd-6" means tons per day, 6-day per week average.
5.- Class III Landfill Disposal Need refers to the amount of solid waste generated in or imported into Los Angeles County that needs to be disposed in Class III Landfills located within Los Angeles County.
6.- capacity.
7.- Available out-of-County disposal capacity refers to the amount of solid waste generated in Los Angeles County that can be accepted by the out-of-County Class III landfills which are currently accepting solid waste from Los Angeles County.
8.- Remaining daily disposal capacity need (shortfall) refers to the daily amount of solid waste in need of disposal that exceeds (in excess) of the available in-County and out-of-County (export) disposal capacity.
9.- Existing export quantities are considered part of the Class III landfill export need and are considered in determining the remaining daily disposal capacity need (shortfall).
10.- 2006 import waste quantities are based on the 2007 Landfill Survey for the period of 1/1/06 to 12/31/06. Import waste quantities for 2006 (854) and 2007 (764) are based on SWIMS data, import waste quantities for 2008 and beyond are assumed to be 900 tpd.
11.- Use of existing in-County Class III landfill and transformation facilities; utilization of currently available out-of-County disposal facilities capacity; and increase in diversion rate from 50□ in 2010 to 60□ in 2020 and beyond.

LEGEND:

C - Closure due to exhausted capacity
E - Potential expansion of existing class III landfill
L - Does not accept waste from the City of Los Angeles and Orange County
R - Restricted Wasteshed
CIWMB - California Integrated Waste Management Board

Source : Los Angeles County Department of Public Works, SWIMS (May 2008), and 2006 Annual Report on the Los Angeles County Countywide Siting Element, June 2008

TABLE 4-14
SCENARIO 4

DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)
UTILIZATION OF EXISTING IN-COUNTY CLASS III LANDFILLS AND TRANSFORMATION FACILITIES,
UTILIZATION OF CURRENTLY AVAILABLE OUT-OF-COUNTY DISPOSAL CAPACITY , INCREASE IN THE DIVERSION RATE,
AND DEVELOPMENT OF ALTERNATIVE TECHNOLOGY FACILITIES CAPACITY (UP TO 10,000 tpd by 2021)
DURING THE PLANNING PERIOD
(Based on January 1, 2006 through December 31, 2006 six-day average tonnages and
assuming AB 939 diversion is fully implemented)

								1	2	3	4	5	6	7	8	9	10	11	12	13	14				
										R	R				L	R	R	R	R	R				
Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Imported Waste	Maximum Daily Transformation Capacity	Maximum Available Alternative Technology Capacity	Class III Landfill Disposal Need	Antelope Valley	Bradley	Burbank	Calabasas	Chiquita	Lancaster	Pebbly Beach	Puente Hills	San Clemente	Scholl	Sunshine County	Sunshine City	Combined Sunshine City/County	Whittier	Total Expected Daily Tonnage and Remaining Permitted Landfill Capacity □□□□□□□□ tpd-6 Milion Tons	Export Need	Available Out-of-County Disposal Capacity	**Remaining Daily Disposal Capacity Need: Shortfall** (Excess)
								Expected daily tonnage 6-day average (tpd-6)																	
								Remaining permitted landfill capacity at year's end, Million Tons																	
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)																(tpd-6)	(tpd-6)	(tpd-6)
2006	76,305	49□	37,298	854	1,724	0	36,428	977	1,447	125	1,492	4,853	1,221	8.6	12,079	2.7	1,431	2,693	4,118		268	30,715	5,713	5,713	**0**
								9.2	0.1	3.0	7.9	11.0	13.5	0.09	26.6	0.04	6.4	1.4	4.3		4.4	87.8			
2007	76,771	48□	36,918	764	2,069	0	35,613	1,400	200	126	1,501	5,000	1,700	8.7	12,500	2.7	1,440	3,685	2,065		269	29,898	5,715	5,713	**0**
								8.8	**C**	3.0	7.4	9.5	12.9	0.08	22.7	0.04	6.0	0.2	3.6		4.3	78.5			
2008	77,772	50□	38,886	900	2,069	0	37,717	1,800		127	1,521	5,000	1,700	8.8	12,500	2.7	1,459	3,000	4,500		273	31,892	5,825	5,715	**110**
								8.2		2.9	7.0	7.9	12.4	0.08	18.8	0.04	5.5	**C**	2.2		4.2	69.2			
2009	78,947	50□	39,474	900	2,069	0	38,305	1,800		129	1,544	5,000	1,700	8.9	13,200	2.7	1,481		4,500		277	29,643	8,662	5,715	**2,947**
								7.6		2.9	6.5	6.4	11.9	0.08	14.7	0.04	5.0		0.8		4.1	60.0			
2010	80,583	50□	40,292	900	2,069	1,200	37,923	1,800		132	1,576	5,000	1,700	9.1	13,200	2.8	1,512		4,500		283	29,714	8,208	5,715	**2,493**
								7.1		2.8	6.0	4.8	11.4	0.08	10.6	0.04	4.6		**C**		4.0	51.3			
2011	82,190	51□	40,273	900	2,069	1,500	37,604	1,800		133	1,592	5,000	1,700	9.2	13,200	2.8	1,527				286	25,249	12,355	5,715	**6,640**
								6.5		2.8	5.5	3.2	10.8	0.07	6.4	0.04	4.1				3.9	43.4			
2012	83,798	52□	40,223	900	2,069	2,000	37,054	1,800		134	1,607	5,000	1,700	9.3	13,200	2.9	1,541				288	25,283	11,771	5,715	**6,056**
								5.9		2.8	5.0	1.7	**C**	0.07	2.3	0.04	3.6				3.8	25.2			
2013	85,501	53□	40,186	900	2,069	2,500	36,517	1,800		136	1,623	5,000		9.4	13,200	2.9	1,557				291	23,620	12,897	5,715	**7,182**
								5.4		2.7	4.5	0.1		0.07	**C**	0.03	3.1				3.7	19.7			
2014	87,418	54□	40,212	900	2,069	3,000	36,043	1,800		137	1,644	5,000		9.5		2.9	1,577				295	10,465	25,578	12,873	**12,705**
								4.8		2.7	4.0	**C**		0.06		0.03	2.6				3.6	17.8			
2015	89,207	55□	40,143	900	2,069	4,000	34,974	1,800		139	1,661			9.6		2.9	1,593				298	5,503	29,471	12,873	**16,598**
								4.3		2.6	3.4			0.06		0.03	2.1				3.6	16.1			
2016	90,951	56□	40,018	900	2,069	5,000	33,849	1,800		140	1,677			9.7		3.0	1,608				301	5,539	28,311	11,206	**17,105**
								3.7		2.6	2.9			0.06		0.03	1.6				3.5	14.4			
2017	92,686	57□	39,855	900	2,069	6,000	32,686	1,800		141	1,692			9.8		3.0	1,623				304	5,573	27,113	11,206	**15,907**
								3.1		2.5	2.4			0.06		0.03	1.1				3.4	12.6			
2018	94,321	58□	39,615	900	2,069	7,000	31,446	1,800		142	1,705			9.9		3.0	1,635				306	5,601	25,844	11,206	**14,638**
								2.6		2.5	1.9			0.05		0.03	0.6				3.3	10.9			
2019	95,958	59□	39,343	900	2,069	8,000	30,174	1,800		143	1,717			9.9		3.0	1,647				308	5,629	24,544	11,206	**13,338**
								2.0		2.5	1.3			0.05		0.03	**C**				3.2	9.0			
2020	97,708	60□	39,083	900	2,069	9,000	28,914	1,800		145	1,732			10.0		3.1					311	4,000	24,914	11,206	**13,708**
								1.5		2.4	0.8			0.05		0.03					3.1	7.8			
2021	99,537	60□	39,815	900	2,069	10,000	28,646	1,800		147	1,764			10.2		3.1					317	4,041	24,605	11,206	**13,399**
								0.9		2.4	**C**			0.05		0.03					3.0	6.3			

NOTES ASSUMPTIONS:

1.- The Waste Generation Rate (excluding the inert waste being handled at inert waste landfills) was estimated using the CIWMB's adjustment methodology, utilizing population projection, employment and taxable sales projections available from UCLA Longterm Forecast for Los Angeles County, dated June 2007.

2.- There is no remaining daily disposal capacity need (shortfall) for 2006 and 2007 because the total export need of 5,713 tpd and 5,715 tpd, respectively, were actually exported to out-of-County landfills. Since there was zero remaining daily disposal capacity need in 2006 and 2007, the diversion rate is calculated to be 49□ and 48□, respectively, in order to maintain consistency of this analysis with the 2006 generation rate of 23,807,137 tons (see Table 4-5). However, the actual unofficial Waste Board's diversion rate for Los Angeles County in 2006 is 54.7□. This uses the default diversion rate for all jurisdictions plus the Taxable Sales deflator Index value. The rate does not include transformation credit, or disposal modifications requested by jurisdictions. Also, a 50□ diversion rate is assumed from 2008 through 2021.

3.- Expected daily tonnage rates are based on the permitted daily capacity for the Antelope Valley, Chiquita, Lancaster, Puente Hills, and Sunshine Canyon landfills. The expected daily tonnage rate for Burbank, Calabasas, Pebbly Beach, San Clemente, Scholl, and Whittier (Savage) landfills are based on the average daily tonnages for the period of 1/1/06 to 12/31/06. Expected daily tonnage rate for Bradley Landfill is based on the fact that the Landfill remained open through April 14, 2007. Puente Hills Landfill's permitted daily capacity is based on the CUP requirement and the daily disposal capacity will be reduced if waste-by-rail is not implemented during the specified benchmark dates.

4.- "tpd-6" means tons per day, 6-day per week average.

5.- Class III Landfill Disposal Need refers to the amount of solid waste generated in or imported into Los Angeles County that needs to be disposed in Class III Landfills located within Los Angeles County.

6.- capacity.

7.- Available out-of-County disposal capacity refers to the amount of solid waste generated in Los Angeles County that can be accepted by the out-of-County Class III landfills which are currently accepting solid waste from Los Angeles County.

8.- Remaining daily disposal capacity need (shortfall) refers to the daily amount of solid waste in need of disposal that exceeds (in excess) of the available in-County and out-of-County (export) disposal capacity.

9.- Existing export quantities are considered part of the Class III landfill export need and are considered in determining the remaining daily disposal capacity need (shortfall).

10.- 2006 import waste quantities are based on the 2007 Landfill Survey for the period of 1/1/06 to 12/31/06. Import waste quantities for 2006 (854) and 2007 (764) are based on SWIMS data, import waste quantities for 2008 and beyond are assumed to be 900 tpd.

11.- Use of existing in-County Class III landfill and transformation facilities; utilization of currently available out-of-County disposal facilities capacity; increase in diversion rate from 50□ in 2010 to 60□ in 2020 and beyond; and development of alternative technology facilities

LEGEND:

C - Closure due to exhausted capacity
E - Potential expansion of existing class III landfill
L - Does not accept waste from the City of Los Angeles and Orange County
R - Restricted Wasteshed
CIWMB - California Integrated Waste Management Board

Source : Los Angeles County Department of Public Works, SWIMS (May 2008), and 2006 Annual Report on the Los Angeles County Countywide Siting Element, June 2008

TABLE 4-15
SCENARIO 5

DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)
UTILIZATION OF EXISTING IN-COUNTY CLASS III LANDFILLS AND TRANSFORMATION FACILITIES,
UTILIZATION OF CURRENTLY AVAILABLE OUT-OF-COUNTY DISPOSAL CAPACITY , INCREASE THE DIVERSION RATE,
DEVELOPMENT OF ALTERNATIVE TECHNOLOGY FACILITIES CAPACITY (UP TO 10,000 tpd by 2021),
AND DEVELOPMENT OF PROPOSED IN-COUNTY CLASS III LANDFILL EXPANSIONS
DURING THE PLANNING PERIOD
(Based on January 1, 2006 through December 31, 2006 six-day average tonnages and assuming AB 939 diversion is fully implemented)

Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Imported Waste	Maximum Daily Transformation Capacity	Maximum Available Alternative Technology Capacity	Class III Landfill Disposal Need	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total Expected Daily Tonnage and Remaining Permitted Landfill Capacity □□□□□□□□ tpd-6 Milion Tons	Export Need	Available Out-of-County Disposal Capacity	**Remaining Daily Disposal Capacity Need□ Shortfall** (Excess)
								Antelope Valley	Bradley	Burbank **R**	Calabasas **R**	Chiquita	Lancaster	Pebbly Beach	Puente Hills **L**	San Clemente **R**	Scholl **R**	Sunshine County **R**	Sunshine City **R**	Combined Sunshine City/County **R**	Whittier **R**				
								Expected daily tonnage 6-day average (tpd-6)																	
								Remaining permitted landfill capacity at year's end, Million Tons																	
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)																(tpd-6)	(tpd-6)	(tpd-6)
2006	76,305	49□	37,298	854	1,724	0	36,428	977	1,447	125	1,492	4,853	1,221	8.6	12,079	2.7	1,431	2,693	4,118		268	30,715	5,713	5,713	**0**
								9.2	0.1	3.0	7.9	11.0	13.5	0.09	26.6	0.04	6.4	1.4	4.3		4.4	87.8			
2007	76,771	48□	36,918	764	2,069	0	35,613	1,400	200	126	1,501	5,000	1,700	8.7	12,500	2.7	1,440	3,685 **E**	2,065		269	29,898	5,715	5,715	**0**
								8.8	**C**	3.0	7.4	9.5	12.9	0.08	22.7	0.040	6.0	3.0	3.6		4.3	81.3			
2008	77,772	50□	38,886	900	2,069	0	37,717	1,800 **E**		125	1,492	5,000	1,700	8.8	12,500	2.7	1,431	3,500	4,500		267	32,327	5,390	5,715	(325)
								17.2		2.9	7.0	7.9	12.4	0.08	18.8	0.039	5.5	1.9	2.2		4.2	80.1			
2009	78,947	50□	39,474	900	2,069	0	38,305	1,800		127	1,514	5,000 **E**	1,700	8.9	13,200	2.7	1,453	3,500 **E**	4,500 **E**		271	33,077	5,227	5,715	(488)
								16.6		2.9	6.5	38.4	11.9	0.08	14.7	0.038	5.1	20.8	49.8		4.1	170.8			
2010	80,583	50□	40,292	900	2,069	1,200	37,923	3,600		130	1,546	5,000	3,000 **E**	9.1	13,200	2.7	1,483			11,000	277	39,247	(1,325)	5,715	(7,040)
								15.5		2.8	6.0	36.8	11.0	0.08	10.6	0.037	4.6			67.2	4.0	158.6			
2011	82,190	51□	40,273	900	2,069	1,500	37,604	3,600		131	1,561	5,000	3,000	9.2	13,200	2.8	1,498			11,000	280	39,282	(1,677)	5,715	(7,392)
								14.3		2.8	5.5	35.2	10.0	0.07	6.4	0.036	4.1			63.8	3.9	146.3			
2012	83,798	52□	40,223	900	2,069	2,000	37,054	3,600		132	1,576	5,000	3,000	9.3	13,200	2.8	1,512			11,000	282	39,315	(2,261)	5,715	(7,976)
								13.2		2.8	5.0	33.7	9.1	0.07	2.3	0.0355	3.6			60.4	3.8	134.1			
2013	85,501	53□	40,186	900	2,069	2,500	36,517	3,600		134	1,592	5,000	3,000	9.4	13,200	2.8	1,528			11,000	285	39,351	(2,835)	5,715	(8,550)
								12.1		2.7	4.5	32.1	8.1	0.07	**C**	0.0346	3.2			56.9	3.8	123.6			
2014	87,418	54□	40,212	900	2,069	3,000	36,043	3,600		135	1,612	5,000	3,000	9.5		2.9	1,547			11,000	289	26,195	9,848	12,873	(3,025)
								11.0		2.7	4.0	30.6	7.2	0.06		0.0337	2.7			53.5	3.7	115.4			
2015	89,207	55□	40,143	900	2,069	4,000	34,974	3,600		137	1,629	5,000	3,000	9.6		2.9	1,563			11,000	292	26,233	8,741	12,873	(4,132)
								9.9		2.6	3.5	29.0	6.3	0.06		0.0328	2.2			50.1	3.6	107.2			
2016	90,951	56□	40,018	900	2,069	5,000	33,849	3,600		138	1,645	5,000	3,000	9.7		2.9	1,578			11,000	295	26,268	7,582	11,206	(3,624)
								8.7		2.6	3.0	27.4	5.3	0.06		0.0319	1.7			46.6	3.5	99.0			
2017	92,686	57□	39,855	900	2,069	6,000	32,686	3,600		139	1,659	5,000	3,000	9.8		3.0	1,592			11,000	297	26,301	6,385	11,206	(4,821)
								7.6		2.5	2.5	25.9	4.4	0.06		0.0310	1.2			43.2	3.4	90.8			
2018	94,321	58□	39,615	900	2,069	7,000	31,446	3,600		140	1,672	5,000	3,000	9.9		3.0	1,604			11,000	300	26,329	5,116	11,206	(6,090)
								6.5		2.5	2.0	24.3	3.5	0.05		0.0301	0.7			39.8	3.3	82.6			
2019	95,958	59□	39,343	900	2,069	8,000	30,174	3,600		141	1,684	5,000	3,000	9.9		3.0	1,616			11,000	302	26,357	3,817	11,206	(7,389)
								5.4		2.5	1.4	22.8	2.5	0.05		0.0291	0.2			36.3	3.2	74.4			
2020	97,708	60□	39,083	900	2,069	9,000	28,914	3,600		143	1,698	5,000	3,000	10.0		3.0	1,629 **E**			11,000	304	26,388	2,527	11,206	(8,679)
								4.2		2.4	0.9	21.2	1.6	0.05		0.0282	4.7			32.9	3.1	71.1			
2021	99,537	60□	39,815	900	2,069	10,000	28,646	3,600		145	1,730	5,000	3,000	10.2		3.1	1,660			11,000	310	26,459	2,187	11,206	(9,019)
								3.1		2.4	**C**	19.6	**C**	0.05		0.0272	10.2			29.5	3.0	67.9			

NOTES/ASSUMPTIONS:

1.- The Waste Generation Rate (excluding the inert waste being handled at inert waste landfills) was estimated using the CIWMB's adjustment methodology, utilizing population projection, employment and taxable sales projections available from UCLA Longterm Forecast for Los Angeles County, dated June 2007.

2.- There is no remaining daily disposal capacity need (shortfall) for 2006 and 2007 because the total export need of 5,713 tpd and 5,715 tpd, respectively, were actually exported to out-of-County landfills. Since there was zero remaining daily disposal capacity need in 2006 and 2007, the diversion rate is calculated to be 49□ and 48□ , respectively, in order to maintain consistency of this analysis with the 2006 generation rate of 23,807,137 tons (see Table 4-5). However, the actual unofficial Waste Board's diversion rate for Los Angeles County in 2006 is 54.7□. This uses the default diversion rate for all jurisdictions plus the Taxable Sales deflator Index value. The rate does not include transformation credit, or disposal modifications requested by jurisdictions. Also, a 50□ diversion rate is assumed from 2008 through 2021.

3.- Expected daily tonnage rates are based on the permitted daily capacity for the Antelope Valley, Chiquita, Lancaster, Puente Hills, and Sunshine Canyon landfills. The expected daily tonnage rate for Burbank, Calabasas, Pebbly Beach, San Clemente, Scholl, and Whittier (Savage) landfills are based on the average daily tonnages for the period of 1/1/06 to 12/31/06. Expected daily tonnage rate for Bradley Landfill is based on the fact that the Landfill remained open through April 14, 2007. Puente Hills Landfill's permitted daily capacity is based on the CUP requirement and the daily disposal capacity will be reduced if waste-by-rail is not implemented during the specified benchmark dates.

4.- "tpd-6" means tons per day, 6-day per week average.

5.- Class III Landfill Disposal Need refers to the amount of solid waste generated in or imported into Los Angeles County that needs to be disposed in Class III Landfills located within Los Angeles County.

6.- Class III Landfill Export Need refers to the daily amount of solid waste in need of disposal that exceeds the combined daily permitted and expected capacity of all in-County Class III landfills and transformation facilities. The amount shown for each year were taken care of by the currently available out-of-County class III landfill capacity.

7.- Available out-of-County disposal capacity refers to the amount of solid waste generated in Los Angeles County that can be accepted by the out-of-County Class III landfills which are currently accepting solid waste from Los Angeles County.

8.- Remaining daily disposal capacity need (shortfall) refers to the daily amount of solid waste in need of disposal that exceeds (in excess) of the available in-County and out-of-County (export) disposal capacity.

9.- Existing export quantities are considered part of the Class III landfill export need and are considered in determining the remaining daily disposal capacity need (shortfall).

10.- 2006 import waste quantities are based on the 2007 Landfill Survey for the period of 1/1/06 to 12/31/06. Import waste quantities for 2006 (854) and 2007 (764) are based on SWIMS data, import waste quantities for 2008 and beyond are assumed to be 900 tpd.

11.- Use of existing in-County Class III landfill and transformation facilities; utilization of currently available out-of-County disposal facilities capacity; increase in diversion rate to 60□ in 2020 and beyond; development of alternative technology facilities (1,200 tpd in 2010 to 10,000 tpd in 2021); and development of all proposed in-County Class III landfill expansions. This assumes a full implementation of the alternative technology facilities goals and objectives proposed by both the City and County of Los Angeles.

LEGEND:

C - Closure due to exhausted capacity
E - Potential expansion of existing class III landfill
L - Does not accept waste from the City of Los Angeles and Orange County
R - Restricted Wasteshed
CIWMB - California Integrated Waste Management Board

Source : Los Angeles County Department of Public Works, SWIMS (May 2008), and 2006 Annual Report on the Los Angeles County Countywide Siting Element, June 2008

TABLE 4-16
SCENARIO 6 (BEST CASE SCENARIO)

DISPOSAL CAPACITY NEED ANALYSIS (EXCLUDING INERT WASTE LANDFILLS)
UTILIZATION OF EXISTING IN-COUNTY CLASS III LANDFILLS AND TRANSFORMATION FACILITIES,
UTILIZATION OF CURRENTLY AVAILABLE OUT-OF-COUNTY DISPOSAL CAPACITY, INCREASE THE DIVERSION RATE,
DEVELOPMENT OF ALTERNATIVE TECHNOLOGY FACILITIES CAPACITY (UP TO 10,000 tpd by 2021),
DEVELOPMENT OF PROPOSED IN-COUNTY CLASS III LANDFILL EXPANSIONS,
AND UTILIZATION OF FUTURE AVAILABLE OUT-OF-COUNTY DISPOSAL FACILITIES CAPACITY DURING THE PLANNING PERIOD
(Based on January 1, 2006 through December 31, 2006 six-day average tonnages and assuming AB 939 diversion is fully implemented)

Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Imported Waste	Maximum Daily Transformation Capacity	Maximum Available Alternative Technology Capacity	Class III Landfill Disposal Need	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total Expected Daily Tonnage and Remaining Permitted Landfill Capacity □□□□□□□□ tpd-6 Milion Tons	Export Need	Available Out-of-County Disposal Capacity	**Remaining Daily Disposal Capacity Need□ Shortfall** (Excess)
								EXISTING LANDFILLS																	
										R	R				L	R	R	R	R	R	R			
																				Combined Sunshine					
								Antelope	Bradley	Burbank	Calabasas	Chiquita	Lancaster	Pebbly Beach	Puente Hills	San Clemente	Scholl	Sunshine County	Sunshine City	City/County	Whittier				
								Expected daily tonnage 6-day average (tpd-6)																	
								Remaining permitted landfill capacity at year's end, Million Tons																	
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)																(tpd-6)	(tpd-6)	(tpd-6)
2006	76,305	49□	37,298	854	1,724	0	36,428	977	1,447	125	1,492	4,853	1,221	8.6	12,079	2.65	1,431	2,693	4,118		268	30,715	5,713	5,713	**0**
								9.2	0.1	3.0	7.9	11.0	13.5	0.087	26.6	0.041	6.4	1.4	4.3		4.4	87.8			
2007	76,771	48□	36,918	764	2,069	0	35,613	1,400	200	126	1,501	5,000	1,700	8.7	12,500	2.7	1,440	3,685 **E**	2,065		269	29,898	5,715	5,715	**0**
								18.0	0.0	3.0	7.4	9.5	12.9	0.085	22.7	0.040	6.0	3.0	3.6		4.3	90.5			
2008	77,772	50□	38,886	900	2,069	0	37,717	1,800	**C**	125	1,492	5,000	1,700	8.6	12,500	2.65	1,431	3,500	4,500		267	32,327	5,390	5,715	(325)
								17.4		2.9	7.0	7.9	12.4	0.082	18.8	0.039	5.5	1.9	2.2		4.2	80.4			
2009	78,947	50□	39,474	900	2,069	0	38,305	1,800		127	1,514	5,000	1,700	8.8	13,200	2.69	1,453	3,500 **E**	4,500 **E**		271	33,077	5,227	5,715	(488)
								16.8		2.9	6.5	6.4	11.9	0.079	14.7	0.038	5.1	20.8	49.8		4.1	139.1			
2010	80,583	50□	40,292	900	2,069	1,200	37,923	3,600 **E**		130	1,546	5,000 **E**	3,000 **E**	9.0	13,200	2.75	1,483			11,000	277	39,247	(1,325)	9,715	(11,040)
								15.7		2.8	6.0	36.8	11.0	0.076	10.6	0.037	4.6			67.2	4.0	158.8			
2011	82,190	51□	40,273	900	2,069	1,500	37,604	3,600		131	1,561	5,000	3,000	9.0	13,200	2.78	1,498			11,000	280	39,282	(1,677)	9,715	(11,392)
								14.6		2.8	5.5	35.2	10.0	0.074	6.4	0.036	4.1			63.8	3.9	146.6			
2012	83,798	52□	40,223	900	2,069	2,000	37,054	3,600		132	1,576	5,000	3,000	9.1	13,200	2.80	1,512			11,000	282	39,315	(2,261)	9,715	(11,976)
								13.5		2.8	5.0	33.7	9.1	0.071	2.3	0.0355	3.6			60.4	3.8	134.3			
2013	85,501	53□	40,186	900	2,069	2,500	36,517	3,600		134	1,592	5,000	3,000	9.2	13,200	2.83	1,528			11,000	285	39,351	(2,835)	9,715	(12,550)
								12.3		2.7	4.5	32.1	8.1	0.068	**C**	0.0346	3.2			56.9	3.8	123.8			
2014	87,418	54□	40,212	900	2,069	3,000	36,043	3,600		135	1,612	5,000	3,000	9.3		2.87	1,547			11,000	289	26,195	9,848	16,873	(7,025)
								11.2		2.7	4.0	30.6	7.2	0.065		0.0337	2.7			53.5	3.7	115.6			
2015	89,207	55□	40,143	900	2,069	4,000	34,974	3,600		137	1,629	5,000	3,000	9.4		2.90	1,563			11,000	292	26,233	8,741	16,873	(8,132)
								10.1		2.6	3.5	29.0	6.3	0.062		0.0328	2.2			50.1	3.6	107.5			
2016	90,951	56□	40,018	900	2,069	5,000	33,849	3,600		138	1,645	5,000	3,000	9.5		2.93	1,578			11,000	295	26,268	7,582	15,206	(7,624)
								9.0		2.6	3.0	27.4	5.3	0.059		0.0319	1.7			46.6	3.5	99.3			
2017	92,686	57□	39,855	900	2,069	6,000	32,686	3,600		139	1,659	5,000	3,000	9.6		2.95	1,592			11,000	297	26,301	6,385	15,206	(8,821)
								7.8		2.5	2.5	25.9	4.4	0.056		0.0310	1.2			43.2	3.4	91.1			
2018	94,321	58□	39,615	900	2,069	7,000	31,446	3,600		140	1,672	5,000	3,000	9.7		2.97	1,604			11,000	300	26,329	5,117	15,206	(10,089)
								6.7		2.5	2.0	24.3	3.5	0.053		0.0301	0.7			39.8	3.3	82.8			
2019	95,958	59□	39,343	900	2,069	8,000	30,174	3,600		141	1,684	5,000	3,000	9.8		3.00	1,616			11,000	302	26,357	3,817	15,206	(11,389)
								5.6		2.5	1.4	22.8	2.5	0.050		0.0291	0.2			36.3	3.2	74.6			
2020	97,708	60□	39,083	900	2,069	9,000	28,914	3,600		143	1,698	5,000	3,000	9.8		3.02	1,629 **E**	11,000	304	26,387	2,527	15,206	(12,679)		
								4.5		2.4	0.9	21.2	1.6	0.047		0.0282	4.7			32.9	3.1	71.4			
2021	99,537	60□	39,815	900	2,069	10,000	28,646	3,600		145	1,730	5,000	3,000	10.0		3.08	1,660			11,000	310	26,458	2,187	15,206	(13,019)
								3.4		2.4	0.4	19.6	0.7	0.044		0.0272	10.2			29.5	3.0	69.1			

NOTES ASSUMPTIONS:

1.- The Waste Generation Rate (excluding the inert waste being handled at inert waste landfills) was estimated using the CIWMB's adjustment methodology, utilizing population projection, employment and taxable sales projections available from UCLA Longterm Forecast for Los Angeles County, dated June 2007.

2.- There is no remaining daily disposal capacity need (shortfall) for 2006 and 2007 because the total export need of 5,713 tpd and 5,715 tpd, respectively, were actually exported to out-of-County landfills. Since there was zero remaining daily disposal capacity need in 2006 and 2007, the diversion rate is calculated to be 49□ and 48□, respectively, in order to maintain consistency of this analysis with the 2006 generation rate of 23,807,137 tons (see Table 4-5). However, the actual unofficial Waste Board's diversion rate for Los Angeles County in 2006 is 54.7□. This uses the default diversion rate for all jurisdictions plus the Taxable Sales deflator Index value. The rate does not include transformation credit, or disposal modifications requested by jurisdictions. Also, a 50□ diversion rate is assumed from 2008 through 2021.

3.- Expected daily tonnage rates are based on the permitted daily capacity for the Antelope Valley, Chiquita, Lancaster, Puente Hills, and Sunshine Canyon landfills. The expected daily tonnage rate for Burbank, Calabasas, Pebbly Beach, San Clemente, Scholl, and Whittier (Savage) landfills are based on the average daily tonnages f the period of 1/1/06 to 12/31/06. Expected daily tonnage rate for Bradley Landfill is based on the fact that the Landfill remained open through April 14, 2007. Puente Hills Landfill's permitted daily capacity is based on the CUP requirement and the daily disposal capacity will be reduced if waste-by-rail is not implemented during the specified benchmark dates.

4.- "tpd-6" means tons per day, 6-day per week average.

5.- Class III Landfill Disposal Need refers to the amount of solid waste generated in or imported into Los Angeles County that needs to be disposed in Class III Landfills located within Los Angeles County.

6.- Class III Landfill Export Need refers to the daily amount of solid waste in need of disposal that exceeds the combined daily permitted and expected capacity of all in-County Class III landfills and transformation facilities. The amount shown for each year were taken care of by the currently available out-of-County class III landfill capacity.

7.- Available out-of-County disposal capacity refers to the amount of solid waste generated in Los Angeles County that can be accepted by the out-of-County Class III landfills which are currently accepting solid waste from Los Angeles County.

8.- Remaining daily disposal capacity need (shortfall) refers to the daily amount of solid waste in need of disposal that exceeds (in excess) of the available in-County and out-of-County (export) disposal capacity.

9.- Existing export quantities are considered part of the Class III landfill export need and are considered in determining the remaining daily disposal capacity need (shortfall).

10.- 2006 import waste quantities are based on the 2007 Landfill Survey for the period of 1/1/06 to 12/31/06. Import waste quantities for 2006 (854) and 2007 (764) are based on SWIMS data, import waste quantities for 2008 and beyond are assumed to be 900 tpd.

11.- Use of existing in-County Class III landfill and transformation facilities; utilization of currently available out-of-County disposal facilities capacity; increase in diversion rate to 60□ in 2020 and beyond; development of alternative technology facilities (1,200 tpd in 2010 and up to 10,000 tpd in 2021); development of all proposed in-County Class III landfill expansions; and utilization of future available out-of-County disposal facility capacity. This assumes a full implementation of the alternative technology facilities goals and objectives proposed by both the City and County of Los Angeles.

LEGEND:

C - Closure due to exhausted capacity
E - Potential expansion of existing class III landfill
L - Does not accept waste from the City of Los Angeles and Orange County
R - Restricted Wasteshed
CIWMB - California Integrated Waste Management Board

Source : Los Angeles County Department of Public Works, SWIMS (May 2008), and 2006 Annual Report on the Los Angeles County Countywide Siting Element, June 2008

TABLE 4-17
SUMMARY OF THE EXPORT NEED
FOR THE VARIOUS DISPOSAL CAPACITY NEED ANALYSIS SCENARIOS

Year	Waste Generation Rate	Imported Waste	Maximum Daily Transformation Capacity	**Scenario 1 (Table 4-11) Worst Case Scenario**	**Scenario 2 (Table 4-12)**	**Scenario 3 (Table 4-13)**	**Scenario 4 (Table 4-14)**	**Scenario 5 (Table 4-15)**	**Scenario 6 (Table 4-16) Best Case Scenario**
				Existing in-County Class III landfills and transformation facilities only	**Scenario 1 plus currently available out-of-County disposal capacity**	**Scenario 2 plus increase in the diversion rate (from 50% in 2010 and up to 60% by 2020)**	**Scenario 3 plus alternative technology facilities capacity (1200 tpd in 2010 and up to 10,000 tpd[1] by 2021)**	**Scenario 4 plus development of all proposed in-County Class III landfill expansions**	**Scenario 5 plus utilization of future available out-of-County disposal capacity**
				Class III Landfill Daily Disposal Capacity Export Need					
	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)
2006	76,305	854	1,715	**5,713**	**5,713**	**5,713**	**5,713**	**5,713**	**5,713**
2007	76,771	764	2,069	**5,715**	**5,715**	**5,715**	**5,715**	**5,715**	**5,715**
2008	77,772	900	2,069	**5,825**	**5,825**	**5,825**	**5,825**	**5,390**	**5,390**
2009	78,947	900	2,069	**8,662**	**8,662**	**8,662**	**8,662**	**5,227**	**5,227**
2010	80,583	900	2,069	**9,408**	**9,408**	**9,408**	**8,208**	(1,325)	(1,325)
2011	82,190	900	2,069	**14,642**	**14,642**	**13,855**	**12,355**	(1,677)	(1,677)
2012	83,798	900	2,069	**15,376**	**15,376**	**13,771**	**11,771**	(2,261)	(2,261)
2013	85,501	900	2,069	**17,853**	**17,853**	**15,397**	**12,897**	(2,835)	(2,835)
2014	87,418	900	2,069	**31,928**	**31,928**	**28,578**	**25,578**	**9,848**	**9,848**
2015	89,207	900	2,069	**37,744**	**37,744**	**33,471**	**29,471**	**8,741**	**8,741**
2016	90,951	900	2,069	**38,540**	**38,540**	**33,311**	**28,311**	**7,582**	**7,582**
2017	92,686	900	2,069	**39,332**	**39,332**	**33,113**	**27,113**	**6,385**	**6,385**
2018	94,321	900	2,069	**40,078**	**40,078**	**32,844**	**25,844**	**5,116**	**5,117**
2019	95,958	900	2,069	**40,825**	**40,825**	**32,544**	**24,544**	**3,817**	**3,817**
2020	97,708	900	2,069	**43,457**	**43,457**	**33,914**	**24,914**	**2,527**	**2,527**
2021	99,537	900	2,069	**44,326**	**44,326**	**34,605**	**24,605**	**2,187**	**2,187**

Assumptions:

1. Import rate of 900 tpd from 2008 to 2021. Actual import rate are used for 2006 and 2007.
2. For Scenario 1, export quantities are considered part of the Class III landfill Disposal Need and the daily disposal capacity need (shortfall).

General Notes:

Scenario 1: Use of existing in-County Class III landfill and transformation facilities only (Worst Case).
Scenario 2: Use of existing in-County Class III landfill and transformation facilities, and utilization of currently available out-of-County disposal facilities capacity (Status Quo).
Scenario 3: Use of existing in-County Class III landfill and transformation facilities; utilization of currently available out-of-County disposal facilities capacity; and increase in diversion rate from 50% in 2010 to 60% in 2020 and beyond.
Scenario 4: Use of existing in-County Class III landfill and transformation facilities; utilization of currently available out-of-County disposal facilities capacity; increase in diversion rate from 50% in 2010 to 60% in 2020 and beyond; and development of alternative technology facilities (1,200 tpd in 2010 and upt to 10,000 tpd in 2021). This assumes a full implementation of the alternative technology facilities goals and objectives proposed by both the City and County of Los Angeles.
Scenario 5: Use of existing in-County Class III landfill and transformation facilities; utilization of currently available out-of-County disposal facilities capacity; increase in diversion rate to 60% in 2020 and beyond; development of alternative technology facilities (1,200 tpd in 2010 to 10,000 tpd in 2021); and development of all proposed in-County Class III landfill expansions. This assumes a full implementation of the alternative technology facilities goals and objectives proposed by both the City and County of Los Angeles.
Scenario 6: Use of existing in-County Class III landfill and transformation facilities; utilization of currently available out-of-County disposal facilities capacity; increase in diversion rate to 60% in 2020 and beyond; development of alternative technology facilities (1,200 tpd in 2010 and up to 10,000 tpd in 2021); development of all proposed in-County Class III landfill expansions; and utilization of future available out-of-County disposal facility capacity. This assumes a full implementation of the alternative technology facilities goals and objectives proposed by both the City and County of Los Angeles.

Footnotes:

[1] "tpd-6" means tons per day, at an average of 6 days per week.

Source : Los Angeles County Department of Public Works, SWIMS (May 2008), and 2006 Annual Report on the Los Angeles County Countywide Siting Element, June 2008

TABLE 4-18
SUMMARY OF CLASS III LANDFILL REMAINING DAILY DISPOSAL CAPACITY NEED (SHORTFALL FOR THE VARIOUS DISPOSAL CAPACITY NEED ANALYSIS SCENARIOS

Year	Waste Generation Rate	Imported Waste	Maximum Daily Transformation Capacity	**Scenario 1 (Table 4-11) Worst Case Scenario**	**Scenario 2 (Table 4-12)**	**Scenario 3 (Table 4-13)**	**Scenario 4 (Table 4-14)**	**Scenario 5 (Table 4-15)**	**Scenario 6 (Table 4-16) Best Case Scenario**
				Existing in-County Class III landfills and transformation facilities only	**Scenario 1 plus utilization of currently available out-of-County disposal capacity**	**Scenario 2 plus increase in the diversion rate (from 50% in 2010 and up to 60% by 2020)**	**Scenario 3 plus alternative technology facilities capacity (1200 tpd in 2010 and up to 10,000 tpd[1] by 2021)**	**Scenario 4 plus development of all proposed in-County class III landfill expansions**	**Scenario 5 plus utilization of future available out-of-County disposal capacity**
				Class III Landfill Remaining Daily Disposal Capacity Need (Excess)					
	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)
2006	76,305	854	1,715	0	0	0	0	0	0
2007	76,771	764	2,069	0	0	0	0	0	0
2008	77,772	900	2,069	**5,825**	**110**	**110**	**110**	(325)	(325)
2009	78,947	900	2,069	**8,662**	**2,947**	**2,947**	**2,947**	(488)	(488)
2010	80,583	900	2,069	**9,408**	**3,693**	**3,693**	**2,493**	(7,040)	(11,040)
2011	82,190	900	2,069	**14,642**	**8,927**	**8,140**	**6,640**	(7,392)	(11,392)
2012	83,798	900	2,069	**15,376**	**9,661**	**8,056**	**6,056**	(7,976)	(11,976)
2013	85,501	900	2,069	**17,853**	**12,138**	**9,682**	**7,182**	(8,550)	(12,550)
2014	87,418	900	2,069	**31,928**	**19,055**	**15,705**	**12,705**	(3,025)	(7,025)
2015	89,207	900	2,069	**37,744**	**24,871**	**20,598**	**16,598**	(4,132)	(8,132)
2016	90,951	900	2,069	**38,540**	**27,334**	**22,105**	**17,105**	(3,624)	(7,624)
2017	92,686	900	2,069	**39,332**	**28,126**	**21,907**	**15,907**	(4,821)	(8,821)
2018	94,321	900	2,069	**40,078**	**28,872**	**21,638**	**14,638**	(6,090)	(10,089)
2019	95,958	900	2,069	**40,825**	**29,619**	**21,338**	**13,338**	(7,389)	(11,389)
2020	97,708	900	2,069	**43,457**	**32,251**	**22,708**	**13,708**	(8,679)	(12,679)
2021	99,537	900	2,069	**44,326**	**33,120**	**23,399**	**13,399**	(9,019)	(13,019)

Assumptions:

1. Import rate of 900 tpd from 2008 to 2021. Actual import rate are used for 2006 and 2007.
2. For Scenario 1, export quantities are considered part of the Class III landfill Disposal Need and the Daily Disposal Capacity Shortfall.

General Notes:

Scenario 1: Use of existing in-County Class III landfill and transformation facilities only (Worst Case).
Scenario 2: Use of existing in-County Class III landfill and transformation facilities, and utilization of currently available out-of-County disposal facilities capacity (Status Quo).
Scenario 3: Use of existing in-County Class III landfill and transformation facilities; utilization of currently available out-of-County disposal facilities capacity; and increase in diversion rate from 50% in 2010 to 60% in 2020 and beyond.
Scenario 4: Use of existing in-County Class III landfill and transformation facilities; utilization of currently available out-of-County disposal facilities capacity; increase in diversion rate from 50% in 2010 to 60% in 2020 and beyond; and development of alternative technology facilities (1,200 tpd in 2010 and up to 10,000 tpd in 2021). This assumes a full implementation of the alternative technology facilities goals and objectives proposed by both the City and County of Los Angeles.
Scenario 5: Use of existing in-County Class III landfill and transformation facilities; utilization of currently available out-of-County disposal facilities capacity; increase in diversion rate to 60% in 2020 and beyond; development of alternative technology facilities (1,200 tpd in in 2021); and development of all proposed in-County Class III landfill expansions. This assumes a full implementation of the alternative technology facilities goals and objectives proposed by both the City and County of Los Angeles.
Scenario 6: Use of existing in-County Class III landfill and transformation facilities; utilization of currently available out-of-County disposal facilities capacity; increase in diversion rate to 60% in 2020 and beyond; development of alternative technology facilities (1,200 tpd in in 2021); development of all proposed in-County Class III landfill expansions; and utilization of future available out-of-County disposal facility capacity. This assumes a full implementation of the alternative technology facilities goals and objectives proposed by both the City and County of Los Angeles.

Footnotes:

[1] "tpd-6" means tons per day, at an average of 6 days per week.

Source : Los Angeles County Department of Public Works, SWIMS (May 2008), and 2006 Annual Report on the Los Angeles County Countywide Siting Element, June 2008

TABLE 4-19
SUMMARY OF OUT-OF-COUNTY CLASS III LANDFILLS
CURRENTLY AVAILABLE FOR USE BY LOS ANGELES COUNTY JURISDICTIONS

County Location	Facility Name	Owner	Operator	Distance from Los Angeles County[1] (miles)	Rail Access Available (Y/N)	Average Daily Disposal Rate[2] (tpd)	Permitted Daily Capacity (tpd)	Potential Available Capacity for Solid Waste from Los Angeles County[3] (tpd)	Average Exports from Los Angeles County in 2006[4] (tpd)	Remaining Disposal Capacity [and date of remaining capacity] (million cubic yards)	Remaining Design Life as of January 1, 2007 (years)	Accepted solid waste from Los Angeles County prior to 2006 (Y/N)	Will accept solid waste from Los Angeles County (Y/N)	Tipping Fees[5] (dollar per ton)	Host Fees[6] (dollar per ton)
Alameda	Vasco Road Sanitary Landfill	Republic Services of California	Republic Services of California	344	No	1,157	2,518	TBD[7]	0.005	12.28 June 11, 2001	15	Y	Y	TBD	TBD
Fresno	American Avenue Disposal Site	Fresno County Planning and Resource Management	Fresno County Planning and Resource Management	239	No	1,308	2,200	TBD	0.003	28.47 June 30, 2007	5	Y	Y	TBD	TBD
Imperial	Mesquite Regional Landfill[8]	County Sanitation Districts of Los Angeles County	County Sanitation Districts of Los Angeles County	207	Yes	N/A[9]	20,000	12,000	N/A	600.00 May 1, 2007	100	Y	Y	TBD	□1 to □5
Kern	Bakersfield Metropolitan (Bena) Sanitary Landfill	Kern County Waste Management	Kern County Waste Management	134	No	1,443	4,500	TBD	16.79	2.99 June 21, 2001	32	Y	Y	TBD	TBD
	Shafter-Wasco Sanitary Landfill	Kern County Waste Management	Kern County Waste Management	137	No	473	888	TBD	0.49	7.90 June 21, 2001	21	Y	Y	TBD	TBD
Kings	CWMI, KHF (MSW) Landfill B-19)	Waste Management, Inc.	Chemical Waste Management, Inc.	183	No	350	1,400	0.000	None	1.90 June 6, 2005	4	Y	Y	TBD	TBD
	Kettleman Hills B18 Nonhazardous Codisposal	Waste Management, Inc.	Chemical Waste Management, Inc.	183	No	290	8,000	TBD	60.90	6.00 October 4, 2000	4	Y	Y	TBD	TBD
	Avenal Regional Landfill	City of Avenal	Madera Disposal System	194	Yes	2,150	6,000	TBD	None	26.00 August 10, 2006	14	Y	Y	TBD	TBD
Orange	Frank R. Bowerman Sanitary Landfill[10]	County of Orange	County of Orange Integrated Waste Management	43	No	6,932	8,500	1,500	823	67.77 June 30, 2007	15	Y	Y	□46 per ton	□1.04
	Olinda Alpha Sanitary Landfill[10]	County of Orange	County of Orange Integrated Waste Management	31	No	6,100	8,000	1,500	1360	32.36 June 30, 2007	6	Y	Y	□46 per ton	□1.04
	Prima Deshecha Canada Sanitary Landfill[10]	County of Orange	County of Orange Integrated Waste Management	61	No	2,100	4,000	1,500	326	135.90 June 30, 2007	60	Y	Y	□46 per ton	□1.04
Riverside	El Sobrante Landfill[11]	Waste Management of the Inland Empire	Waste Management of the Inland Empire	58	No	8,100	10,000	4,000	2,397	7.93 January 1, 2006	40	Y	Y	□31.91 per ton	12□-17□ (□3 to □10 min. fee)
	Eagle Mountain Landfill[12]	Kaiser Steel Resources	Mine Reclamation Corporation	171	Yes	N/A	20,000	18,000	N/A	670.00 May 1, 2007	100	Y	Y	N/A	N/A
San Bernardino	Barstow Sanitary Landfill	San Bernardino County	San Bernardino County	TBD	TBD	261	750	TBD	.010	0.92 TBD	5	Y	Y	TBD	TBD
	California Street Landfill	City of Redlands Municipal Utilities Department	City of Redlands Municipal Utilities Department	57	No	197	829	TBD	None	0.47 May 1, 2007	24	Y	Y	TBD	TBD
	Colton Sanitary Landfill	County of San Bernardino Solid Waste Management Division	County of San Bernardino Solid Waste Management Division	52	No	729	3,100	TBD	2.34	1.60 July 1, 2006	4.9	Y	Y	TBD	TBD
	Landers Sanitary Landfill	County of San Bernardino Solid Waste Management Division	County of San Bernardino Solid Waste Management Division	129	No	319	1,200	TBD	None	0.84 July 1, 2006	6	Y	Y	TBD	TBD
	Mid-Valley Sanitary Landfill	San Bernardino County	San Bernardino County	47	No	2,600	7,500	TBD	285	70.63 July 1, 2006	26	Y	Y	TBD	TBD
	San Timoteo Sanitary Landfill	San Bernardino County	San Bernardino County	61	No	613	1,000	TBD	0.108	1.80 July 1, 2006	5	Y	Y	TBD	TBD
	Victorville Sanitary Landfill	San Bernardino County	San Bernardino County	87	No	977	3,000	TBD	0.090	80.06 July 1, 2006	40	Y	Y	TBD	TBD
San Diego	Otay Annex Landfill	Allied Waste Industries, Inc	Otay Landfill, Inc.	132	TBD	4,773	5,000	TBD	0.260	41.15 September 30, 2002	21	Y	Y	TBD	TBD
	Sycamore Landfill	Allied Waste Industries, Inc	Sycamore Landfill, Inc.	130	TBD	3,446	3,300	TBD	None	23.77 June 11, 2001	10	Y	TBD	TBD	TBD
	West Miramar Landfill	United States Navy	City of San Diego Environmental Services	113	No	3,878	8,079	TBD	None	8.70 August 30, 2007	5	Y	Y	TBD	TBD
San Luis Obispo	Cold Canyon Landfill Solid Waste DS	Corral De Piedra Land Company	Cold Canyon Landfill, Inc.	198	No	545	1,200	TBD	None	2.80 July 1, 2006	6	Y	TBD	TBD	TBD
Santa Barbara	Tajiguas Sanitary Landfill	Santa Barbara County	Santa Barbara County	129	No	729	1,500	TBD	None	7.25 September 1, 2007	14	Y	Y	TBD	TBD
Solano	Potrero Hills Landfill	Potrero Hills Landfill, Inc.	Potrero Hills Landfill, Inc.	389	No	3,400	4,330	TBD	None	8.20 January 1, 2006	4.5	Y	Y	TBD	□6.43
Stanislaus	Bonzi Sanitary	Bonzi Sanitary Landfill	Bonzi Sanitary Landfill	TBD	TBD	33	200	TBD	None	0.29 TBD	2	Y	Y	TBD	TBD
	Fink Road Landfill	County of Stanislaus	County of Stanislaus	298	No	400	2,400	TBD	None	10.00 February 1, 2004	16	Y	Y	TBD	TBD
Ventura	Simi Valley Landfill □ Recycling Center Ventura County	Waste Management of California	Waste Management of California	48	No	2,900	3,000	1,000	522	21.00 July 1, 2007	19	Y	Y	□45 per ton	TBD
TOTAL[13]	N/A	N/A	N/A	N/A	N/A	56,203	142,394	39,500	5,794	N/A	N/A	N/A	N/A	N/A	N/A

Note:

[a] The Landfills listed here are out-of-County Class III landfills in California that accepted solid waste from Los Angeles County at anytime prior to January 1, 2006 based on the Solid Waste Information System (SWIS) Disposal Report, and not restricted from accepting Los Angeles County exports in the future.

[b] Average daily disposal rates are based on data obtained from SWIS database as of November 1, 2007. Daily rate are calculated using 312 days in a year (6 days per week).

Footnotes:

[1] Distance is measured from Los Angeles County Department of Public Works, Headquarters at 900 South Fremont Avenue, Alhambra, California 91803.

[2] The Average Daily Disposal Rate tonnages are based on the 2007/2008 survey of out-of-County Class III landfills located in California.

[3] Potential available capacity for waste from Los Angeles County means amount of all allowable out-of-County imports to the landfill that is available for Los Angeles County waste exports.

[4] Estimated quantity based on the Disposal Reporting System information from the respective Counties and/or export agreement with the county. Total waste exported is approximately 7,000 tons per day (i.e., 20□ of total disposal) and are exported to mostly adjacent counties (18□ to Orange, Riverside, and Ventura), with the remaining 2□ exported to Alameda, Fresno, Kern, Kings, San Bernardino, San Diego, and Stanislaus Counties in California.

[5] Tipping fees at gate fees as of April 2007.

[6] Host Fees are fees charged for disposal of out-of-County waste based on the base disposal fee charged by the operator

[7] "TBD" means to be determined.

[8] Expected to be operational by 2009. Permitted to reserve up to 1,000 tpd of available capacity for Imperial County wastestream by truck and remaining capacity is available only for out-of-County waste imports. Maximum anticipated waste imported from Los Angeles County is 8,000 tpd by rail and 4,000 tpd by truck.

[9] "N/A" means not applicable.

[10] There is no host fee for waste delivered under an imported waste contract. The current disposal fee for these contracts is □21.34 per ton. Importation waste tonage is received under 10-year contracts with franchise waste haulers and continue permitted daily capacity at Frank R. Bowerman Landfill may increase from 8,500 to 11,500 tpd with expansion efforts.

[11] El Sobrante Landfill is permitted to import out-of-County waste up to 60□ of permitted daily capacity.

[12] Currently not operational and has remained in litigation since 1999. The purchase of Eagle Mountain Landfill by the County Sanitation Districts of Los Angeles County and its eventual operation are contingent upon successful resolution of pending federal litigation.

[13] The total amounts do not include data noted as "TBD;" therefore, the total amounts shown here are subject to change as new information become available.

Source : Los Angeles County Department of Public Works, SWIMS (May 2008), and 2006 Annual Report on the Los Angeles County Countywide Siting Element, June 2008

Table 4-20

SUMMARY OF CURRENTLY AVAILABLE OUT-OF-COUNTY DISPOSAL CAPACITY (TONS PER DAY) AND OUT-OF-COUNTY FUTURE AVAILABLE EXPORT CAPACITY

(Based on January 1, 2006 through December 31, 2006 six day average tonnages and assuming AB 939 diversion is fully implemented)

Year	Alternative A[1] (Existing Staus Quo)	Alternative B[2] (Existing plus CSD's Waste-by-Rail Only)	Alternative C[3] (Existing plus CSD's Waste-by-Rail and Waste-by-Truck)	Alternative D[4] (Existing plus CSD's Waste-by-Rail, CSD's Waste-by-Truck and New and Expansion of Out-of-County Landfills)
2006	5,713	5,713	5,713	5,713
2007	5,715	5,715	5,715	5,715
2008	5,715	5,715	5,715	5,715
2009	5,715	5,715	5,715	5,715
2010	5,715	5,715	9,715	9,715
2011	5,715	5,715	9,715	9,715
2012	5,715	5,715	9,715	9,715
2013	5,715	5,715	9,715	9,715
2014	4,873	12,873	16,873	16,873
2015	4,873	12,873	16,873	16,873
2016	3,206	11,206	15,206	15,206
2017	3,206	11,206	15,206	15,206
2018	3,206	11,206	15,206	15,206
2019	3,206	11,206	15,206	15,206
2020	3,206	11,206	15,206	15,206
2021	3,206	11,206	15,206	15,206

Footnotes:

[1]Alternative A - includes utilization of currently available out-of-County disposal capacity only.
[2]Alternative B - "Alternative A" plus 8,000 tpd from County Sanitation Districts of Los Angeles County's (CSD) waste-by-rail starting from 2014.
[3]Alternative C - "Alternate B" plus 4,000 tpd of CSD's waste-by-truck to Mesquite Regional Landfill starting from 2010.
[4]Alternative D - "Alternative C" plus utilization of future available out-of-County disposal capacity, plus expansion of the potentially availabe out-of-County landfills.

Notes Assumptions:

1. The 2006 and 2007 export tonnages are based on actual data from DRS Report. The export tonnages for 2008 through 2021 are based on projected exports to out-of-County Class III landfills located in California that are currently available to accept solid waste from Los Angeles County (e.g., at anytime prior to January 1, 2006) based on the available (i.e., 2000-2006) Solid Waste Information System/Disposal Reporting System Report and other available information. Daily rate are based on landfill operating 6 days per week or 312 days per year.
2. Condition 58 of Puente Hills Landfill CUP requires CSD to develop a waste-by-rail system that would be consistent with the daily disposal capacity of the facility and with specific milestones and tonnage reduction penalties. The milestones and penalties are: (1) To begin development of at least one remote landfill by December 31, 2007 or be assessed a penalty of 2,000 tpd reduction in their daily maximum permitted refuse intake capacity (13,200 tpd), (2) At least one remote landfill becomes operational by December 31, 2008, or be assessed a penalty of 1,000 tpd in their maximum permitted refuse intake capacity, and (3) Waste-by-rail system becomes operational by December 31, 2009, or be assessed a penalty of 2,000 tpd and every year thereafter in their daily maximum permitted refuse intake capacity. However, for the purpose of this chapter, it is assumed that CSD will meet all the milestones.
3. In 1997, Orange County entered into export agreement with Burrtec/EDCC, CSD, and Republic Industries to import a combined total of not less than 867,000 tons of municipal solid waste per year from Orange County to Frank R. Bowerman Sanitary Landfill, Olinda Alpha Sanitary Landfill and Prima Deshecha Canada Sanitary Landfill. Under the agreement, (1) Frank R. Bowerman Sanitary Landfill is to receive at least 255,000 tons per year (tpy) from CSD, (2) Olinda Alpha Sanitary Landfill is to receive at least 357,000 tpy from Republic Industries and 161,500 tpy from Burrtec/EDCC, with export agreements expiring in 2013 and 2015 respectively, and (3) Prima Deshecha Canada Sanitary Landfill is to receive 93,500 tpy from Burrtec/EDCC and will expire in 2015.
4. Simi Valley Landfill is expected to expand by year 2011. The various expansions of the out-of-County landfills would not result in a net increase in available daily export capacity because it results only in extension of life of (1) Simi Valley Landfill and Recycling Center from 2013 to 2031, and (2) Frank R. Bowerman Sanitary Landfill from 2014 to 2053. However, for the Orange County landfills, the additional disposal capacity due to the expansion will not be available after the export agreement with Burrtec/EDCC waste to Orange County Landfills will expire in 2013 unless the contract is renewed or negotiated.

Source : Los Angeles County Department of Public Works, SWIMS (May 2008), and 2006 Annual Report on the Los Angeles County Countywide Siting Element, June 2008

Table 4-21

Estimate of Potential Available Capacity for Conversion and other Alternative Technology Facilities During the Planning Period (2006-2021)

Planning Period	County of Los Angeles Projects			City of Los Angeles Projects			Other Future Projects	Total Projects
	Conversion Technology (CT) demonstration facilities capacity	Conversion Technology (CT) Commercial scale facilities capacity	Total Conversion Technology (CT) demonstration and commercial scale facilities capacity	Alternative Technology demonstration facilities capacity (combined capacity of both CT and non-CT facilities)	Alternative Technology Commercial scale facilities capacity (combined capacity of both CT and non-CT facilities)	Total Alternative Technology demonstration plus commercial scale facilites capacity	Total Alternative Technology demonstration plus commercial scale facilites capacity	Total Conversion and Alternative Technology Facilities Capacity
Year	**tpd**	**tpd**	**tpd**	**tpd**	**tpd**	**tpd**	**tpd**	**tpd**
2006	N/A	0	**0**	0	0	**0**	**0**	**0**
2007	N/A	0	**0**	0	0	**0**	**0**	**0**
2008	N/A	0	**0**	0	0	**0**	**0**	**0**
2009	N/A	0	**0**	0	0	**0**	**0**	**0**
2010	N/A	0	**0**	200	1,000	**1,200**	**0**	**1,200**
2011	N/A	0	**0**	200	1,000	**1,200**	**300**	**1,500**
2012	N/A	0	**0**	200	1,000	**1,200**	**800**	**2,000**
2013	N/A	0	**0**	200	1,000	**1,200**	**1,300**	**2,500**
2014	N/A	500	**500**	200	1,000	**1,200**	**1,300**	**3,000**
2015	N/A	750	**750**	200	2,000	**2,200**	**1,050**	**4,000**
2016	N/A	1,000	**1,000**	200	2,000	**2,200**	**1,800**	**5,000**
2017	N/A	1,750	**1,750**	200	2,000	**2,200**	**2,050**	**6,000**
2018	N/A	2,000	**2,000**	200	2,000	**2,200**	**2,800**	**7,000**
2019	N/A	3,000	**3,000**	200	3,000	**3,200**	**1,800**	**8,000**
2020	N/A	3,000	**3,000**	200	3,000	**3,200**	**2,800**	**9,000**
2021	N/A	3,000	**3,000**	200	3,600	**3,800**	**3,200**	**10,000**

Note:

1. The alternative technology facility projects are in the initial planning stages. Therefore, the above alternative technology facilities capacity are only an estimate and are subject to change as new data and information become available.

2. The total conversion/alternative technology facilitiesfor all the projects are as assumed in the 2006 Annual Report for Los Angeles County Countywide Siting Element, except for the year 2006 where 1200 tpd was used instead of 1000 tpd is used.

3. "N/A" means not available.

Assumptions:

1. The current County alternative technology facilities projects are only conversion technology facilities. The City of Los Angeles alternative technology facilities projects could be a mix of conversion and/or non-conversion technology facilities.

2. The demonstration facilities will continue to operate after the commercial scale facilities become operational.

3. The capacity for City of Los Angeles alternative technology demonstration facilities is based on the City's Request for Proposal (RFP) dated February 5, 2007 with a minimum capacity of 20 tpd and a maximum capacity of 200 tpd. However, the maximum capacity of 200 tpd will be used throughout the planning period. The capacity for City of Los Angeles alternative technology commercial scale facilities is based on the City's RFP with a total minimum capacity of 200 tpd and a maximum capacity of 1,000 tpd. However, the total maximum capacity of 1,000 tpd will be used for the years 2010 through 2014; 2000 tpd for the years 2015 to 2018; 3,000 tpd for the years 2019 and 2020; and 3,600 tpd for the year 2021.

4. The "other future projects" are additional alternative technology facilities projects that are expected to be implemented within the planning period by the public or private sector to help achieve the projected total conversion/alternative technology facilities capacity.

5. The total conversion/alternative technology facilitiesfor all the projects are as assumed in the 2006 Annual Report for Los Angeles County Countywide Siting Element, except for the year 2006 where 1200 tpd was used instead of 1000 tpd is used. Total conversion/alternative technology facilities capacity is assumed as 1,200 tpd in 2010, and up to 10,000 tpd in 2020. This assumption is based on the most optimistic expectation of the development of conversion/alternative technology facilities available to Los Angeles County jurisdictions, taking into account the planned development of City and County of Los Angeles projects. It is assumed that this total alternative technology capacity would be available for waste generated in Los Angeles County even though some of the facilities may be located outside Los Angeles County.

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Table 4-22

SUMMARY OF CURRENT EXPORT (CURRENTLY AVAILABLE OUT-OF-COUNTY DISPOSAL CAPACITY) AND PROJECTED FUTURE[1] EXPORTS (FUTURE AVAILABLE OUT-OF-COUNTY DISPOSAL CAPACITY DURING THE PLANNING PERIOD

(Based on January 1, 2006 through December 31, 2006 six day average tonnages and assuming AB 939 diversion is fully implemented)

Location		Landfill Name	Owner	Operator	Throughput in tons per day		Estimated Remaining[4] Disposal Capacity			Estimated Closure Date	Estimated Closure Date After Expansion	Existing Remaining Life in Years as of (January 1, 2007)	Proposed Landfill Expansion[6]			2006[2]	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
County	City				Maximum Permitted	Average Daily	Million Cubic Yards	Million Tons	As of Remaining Capacity Date				Y N	Additional Life	Additional Disposal Capacity in million tons	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day
PROPOSED NEW OUT-OF-COUNTY CLASS III LANDFILLS LOCATED IN CALIFORNIA																															
Imperial County	City of Brawley	Mesquite Regional Landfill	Sanitation Districts of Los Angeles County	Sanitation Districts of Los Angeles County	20,000		600			2109		100	N			N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A 4,000 4,000	N/A N/A 4,000 4,000	N/A N/A 4,000 4,000	N/A N/A 4,000 4,000	N/A 8,000 12,000 12,000	N/A 8,000 12,000 12,000	N/A 8,000 12,000 12,000	N/A 8,000 12,000 12,000	N/A 8,000 12,000 12,000	N/A 8,000 12,000 12,000	N/A 8,000 12,000 12,000	N/A 8,000 12,000 12,000
Riverside	Desert Center	Eagle Mountain Landfill	Kaiser Steel Resources	Mine Reclamation Corporation	20,000[12]		670			2085		100	N																		
San Diego	Pala	Campo Solid Waste Management Project	Campo Band of Kumeyaay Mission Indians		3,000		29.5																								
	Pala	Gregory Canyon Landfill	Richard Chase	Gregory Canyon, Ltd.	5,000		49.5		11/13/06			30																			
EXISTING OUT-OF-COUNTY CLASS III LANDFILLS LOCATED IN CALIFORNIA																															
Alameda	Livermore	Altamont Landfill and Resource Recovery	Waste Management of Alameda County	Waste Management of Alameda County	11,150		124.4		04/12/05	01/01/2025		19	Y	14 Years																		
	Livermore	Vasco Road Sanitary Landfill	Republic Services of California	Republic Services of California	2,518		12.28		06/11/01	01/01/2015		9	Y																			
Fresno	Tranquility	American Avenue Disposal Site	Fresno County Planning and Resource Management	Fresno County Planning and Resource Management	2,200		29.36		07/29/05	08/31/2031		25	N																			
Imperial	Imperial	Allied Imperial Landfill	Imperial Landfill, Inc.	Imperial Landfill, Inc.	1,135		2.11		01/31/06	01/01/2013		5	Y	80 Years																		
Kern	Arvin	Arvin Sanitary Landfill	Kern County Waste Management	Kern County Waste Management	800		2.25		06/21/01	12/31/2008		2	Y	(10 Years)																		
	Caliente	Bakersfield Metropolitan (Bena)	Kern County Waste Management	Kern County Waste Management	4,500		2.99		06/21/01	12/01/2038			Y	40 Years																		
	Shafter	Shafter-Wasco Sanitary Landfill	Kern County Waste Management	Kern County Waste Management			7.9		06/21/01	12/31/2027		21	Y	16 Years																		
Kings	Avenal	Avenal Regional Landfill	City of Avenal	Madera Disposal System	6,000		26		08/10/06	12/31/2020		14	Y[15]																			
	Kettleman City	CWMI, KHF (MSW Landfill B-19)	Waste Management, Inc	Chemical Waste Management, Inc	1,400		1.9		06/06/05	12/31/2010		4	Y	(2 Years)																		
	Kettleman City	Kettleman Hills B18 Nonhazardous Codisposal	Waste Management, Inc.	Chemical Waste Management, Inc	8,000		6		10/04/00	N/A[16]		4	Y	(5 Years)																		

Table 4-22

SUMMARY OF CURRENT EXPORT (CURRENTLY AVAILABLE OUT-OF-COUNTY DISPOSAL CAPACITY) AND PROJECTED FUTURE[1] EXPORTS (FUTURE AVAILABLE OUT-OF-COUNTY DISPOSAL CAPACITY DURING THE PLANNING PERIOD

(Based on January 1, 2006 through December 31, 2006 six day average tonnages and assuming AB 939 diversion is fully implemented)

Location		Landfill Name	Owner	Operator	Throughput in tons per day		Estimated Remaining[4] Disposal Capacity			Estimated Closure Date	Estimated Closure Date After Expansion	Existing Remaining Life in Years as of (January 1, 2007)	Proposed Landfill Expansion[6]			2006[2]	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
County	City				Maximum Permitted	Average Daily	Million Cubic Yards	Million Tons	As of Remaining Capacity Date				Y N	Additional Life	Additional Disposal Capacity in million tons	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day
Orange[3]	Irvine	Frank R. Bowerman Sanitary Landfill	County of Orange	County of Orange Integrated Waste Management	8,500	(11,500 tpd)	59.41		12/01/06	2022	(2053)	15	Y	(31 Years)		823 823 823 823	823 823 823 823	823 823 823 823	823 823 823 823	823 823 823 823	823 823 823 823	823 823 823 823	823 823 823 823	823 823 823 823	823 823 823 823	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
	Brea	Olinda/Olinda Alpha Sanitary Landfill[4]	County of Orange	County of Orange Integrated Waste Management	8,000		38.58		10/01/05	2013	(2021)	6	Y	(8 Years)		1,360 1,360 1,360 1,360	1,360 1,360 1,360 1,360	1,360 1,360 1,360 1,360	1,360 1,360 1,360 1,360	1,360 1,360 1,360 1,360	1,360 1,360 1,360 1,360	1,360 1,360 1,360 1,360	1,360 1,360 1,360 1,360	518 518 518 518	518 518 518 518	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
	San Juan Capistrano	Prima Deshecha Canada Sanitary Landfill	County of Orange	County of Orange Integrated Waste Management	4,000		87.39		08/01/05	2067		60	N			326 326 326 326	326 326 326 326	326 326 326 326	326 326 326 326	326 326 326 326	326 326 326 326	326 326 326 326	326 326 326 326	326 326 326 326	326 326 326 326	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Riverside	Moreno Valley	Badlands Sanitary landfill	County of Riverside	County of Riverside	4,000		7.93		01/01/06	2013		6	Y																		
	Corona	El Sobrante Landfill	Waste Management of the Inland Empire	Waste Management of the Inland Empire	10,000		38.11		01/01/06	2031		24	N			2,397 2,397 2,397 2,397	2,397 2,397 2,397 2,397	2,397 2,397 2,397 2,397	2,397 2,397 2,397 2,397	2,397 2,397 2,397 2,397	2,397 2,397 2,397 2,397	2,397 2,397 2,397 2,397	2,397 2,397 2,397 2,397	2,397 2,397 2,397 2,397	2,397 2,397 2,397 2,397	2,397 2,397 2,397 2,397	2,397 2,397 2,397 2,397	2,397 2,397 2,397 2,397	2,397 2,397 2,397 2,397	2,397 2,397 2,397 2,397	2,397 2,397 2,397 2,397
	Beaumont	Lamb Canyon Sanitary Landfill	County of Riverside	County of Riverside	3,000		15.19		03/06/07	2017		9	Y																		
San Bernardino	Redlands	California Street Landfill	City of Redlands Municipal Utilities Department	City of Redlands Municipal Utilities Department	829		0.47		05/01/01	01/01/2031		24	N																		
	Colton	Colton Sanitary Landfill	County of San Bernardino Solid Waste Management Division	County of San Bernardino Solid Waste Management Division	3,100		0.61		11/01/05	2012		6	N																		
	Landers	Landers Sanitary Landfill	County of San Bernardino Solid Waste Management Division	County of San Bernardino Solid Waste Management Division	1,200		0.46		07/03/01	2012		6	N																		
	Rialto	Mid-Valley Sanitary Landfill	San Bernardino County	San Bernardino County	7,500		71.5		06/30/06	04/01/2033		27	N			285 285 285 285	286 286 286 286	286 286 286 286	286 286 286 286	286 286 286 286	286 286 286 286	286 286 286 286	286 286 286 286	286 286 286 286	286 286 286 286	286 286 286 286	286 286 286 286	286 286 286 286	286 286 286 286	286 286 286 286	286 286 286 286
	Redlands	San Timoteo Sanitary Landfill	San Bernardino County	San Bernardino County	1,000		9.49		02/15/06	05/01/2016		10	N																		
	Victorville	Victorville Sanitary Landfill	San Bernardino County	San Bernardino County	1,600		82.2		03/29/06	07/01/2059		53	N																		

Table 4-22

SUMMARY OF CURRENT EXPORT (CURRENTLY AVAILABLE OUT-OF-COUNTY DISPOSAL CAPACITY) AND PROJECTED FUTURE[1] EXPORTS (FUTURE AVAILABLE OUT-OF-COUNTY DISPOSAL CAPACITY DURING THE PLANNING PERIOD

(Based on January 1, 2006 through December 31, 2006 six day average tonnages and assuming AB 939 diversion is fully implemented)

Location		Landfill Name	Owner	Operator	Throughput in tons per day		Estimated Remaining[4] Disposal Capacity			Estimated Closure Date	Estimated Closure Date After Expansion	Existing Remaining Life in Years as of (January 1, 2007)	Proposed Landfill Expansion[6]			2006[2]	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
County	City				Maximum Permitted	Average Daily	Million Cubic Yards	Million Tons	As of Remaining Capacity Date				Y/N	Additional Life	Additional Disposal Capacity in million tons	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day	tons per day
San Diego	Chula Vista	Otay Annex Landfill	Allied Waste Industries, Inc	Otay Landfill, Inc.	5,000		41.15		09/30/02	12/03/2027		21	N																		
	Ramona Landfill	Ramona	Allied Waste Industries, Inc	Ramona Landfill, Inc.	295																										
	San Diego	Sycamore Landfill	Allied Waste Industries, Inc	Sycamore Landfill, Inc.	3,300		23.77		06/11/01	2017		10	Y																		
	San Diego	West Miramar Landfill	United States Navy	City of San Diego	8,000		13.69		03/31/06	12/31/2011		5	Y	(3-10 Years)																	
San Luis Obispo	San Luis Obispo	Cold Canyon Landfill Solid Waste DS	Corral De Piedra Land Company	Cold Canyon Landfill, Inc.	1,200		2.8		07/01/06	01/01/2012		6	Y	(35 Years)																	
Santa Barbara	Goleta	Tajiguas Sanitary Landfill	Santa Barbara County	Santa Barbara County	1,500		8.46		05/01/05	01/01/2020		14	N																		
Solano	Suisun City	Potrero Hills Landfill	Potrero Hills Landfill, Inc.	Potrero Hills Landfill, Inc.	4,330		8.2		01/01/06	01/01/2011		5	Y	(35□ years)																	
Stanislaus	Crows Landing	Fink Road Landfill	County of Stanislaus	County of Stanislaus	1,500		10		02/01/04	01/01/2011		5	Y	(15 Years)																	
Ventura	Simi Valley[5]	Simi Valley Landfill and Recycling Center	Waste Management of California	Waste Management of California	3,000	(6,000)	9.47		06/15/01	2026		19	Y	(74 Years)	68.8	522 522 522 522	523 523 523 523	523 523 523 523	523 523 523 523	523 523 523 523	523 523 523 523	523 523 523 523	523 523 523 523	523 523 523 523	523 523 523 523	523 523 523 523	523 523 523 523	523 523 523 523	523 523 523 523	523 523 523 523	523 523 523 523
	Santa Paula	Toland Road Landfill	Ventura Regional Sanitation District	Ventura Regional Sanitation District	1,500		19.19		05/01/05			10	N			522	523	523	523	523	523	523	523	523	523	523	523	523	523	523	523
Total															**Worse Case (Existing Status Quo)**	**5,713**	**5,715**	**5,715**	**5,715**	**5,715**	**5,715**	**5,715**	**5,715**	**4,873**	**4,873**	**3,206**	**3,206**	**3,206**	**3,206**	**3,206**	**3,206**
															Better Case (Existing CSD's Waste-by-rail)	**5,713**	**5,715**	**5,715**	**5,715**	**5,715**	**5,715**	**5,715**	**5,715**	**12,873**	**12,873**	**11,206**	**11,206**	**11,206**	**11,206**	**11,206**	**11,206**
															Best Case (Existing CDS's Waste-by-rail CSD's Waste-by-truck)	**5,713**	**5,715**	**5,715**	**5,715**	**9,715**	**9,715**	**9,715**	**9,715**	**16,873**	**16,873**	**15,206**	**15,206**	**15,206**	**15,206**	**15,206**	**15,206**
															Extra Best Case (Existing CSD's Waste-by-rail CSD's Waste-by-truck Out-of-County Expansion[6])	**5,713**	**5,715**	**5,715**	**5,715**	**9,715**	**9,715**	**9,715**	**9,715**	**16,873**	**16,873**	**15,206**	**15,206**	**15,206**	**15,206**	**15,206**	**15,206**

Footnotes:

[1] Projected future exports are based on current exports to out-of-County landfills that are currently accepting significant amount of export waste for Los Angeles County.

[2] 2006 and 2007 daily tonnages are based on actual data from DRS Report. The export tonnages for 2008 through 2021 are based on projected exports to out-of-County Class III landfills located in California that are currently available to accept solid waste from Los Angeles County (e.g., at anytime prior to January 1, 2006) based on the available Solid Waste Information System Disposal Reporting System Report (i.e., 2000-2006) and other available information. Daily rate are based on landfill operating 6 days per week or 312 days per year.

[3] In 1997, Orange County entered into export agreement with Burrtec/EDCC, County Sanitation District of Los Angeles County (CSD), and Republic Industries to import a combined total of not less than 867,000 tons of municipal solid waste per year from Orange County to Frank R. Bowerman Sanitary Landfill, Olinda Alpha Sanitary Landfill and Prima Deshecha Canada Sanitary Landfill. Under the agreement, (1) Frank R. Bowerman Sanitary Landfill is to receive at least 255,000 tons per year (tpy) from CSD and will expire in 2015; (2) Olinda Alpha Sanitary Landfill is to receive at least 357,000 tpy from Republic Industries and 161,500 tpy from Burrtec/EDCC, with export agreements expiring in 2013 and 2015, respectively; and (3) Prima Deshecha Canada Sanitary Landfill is to receive 93,500 tpy from Burrtec/EDCC and will expire by 2015.

[4] In 2014 and 2015, only export from Burrtec/EDCC will be received at Olinda/Olinda Alpha Sanitary Landfill.

[5] Simi Valley Landfill is expected to expand by year 2011. The various expansions of the out-of-County landfills would not result in a net increase in available daily export capacity because it results only in extension of life of (1) Simi Valley Landfill and Recycling Center from 2013 to 2031, and (2) Frank R. Bowerman Sanitary Landfill from 2014 to 2053. However, for the Orange County landfills, the additional disposal capacity due to the expansion will not be available after the export agreement with Burrtec/EDCC waste to Orange County Landfills will expire in 2013 unless the contract is renewed or negotiated.

[6] Overall, the impact of the various expansions of the out-of-County landfills would not result in a net increase in available daily export capacity, but would result only in extension of life of Simi Valley Landfill and Recycling Center from 2026 to 2100. Though the expansion of Olinda Alpha Sanitary Landfill and Frank R. Bowerman Sanitary Landfill will result in increase in their lifespan from 2013 to 2031 and 2022 to 2053 respectively, the additional disposal capacity due to the expansion will not be available after the export agreement with Burrtec/EDCC, CSD, and Republic Industries (for Los Angeles County waste) to Orange County Landfills has expired.

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APPENDIX 4-A

Los Angeles County Solid Waste Management Committee Integrated Waste Management Task Force March 28, 1991 Report to the California Integrated Waste Management Board - on the Remaining Permitted Disposal Capacity of Solid Waste Facilities in Los Angeles County

LOS ANGELES COUNTY
SOLID WASTE MANAGEMENT COMMITTEE /
INTEGRATED WASTE MANAGEMENT TASK FORCE
900 SOUTH FREMONT AVENUE ALHAMBRA, CALIFORNIA 91803-1331
P.O. BOX 1460 ALHAMBRA, CALIFORNIA 91802

THOMAS A. TIDEMANSON
CHAIRMAN

March 28, 1991

WM-2

Mr. George Larson, Chief Executive O
California Integrated Waste Manageme
1020 Ninth Street, Suite 300
Sacramento, CA 95814

Dear Mr. Larson:

REMAINING PERMITTED DISPOSAL CAPACIT
SOLID WASTE FACILITIES IN
LOS ANGELES COUNTY

Pursuant to the requirements of Section 41791 of the Public Resources Code regarding the date of submission of the Countywide Siting Element and the County Integrated Waste Management Plan for Los Angeles County, the following is offered.

The citizens of Los Angeles County are currently disposing of approximately 51,000 tons (1990 average daily disposal - six days/week) of solid waste per day. Approximately 43,245 tons of this waste are disposed of in 19 permitted Class III landfills (see Table 1, enclosed), 1,000 tons are managed by two waste-to-energy facilities (does not include the 500 tons of residual ash which is landfilled), and the remaining inert waste tons are disposed of at the permitted unclassified landfills.

At present, the remaining permitted Class III capacity in this County is estimated at 99 million tons (Table 1). Based on the 1990 average disposal rate of 43,245 tons per day (six days per week) as shown on Table 1, this capacity will be mathematically exhausted by the year 1999. However, this is misleading in that the majority of landfills have a number of restrictions which significantly impact their operations. These include expiration of the land use permit; restriction on acceptance of waste generated outside a jurisdiction and/or wasteshed boundary; permit restrictions on daily tonnage that can be accepted; and/or limitation on daily tonnage that can be handled at a facility due to lack of manpower and equipment.

At the present time, several of the operating Class III landfills have operating restrictions reducing available daily disposal capacity in the County. Burbank and Whittier (Savage Canyon) can only receive solid waste generated within their respective cities. Lopez Canyon can only receive solid waste generated by single- and multi-family residential customers within the City of Los Angeles which have been collected by City of Los Angeles Bureau of Sanitation trucks; while Puente Hills and Spadra are prohibited from receiving any waste

originating from the City of Los Angeles. Calabasas and Scholl Canyon Landfills only accept solid waste generated within defined wastesheds, while Brand Park, Pitchess Honor Rancho, and San Clemente are not open to the public.

As indicated in Table 1, Class III landfills had a permitted daily capacity of 63,950 tons in January 1991; however, this permitted capacity was reduced by 6,500 tons per day to 57,450 tons per day due to closure of Azusa Western Landfill as the result of a California Apellate Court decision. Additionally, by January 30, 1996, eight of the remaining landfills, representing 35,500 tons of permitted daily capacity, could be closed due to capacity limitations or the expiration of land use permits.

Based on the foregoing and utilizing a diversion rate of 25 percent, the County of Los Angeles will experience daily disposal capacity shortfalls within five years. Accordingly, the County will prepare and submit the CSE and the CoIWMP to the Board by January 1, 1992, pursuant to requirements of Section 41791 of the PRC.

We look forward to working with you in implementing the provisions of the California Integrated Waste Management Act of 1989, as well as other matters of joint interest.

Very truly yours,

T. A. TIDEMANSON, Chairman
Los Angeles County Solid Waste Management
Committee/Integrated Waste Management Task Force

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TABLE 1

REMAINING PERMITTED COMBINED DISPOSAL CAPACI F EXISTING SOLID WASTE FACILITIES IN LOS ANGELES COUNTY

Class III Landfill	Solid Waste Facility Permit	Facility Address	Operation Days/ week	Jan. 1991 SWFP Daily Capacity (tons)	LUP Daily Capacity (tons)	1990 Average Daily Tonnage 6 days/wk	Addt'l Daily Tonnage That Can Be Handled	Quantity of Municipal Solid Waste Disposed million tons/ Year 1990	Projected remaining permitted capacity millions tons	million cubic yards	Comments
Antelope Valley	19-AA-0009	1200 West City Ranch Road Palmdale, CA 93550	7	350	----	400	0	0.125	.925	2.6	Approx. date of closure 1996
Azusa Land Reclamation	19-AA-0013	1201 Gladstone Avenue Azusa, CA 91702	6	6,500	6,500	2,756	0	0.86	0	0	1/91 Appelate Court[c] rescinded permit
BKK	19-AF-0001	2210 South Azusa Avenue West Covina, CA 91790	6	12,000[a]	----	8,744	1,600[d]	3.04	15.96	23.8	Date of closure 11/30/95
Bradley West	19-AR-0008	9227 Tujunga Avenue Sun Valley, CA 91352	6	7,000	9,500	1,923	1,577	0.60	11.8	19.7	LUP expires 12/29/93
Brand Park	19-AA-0006	1601 West Mountain Street Glendale, CA 91207	5	104	----	48	0[e]	0.015	0.306	0.875	Private use only
Burbank	19-AA-0040	1600 Lockheed View Drive Burbank, CA 91510	5	240	----	196	44	0.061	11.44	22.0	Limited to the City's use only
Calabasas	19-AA-0056	26910 Ventura Freeway Agoura, CA 91301	6	3,500	----	2,724	776	0.85	15.155	21.6	Limited to the Calabasas Wasteshed
Chiquita Canyon	19-AA-0052	29201 Henry Mayo Drive Newhall, CA 91322	7	5,000	----	1,763	1,237	0.55	1.78	2.2	LUP expires 11/24/97
Lancaster	19-AA-0050	600 East Avenue F Lancaster, CA 93534	6	450	----	295	5	0.092	0.15	0.5	LUP expires 12/95
Lopez Canyon	19-AA-0820	11950 Lopez Canyon Road Pacoima, CA 91331	5	4,100[b]	4,000	3,109	891	0.97	4.2	7.0	LUP expires 1/30/96 limited to City of Los Angeles use only.
Pebbly Beach	19-AA-0061	Santa Catalina Island Avalon, CA 90704	6	30	----	10	20	0.003	0.097	0.16	
Pitchess Honor Rancho	19-AA-0057	28300 The Old Road Saugus, CA 91350	5	23	----	17	6	0.0054	2.24	3.73	Approx. date of closure 1994. Private use only
Puente Hills	19-AA-0053	2800 S. Workman Hill Rd. Whittier, CA 90607	6	12,000	13,200	11,839	1,341	3.7	7.5	10.7	LUP limits to 72,000 tpw LUP expires 10/31/93, no waste from City of L.A.
San Clemente	19-AA-0063	San Clemente Island LA County, CA 92135	5	1	----	1	0	0.002	0.024	0.036	LUP expires 10/31/91
Scholl Canyon	19-AA-0018	7721 North Figueora St. Los Angeles, CA 90041	6	3,400	----	2,179	1,221	0.68	13.32	19	Limited to the Scholl Cyn. wasteshed only
Spadra	19-AA-0015	4125 West Valley Blvd. Walnut, CA 91789	6	3,000	----	2,724	276	0.85	6.95	9.93	LUP limits to 10,000 tpw reduces to 1,5000 tpw 7/1/95, no City of L.A. waste accepted
Sunshine Canyon (North Valley)	19-AR-0002	14747 San Fernando Road Los Angeles, CA 91342	6	7,000	8,000	3,141	3,859	0.98	0.4	1.64	LUP expires 9/26/91
Two Harbors	19-AA-0062	Two Harbors Avalon, CA	5	3.5	----	3.5	0	0.000088	0.0073	0.0104	
Whittier (Savage Canyon)	19-AH-0001	13919 East Penn Street Whittier, CA 91350	6	350	----	353	0	0.11	6.39	10.6	Limited to the City of Whittier use only
Total				63,050[f]		43,845	11,862	13.49	98.65	156.08	

Source: Los Angeles County Department of Public Works, January 1991.
Based on written surveys of all Solid Waste facilities currently operating in Los Angeles County conducted October, 1990 and phone survey, January 1991.

Note: [a] Daily capacity established in 6/90, Notice and Order, as amended, by the City of West Covina.
[b] Daily capacity established by RDSI and Courts.
[c] Ceased operation as a Class III landfill on 2/21/91.
[d] BKK can handle additional 2,400 tpd if SWFP limit is revised.
[e] Operator has informed DPW that additional waste cannot be handled due to manpower and equipment limitation.
[f] Average daily tonnage, Monday through Friday.

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01/29/91

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