

COUNTY OF SAN DIEGO

INTEGRATED WASTE MANAGEMENT PLAN COUNTYWIDE SITING ELEMENT

DEPARTMENT OF PUBLIC WORKS SOLID WASTE DIVISION

FINAL DRAFT Revised February 23, 1996

COUNTY OF SAN DIEGO INTEGRATED

WASTE MANAGEMENT PLAN

COUNTYWIDE SITING ELEMENT

Board of Supervisors Ron Roberts, Chairman Bill Horn, Vice Chairman Greg Cox Pam Slater Dianne Jacob

Chief Administrative Officer David E. Janssen

Department of Public Works
Tom Garibay, Director
John A. Miller, Assistant Director
Tom Webster, Acting Deputy Director, Solid Waste Division

Revised February 23, 1996

Prepared by:
County of San Diego
Solid Waste Division
5555 Overland Drive MS O383
San Diego, CA 92123
With the assistance of:
City of San Diego Environmental Services Staff

San Diego County Integrated Waste Management Plan

Printed on recycled paper

COUNTYWIDE SITING ELEMENT TABLE OF CONTENTS

LIST OF TABLES	S AND FIGURES	iv
CHAPTER 1	INTRODUCTION	SE-1
CHAPTER 2	GOALS, POLICIES & OBJECTIVES	SE-3
CHAPTER 3	DISPOSAL CAPACITY REQUIREMENTS	SE-7
CHAPTER 4	EXISTING DISPOSAL FACILITIES	SE-11
CHAPTER 5	SITING CRITERIA	SE-31
CHAPTER 6	PROPOSED NEW DISPOSAL FACILITIES	SE-39
CHAPTER 7	RESERVED AREAS	SE-41
CHAPTER 8	STRATEGIES FOR ADDITIONAL CAPACITY	SE-63
CHAPTER 9	IMPLEMENTATION	SE-65
	BIBLIOGRAPHY	SE-69

Diego

County

San

Waste

Management

Plan

Integrated

COUNTYWIDE SITING ELEMENT LIST OF TABLES AND FIGURES

TABLES: Table 3-A Table 3-B	Disposal Capacity Requirements San Diego County in Tons Disposal Capacity Requirements San Diego County in Cubic Yards
Table 4-1	Existing Landfills in San Diego County
Table 5-1	County of San Diego Landfill Siting Evaluation Criteria
Table 8-1	Capacity of Existing & Proposed Landfills in San Diego County (Excludes Military)
Table 9-1	Siting Element Implementation Responsibilities
Table 9-2	Implementation Schedule (Tentative)
Table 9-3	Revenue Sources for City of San Diego and County Landfills Development or
	Expansion
Figure 4-1	Landfill General Locations in San Diego County (map)
Figure 4-2	Miramar Landfill Vicinity Map
Figure 4-3	San Marcos Landfill Vicinity Map
Figure 4-4	Sycamore Landfill Vicinity Map
Figure 4-5	Otay/Otay Annex Landfill Vicinity Map
Figure 4-6	Ramona Landfill Vicinity Map
Figure 4-7	Borrego Springs Landfill Vicinity Map
Figure 4-8	Las Pulgas Landfill Site Development Plan
Figure 4-9	San Onofre Landfill Site Development Plan
Figure 6-1	Solid Waste Facility Permit Tree
Figure 7-1	Regional Location of Tentative Landfill Sites
Figure 7-2	Oak Canyon Landfill Site Development Plan
Figure 7-3	Spring Canyon Landfill Site Development Plan
Figure 7-4	Combined Oak/Spring Canyon Landfill Site Development Plan
Figure 7-5	Upper Sycamore Landfill Site Development Plan
Figure 7-6	Aspen Road Landfill Site Location
Figure 7-7	Merriam Mountain South Landfill Site Location
Figure 7-8	Gregory Canyon Landfill Site Location
Figure 7-9	Wolf Canyon & North Otay Valley Landfills Site Locations
Figure 7-10	East Otay Mesa Landfill Site Location

CHAPTER 1 INTRODUCTION

PURPOSE

The Countywide Siting Element provides a description of the facilities and strategies which will provide adequate disposal capacity for 15 years disposal of solid waste for all the jurisdictions within the county when other alternatives such as additional waste diversion programs and waste export are included.

The Siting Element serves as a policy manual, rather than a specific development program. It provides strategies for meeting the County's disposal needs. While expansions and/or new landfills are relied on for additional capacity, each proposal will be reviewed separately through local land use approval, environmental review, and state solid waste facility permitting procedures. It is expected that expansion of regional landfills along with current remaining disposal capacity will provide for approximately 20 years of solid waste disposal capacity for the County.

Given that the U. S. Supreme Court has held that legislatively imposed flow control is illegal, absent a voluntary contractual commitment to flow control, jurisdictions within the county may, at their own discretion, opt to export their municipal solid waste to out-of-county disposal facilities or private incounty facilities. However, it is clear that the region's integrated waste management system would be better realized with all cities participating jointly in disposal strategies. It is noted that some jurisdictions within the county are exporting some or all their solid waste to out-of-county facilities at this time.

The inclusion of proposals in this Element does not guarantee their approval by any agency or jurisdiction. Review and adoption of this Element does not limit any jurisdiction's or interested party's right to conduct more in-depth review of each proposal.

SOURCES

San Diego Countywide Siting Element utilizes the solid waste disposal facilities planning included in the 1986 County Solid Waste Management Plan (CoSWMP), as adopted by the County and a majority of the cities and approved by the California Waste Management Board.

Other sources utilized for assembling information include, <u>Landfill Siting Study Northern San Diego County</u>; <u>North County Landfill Supplemental Siting Study</u>; and <u>Southwest San Diego County Solid Waste Facility Siting Study</u>. The first two studies were done by the County of San Diego. The latter study was completed jointly by the City of San Diego and the County.

San Diego County Integrated Waste Management Plan

The Integrated Waste Management Act of 1989 (IWM Act) requires each local jurisdiction to prepare and implement the following solid waste management elements:

- o Source Reduction and Recycling Element (SRRE)
- o Household Hazardous Waste Element (HHWE)
- o Non-Disposal Facility Element (NDFE)

The IWM Act requires that the Siting Element be prepared by the County, and then be adopted by a majority of the cities in the county with the majority of the incorporated population and the County.

The State's enactment of AB 3001, in January 1993, significantly altered the focus of the Countywide Siting Element. Prior to AB 3001, the Countywide Siting Element included all facilities identified by jurisdictions as needed for disposal, transfer, or diversion of solid waste or household hazardous wastes. AB 3001 defined a nondisposal facility by stating "non disposal facility means any solid waste facility required to obtain a [solid waste facility] permit...except a disposal facility or transformation facility." As a result of AB 3001, except for landfills, all other facilities, existing or proposed, within San Diego County for the transfer, recovery, or composting of wastes are under the sole discretion of each jurisdiction and identified in their respective Non Disposal Facility Elements.

Because no transformation facilities have been proposed within San Diego County, the Countywide Siting Element discusses only existing and proposed landfills.

STATUTORY AND REGULATORY OVERVIEW

The basic statutory requirements for the content and format of the Siting Element are found in Public Resources Code (PRC), Sections 41700-41721.5. These requirements are further clarified in regulations adopted by the California Integrated Waste Management Board (CIWMB), and approved as California Code of Regulations (CCR), Title 14, Division 7, Chapter 9, Article 6.5, Sections 18755 through 18756.7.

Additional regulations governing the procedures for preparing and revising Countywide Siting Elements are contained in CCR Title 14, Division 7, Chapter 9, Article 8.0 Sections 18776 through 18788.

To the extent feasible, this Countywide Siting Element seeks to comply with all PRC and CCR requirements as cited in the above paragraphs.

San Diego County Integrated Waste Management Plan

CHAPTER 2 SITING ELEMENT GOALS AND POLICIES

1. GOALS

The following goals are adopted to assist the County in complying with the statutory requirements for solid waste disposal facility siting. They emphasize the hierarchy of solid waste management as stated in the Integrated Waste Management Act of 1989 (AB 939). The goals recommended for use in developing the countywide Siting Element are:

- a. Provide adequate future disposal capacity for those wastes generated within the jurisdictions of San Diego County which will need to be landfilled, after maximizing source reduction, recycling, and composting, in facilities which meet State and Federal environmental standards.
- b. Reduce the amount of waste disposed in landfill(s) by:
 - 1) Source reduction, reducing the amount of solid waste generated;
 - 2) Reuse, reusing as much as possible of discarded materials;
 - 3) Recycling, reconstituting as much recyclable solid waste material as possible into usable products;
 - 4) Composting, utilizing the energy and nutrient value of organic solid waste; and
 - 5) Transformation.
- c. Identify disposal facilities or strategies, including export to out-of-county facilities, necessary to dispose of the solid waste generated by the jurisdictions of the county for a minimum of 15 years.
- d. Minimize the potential impacts of solid waste disposal facilities upon adjoining land uses.
- e. To be approved by the city councils of the county's incorporated cities and adopted by the County Board of Supervisors no later than December 31, 1995.

2. POLICIES

The following policies are adopted to assist all jurisdictions in planning and implementing any solid waste disposal programs and for the County in preparation of the Siting Element.

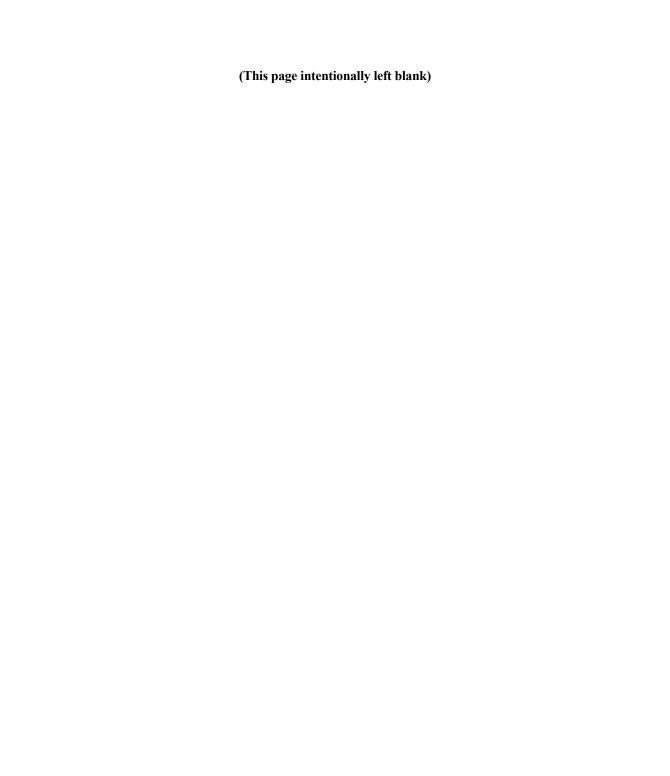
a. Give the highest priority to reducing the production and generation of waste and to waste prevention, reuse, recycling and composting as a means of conserving landfill capacity and natural resources.

San Diego County Integrated Waste Management Plan FINAL DRAFT

- b. Maximize the efficient and economic use of existing solid waste disposal facilities.
- c. Encourage all jurisdictions to implement and expand source reduction, recycling, composting and public information/education programs throughout the region aimed at reducing 50% of the waste previously disposed in landfills.
- d. Encourage all jurisdictions to implement procurement programs to purchase a maximum of products containing recycled (post consumer) content in order to create a steady demand for products containing recycled materials and an expanding market demand for recyclable materials.
- e. Encourage all jurisdictions to consider implementing a variable rate pricing structure for the collection of municipal solid waste.
- f. Encourage all jurisdictions to continue their efforts to ban disposal of targeted recyclable materials at the landfills.

Table 2 - 1: Goals and Task Implementation Schedule

Goal/Task	Objective	Implementing	Responsible Agency	
GOALS 1.a.& b. Provide Adequ	nate Future Disposal Capacity & Re	duce Waste Dispos	ed	
Reduce the Production and Generation of Solid Waste	Conserve Existing Disposal Capacity	Ongoing	Individual Jurisdictions and Solid Waste Authority	
Reuse a maximum of Discarded Materials	Conserve Existing Disposal Capacity	Ongoing	Individual Jurisdictions and Solid Waste Authority	
Recycle, Compost and Reconstitute Solid Waste into Usable Products	Conserve Existing Disposal Capacity	Ongoing	Individual Jurisdictions and Solid Waste Authority	
Ban Disposal of Targeted Recyclables in the Landfills	Conserve Existing Disposal Capacity	Ongoing	Individual Jurisdictions and Solid Waste Authority	
GOAL 1.c. Identify Disposa	al Facilities/Strategies for Solid Was	te Disposal for a M	inimum of 15 Years	
Maximize Use of the Capacity of Existing Landfills	Extend the Useful Life of Existing Landfills	Ongoing	The County, The City of San Diego and the Solid Waste Authority	
Cooperatively Develop New Capacity When Needed	Provide a Minimum of 15 Years Disposal Capacity for Countywide Generated Solid Waste	2000 - 2010	The County, The City of San Diego and the Solid Waste Authority	
GOAL 1.d. Minimize the Im	pact of Disposal Facilities on Adjoi	ning Land Uses		
Utilize Cooperatively Developed Siting Criteria For Selection of Disposal Facility Sites	Compatibility With General Plans and Environmental Concerns Ongoing as Site Selection is Necessary		The County, The City of San Diego and the Solid Waste Authority	
GOAL 1.e. Obtain Regiona	l Support for and Approval of the	Siting Element		
Approve and Adopt the Countywide Siting Element	Support and Cooperation in Addressing the Region's Disposal Capacity Needs	Dec. 1995 -Jan. 1996	Individual City Councils and County Board of Supervisors	



San Diego County Integrated Waste Management Plan

CHAPTER 3 DISPOSAL CAPACITY REQUIREMENTS

PURPOSE & REQUIREMENTS

This chapter identifies the amount of disposal capacity needed to serve the jurisdictions of San Diego County for the next 15 years. The Siting Element is to be updated every five years. In future revisions, the 15 year period will begin with the year the Siting Element is revised.

Specific requirements for the content of this chapter are in CCR Section 18755.3.

EXISTING DISPOSAL CAPACITY ANALYSIS

Section 18755.3 of the California Integrated Waste Management Board's (CIWMB) planning guidelines and procedures require counties to determine existing Countywide disposal capacity and to project anticipated Countywide disposal capacity needs in the Countywide Siting Element. The projection of disposal capacity needs is for a minimum 15 year period, beginning with the year in which the Countywide Integrated Waste Management Plan (CIWMP) is prepared for submittal to the CIWMB. Since San Diego County's CIWMP will be prepared in 1995, its Countywide Siting Element projects disposal capacity needs for the period 1995 to 2010.

Tables 3-A and 3-B calculate in tons and cubic yards the amount of disposal capacity needed by San Diego County for the period 1995-2010. Except for City of San Diego landfill data, weight to volume conversion is based on an in-place density conversion factor of 1 ton per 1.67 cubic yards. (A conversion factor of 1 ton per 1.56 cubic yards is used for estimating landfill capacities of the City of San Diego's existing and proposed disposal sites.) These factors are based on years of local experience with compacted solid waste in the San Diego County geographical region.

In fiscal year 1990, the total remaining landfill capacity in the County was estimated at 72,692,000 cubic yards or 43,615,200 tons, as determined by the Local Task Force. Due to landfill expansion projects and diversion programs since the 1990 estimate, current remaining landfill capacity is approximately 72 million cubic yards. As of June 1995, the total remaining capacity of all existing landfills in the County is 90,197,397 cubic yards or 55,437,994 tons (excluding the United States Marine Corps landfills). Disposal capacity projections in Tables 3-A and 3-B are based on the 1995 estimate.

The Cities of El Cajon, Oceanside, and Escondido are currently exporting waste to disposal facilities located outside of the County of San Diego. Carlsbad also exported waste out of the county during fiscal year 1994-95. The export tonnages in the tables are based on existing waste collection and disposal agreements.

The Cities of Oceanside and El Cajon's agreements with Waste Management Inc. provide for the collection and disposal of approximately 85,000 tons of waste per year each for a minimum of 3 and 5

years, respectively. The City of El Cajon's waste is currently disposed of at the Lancaster Landfill in the City of Lancaster, and the City of Oceanside's waste is currently disposed of at the BKK Landfill in the City of West Covina.

The City of Carlsbad's agreement with Coast Waste provided for the collection of approximately 68,000 tons of waste per year. This waste is disposed in various facilities outside San Diego County including facilities at La Paz, Arizona, the Cocopa Indian Tribe Landfill in Sommerton, Arizona, and the SERRF plant, a waste-to-energy incineration facility in the City of Long Beach. To the extent that wastes exported to the SERRF plant do not exceed 10% of the wastes generated in Carlsbad, they can be counted as tons diverted and not as tons disposed. Since this agreement is updated annually, only the amount anticipated to be exported in fiscal year 1995 is used in the projection calculations.

The City of Escondido's agreement with Coast Waste provides for the transport of one-half the City's collected municipal solid waste, approximately 57,000 ton annually, to landfills in La Paz, Arizona and the Cocopa Indian Tribe Landfill in Sommerton, Arizona for disposal. Since this agreement approximates the amount to be exported in 1995, that is the figure used in the in the projection calculations.

The following information is provided in the tables:

<u>Amount of Solid Waste Generated</u> - This amount represents the aggregate of waste generation quantities reported in the 19 Source Reduction and Recycling Elements (SRREs) of the County and its incorporated cities. Estimates of change in the amount of waste generated are derived from the growth rate assumptions of the individual SRREs.

Amount of Solid Waste Diverted - This amount represents the aggregate of the quantity of waste to be diverted from landfilling through diversion programs identified in the SRREs of San Diego County and its cities.

Amount of Solid Waste Disposed - This amount represents the aggregate of the amount of waste requiring landfill disposal as reported in the SRREs of the County and its cities.

Exports - This represents the amount of solid waste to be hauled to permitted disposal facilities outside San Diego County for disposal in accordance with existing agreements.

Remaining Landfill Capacity - This represents the amount of disposal capacity available at the end of each year in existing and planned future landfill facilities in San Diego County.

Additional Disposal Capacity Needed - This represents the amount by which solid waste disposal requirements exceed the amount of disposal capacity available.

Table 3-ADisposal Capacity Requirements San Diego County
Tons

Year	Generation	Diversion	(See note below) Disposal	Exports	Existing Landfill Capacity	Planned Additional Landfill Capacity	Remaining Landfill Capacity	Additional Disposal Capacity Needed
1995	4,917,781	1,536,222	3,381,559	295,000		0	55,437,994	0
1996	4,990,325	1,731,882	3,258,443	170,000	55,437,994	0	52,394,551	0
1997	5,062,578	2,010,652	3,051,926	170,000	52,394,551	0	49,467,625	0
1998	5,134,786	2,286,870	2,847,916	85,000	49,467,625	0	46,704,709	0
1999	5,206,908	2,480,970	2,725,938	85,000	46,704,709	0	44,063,771	0
2000	5,279,125	2,699,190	2,579,935	0	44,063,771	0	41,483,836	0
2001	5,344,747	2,746,735	2,598,012	0	41,483,836	0	38,885,824	0
2002	5,409,947	2,797,782	2,612,165	0	38,885,824	0	36,273,659	0
2003	5,475,168	2,844,869	2,630,299	0	33,673,659	0	33,643,360	0
2004	5,540,440	2,892,047	2,648,393	0	33,643,360	0	30,994,967	0
2005	5,605,722	2,939,844	2,665,878	0	30,994,967	85,897,436 ¹	114,226,525	0
2006	5,703,872	2,982,212	2,721,660	0	114,226,525	0	111,504,865	0
2007	5,804,008	3,025,154	2,778,854	0	111,504,865	0	108,726,011	0
2008	5,906,174	3,068,675	2,837,499	0	108,726,011	21,077,844 ²	129,966,356	0
2009	6,010,412	3,112,779	2,897,633	0	129,966,356	0	124,068,723	0
2010	6,116,766	3,157,469	2,959,298	0	124,068,723	34,730,539 ³	155,839,964	0

Note: As of June 30, 1995, actual disposal rates are running less than projected in the SRREs of the jurisdictions in the County.

San Diego County Integrated Waste Management Plan

¹ Tentative New City of San Diego Landfill

² Tentative New North County Landfill, currently on hold pending determination of need.

Tentative New South County Landfill, currently on hold pending determination of need.

Table 3-B

Disposal Capacity Requirements San Diego County
Cubic Yards

Year	Generation	Diversion	(See note below) Disposal	Exports	Existing Landfill Capacity	Planned Additional Landfill Capacity	Remaining Landfill Capacity	Additional Disposal Capacity Needed
1995	7,671,738	2,396,506	5,275,232	466,470		0	90,197,397	0
1996	7,784,907	2,701,736	5,083,171	265,200	90,197,397	0	85,379,426	0
1997	7,897,622	3,136,617	4,761,005	265,200	85,379,426	0	80,883,621	0
1998	8,010,266	3,567,517	4,442,749	132,600	80,883,621	0	76,573,472	0
1999	8,122,776	3,870,313	4,252,463	132,600	76,573,472	0	72,453,609	0
2000	8,235,435	4,210,736	4,024,699	0	72,453,609	0	68,428,910	0
2001	8,337,805	4,284,907	4,052,899	0	68,428,910	0	64,376,011	0
2002	8,439,517	4,364,540	4,074,977	0	64,376,011	0	60,301,034	0
2003	8,541,262	4,437,996	4,103,266	0	60,301,034	0	56,197,768	0
2004	8,643,086	4,511,593	4,131,493	0	56,197,768	0	52,066,275	0
2005	8,744,926	4,586,157	4,158,770	0	52,066,275	134,000,000 ¹	181,907,505	0
2006	8,898,040	4,652,251	4,245,790	0	181,907,505	0	177,661,715	0
2007	9,054,253	4,719,241	4,335,012	0	177,661,715	0	173,326,703	0
2008	9,213,631	4,787,133	4,426,498	0	173,326,703	$35,200,000^2$	204,100,205	0
2009	9,376,242	4,855,935	4,520,307	0	204,100,205	0	199,579,898	0
2010	9,542,155	4,925,651	4,616,504	0	199,579,898	58,000,000 ³	252,963,394	0

Note: As of June 30, 1995, actual disposal rates are running less than those projected in the SRREs of the jurisdictions in the County.

San Diego County Integrated Waste Management Plan FINAL DRAFT

¹ Tentative New City of San Diego Landfill

² Tentative New North County Landfill, currently on hold pending determination of need.

³ Tentative New South County Landfill, currently on hold pending determination of need.

CHAPTER 4 EXISTING DISPOSAL FACILITIES

PURPOSE & REQUIREMENTS

This chapter includes a description and location map of each solid waste disposal facility within the county that has a state Solid Waste Facility Permit. Specific requirements for the content of this chapter are contained in CCR Section 18755.5(a) and (b).

EXISTING SOLID WASTE DISPOSAL FACILITIES

The existing solid waste disposal facilities in San Diego County are two landfills owned and operated by the Federal government, five landfills owned by the County of San Diego and operated by Norcal, Inc. under contract (ownership of these sites is in the process of being transferred from the County to the San Diego Solid Waste Authority at the time of the preparation of this document), and one landfill owned by the Federal government and operated by the City of San Diego.

The existing landfills, their owners, operators and remaining capacity as of June 30,1995 are shown in Table 4-1. The general location of these existing landfills is shown on Figure 4-1, followed by a Fact Sheet on each and an individual landfill site location map, Figures 4-2 through 4-9.

Table 4-1: Existing Landfills in San Diego County

LANDFILL NAME	OWNER	OPERATOR	REMAINING CAPACITY (cy)
Las Pulgas	United States Marine Corps (USMC)	USMC	888,576
San Onofre	USMC	USMC	132,787
Borrego Springs	County of San Diego	Norcal, Inc.	455,075
Otay/Otay Annex	County of San Diego	Norcal, Inc.	19,248,488
Ramona	County of San Diego	Norcal, Inc.	1,266,695
San Marcos	County of San Diego	Norcal, Inc.	6,134,494
Sycamore	County of San Diego	Norcal, Inc.	28,796,645
Miramar	United States Navy	City of San Diego	34,296,000
TOTAL			91,218,760*

^{*} Excluding Las Pulgas and San Onofre, remaining capacity for the County is 90,197,397 cy.

San Diego County Integrated Waste Management Plan FINAL DRAFT

Figure 4-1 Landfill General Locations in San Diego County

San Diego County Integrated Waste Management Plan

West Miramar Landfill Fact Sheet

1. FACILITY INFORMATION

a. Facility Name West Miramar Solid Waste Disposal Facility

b. Facility Owner United States of America, Department of the

Navy, Naval Air Station Miramar

c. Facility Operator City of San Diego

Environmental Services Department

2. PERMIT INFORMATION

a. Solid Waste Facility 37-AA-0020

Permit Number

b. Date of Last Permit Review July 28, 1988

c. Permit Review Due Date December 1994

Periodic Site Review Submitted

d. Permitted Remaining Capacity 34,296,000 cy as of 9/20/95

e. Estimate of 20 Years (if current rate of

Remaining Site Life usage continues)

3. MAXIMUM PERMITTED RATE OF DISPOSAL

a. Daily 3600 Tons or 5616 Cubic Yards

(1 Ton = 1.56 Cubic Yards)

b. Yearly 1,299,600 Tons or 2,027,376 Cubic Yards

(calculated on a 361-day year)

4. AVERAGE RATE OF DAILY WASTE RECEIPT

a. Tons 3600

b. Cubic Yards 5616 (1 Ton = 1.56 Cubic Yards)

5. PERMITTED WASTE TYPES Municipal solid wastes; construction/

demolition and inert materials; dead

animals; tires

6. FUTURE LAND USE

Open Space

Figure 4-2 **Miramar Landfill Vicinity Map**

San Diego County Integrated Waste Management Plan

San Marcos Landfill Fact Sheet

1	$\mathbf{E} \wedge \mathbf{O} \mathbf{D}$		DEODI	A TION
1	FACI	LII Y	INFORM	ZIAIIU

a. Facility Name San Marcos Landfill

b. Facility Owner County of San Diego

and Operator Department of Public Works

2. PERMIT INFORMATION

a. Solid Waste Facility 37-AA-0008

Permit Number

b. Date of Last Permit Review August 7, 1993

c. Permit Review Due Date March 17, 1998

d. Permitted Remaining 6,134,494 Cubic Yards as of 6/30/95

Capacity (estimated 3,673,350 Tons)

e. Estimate of 9 Years (if current rate of

Remaining Site Life usage continues)

3. MAXIMUM PERMITTED RATE OF DISPOSAL

a. Daily 6200 Tons (approx 10,354 Cubic Yards) 1 Ton =

1.67 cubic Yards

b. Yearly 1,922,000 Tons (approx. 3,209,740 Cubic Yards)

calculated on a 6-day week

4. AVERAGE RATE OF DAILY WASTE RECEIPT

a. Tons 1296 (base data used was FY 1995)

b. Cubic Yards 2164 (1 Ton = 1.67 Cubic Yards)

5. PERMITTED WASTE Non-hazardous solid waste; mixture of

commercial, residential, and construction/

Plan

demolition refuse

6. FUTURE LAND USE Open Space

Figure 4-3 San Marcos Landfill Vicinity Map

San Diego County Integrated Waste Management Plan FINAL DRAFT

Sycamore Landfill Fact Sheet

1. FACILITY INFORMATION

a. Facility Name Sycamore Landfill

b. Facility Owner County of San Diego

and Operator Department of Public Works

2. PERMIT INFORMATION

b.

a. Solid Waste Facility 37-AA-0023
Permit Number

Date of Last Permit Review

c. Permit Review Due Date August 19, 1998

d. Permitted Remaining 28,796,645 Cubic Yards as of 6/30/95

Capacity (estimated 17,243,500 tons)

e. Estimate of 61.8 Years (if current rate of

Remaining Site Life usage continues)

3. MAXIMUM PERMITTED RATE OF DISPOSAL

a. Daily 2500 Tons (4175 Cubic Yards)

(1 Ton = 1.67 Cubic Yards)

b. Yearly 775,000 Tons (approx. 1,294,250 Cubic Yards)

calculated on a 6-day week

August 19, 1993

4. AVERAGE RATE OF DAILY WASTE RECEIPT

a. Tons 900 (base data used was FY 1995 calculated on 6

days/week)

b. Cubic Yards 1504 (1 Ton = 1.67 Cubic Yards)

5. PERMITTED WASTE TYPES Non-hazardous solid waste; mixture of

commercial, residential, agricultural and construction/demolition refuse; sludge mixed with

soil at a 5:1 or 8:1 soil/sludge ratio; fuel

contaminated soil; nonfriable asbestos

6. FUTURE LAND USE Open Space

Figure 4-4 Sycamore Landfill Vicinity Map

San Diego County Integrated Waste Management Plan

Otay Landfill Fact Sheet

1. FACILITY INFORMATION

a. Facility Name Otay Landfill

b. Facility Owner County of San Diego

and Operator Department of Public Works

2. PERMIT INFORMATION

a. Solid Waste Facility 37-AA-0009

Permit Number

b. Date of Last Permit Review March 1993

c. Permit Review Due Date March 1998

d. Permitted Remaining 634,600 Cubic Yards as of 6/30/95

Capacity (estimated 380,000 Tons)

e. Estimate of Landfill is currently not being utilized.

Remaining Site Life

3. MAXIMUM PERMITTED RATE OF DISPOSAL

a. Daily 650 Tons (approx 1086 Cubic Yards)

1 Ton = 1.67 Cubic Yards

b. Yearly 201,500 Tons (approx. 349,865 Cubic Yards)

calculated on a 6-day week

4. AVERAGE RATE OF DAILY WASTE RECEIPT

a. Tons 0 (base data used was FY 1995)

b. Cubic Yards 0

5. PERMITTED WASTE TYPE Non-hazardous solid waste; mixed commercial

and residential refuse

6. FUTURE LAND USE Open Space

Otay Annex Landfill Fact Sheet

1	FAC	TI II	Y INFO	RMA	TION
	1.41	/ I I / I I	I IINI'	/IX V /	11111

a. Facility Name Otay Annex Landfill

b. Facility Owner County of San Diego

and Operator Department of Public Works

2. PERMIT INFORMATION

a. Solid Waste Facility 37-AA-0010

Permit Number

b. Date of Last Permit Review March 1993

c. Permit Review Due Date March 1998

d. Permitted 18,613,888 Cubic Yards as of 6/30/95

Remaining Capacity (estimated 11,146,041 tons)

e. Estimate of 36.7 Years (if current rate of

Remaining Site Life usage continues)

3. MAXIMUM PERMITTED RATE OF DISPOSAL

a. Daily 3500 Tons* (approx. 5845 Cubic Yards

1 Ton = 1.67 Cubic Yards)

b. Yearly 744,000 Tons (approx. 1,242,480 Cubic Yards)

calculated on a 6-day week

4. AVERAGE RATE OF DAILY WASTE RECEIPT

a. Tons 981 (base data used was FY 1995 calculated on 6

days/week)

b. Cubic Yards 1637 (1 Ton = 1.67 Cubic Yards)

5. PERMITTED WASTE TYPES Non-hazardous solid waste; mixture of

commercial, residential, agricultural, and

construction refuse

6. FUTURE LAND USE Open Space

* Per Notice and Order while permit revision is being processed

Figure 4-5 Otay/Otay Annex Vicinity Map

San Diego County Integrated Waste Management Plan
FINAL DRAFT

Ramona Landfill Fact Sheet

1. **FACILITY INFORMATION**

Facility Name Ramona Landfill a.

b. Facility Owner County of San Diego

> and Operator Department of Public Works

2. PERMIT INFORMATION

Solid Waste Facility a. 37-AA-0005 Permit Number

Date of Last Permit Review August 1992 b.

Permit Review Due Date November 16, 1999 c.

d. **Permitted Remaining** 1,266,695 Cubic Yards as of 6/30/95 (estimated 758,500 Tons) Capacity

Estimate of 24.3 Years (if current rate of e.

Remaining Site Life usage continues)

3. MAXIMUM PERMITTED RATE OF DISPOSAL

Daily 295 Tons (approx 492.7 Cubic Yards) a.

1 Ton = 1.67 Cubic Yards

b. Yearly 76,110 Tons (approx 127,103.7 Cubic Yards)

calculated on a 5-day week

AVERAGE RATE OF DAILY WASTE RECEIPT 4.

101 (base data used was FY 1995 calculated on 6 Tons a.

days/week)

Cubic Yards 101 (1 Ton = 1.67 Cubic Yards) b.

5. PERMITTED WASTE TYPES Non-hazardous solid waste; mixture of

> commercial and industrial refuse; non-hazardous sludge mixed with soil at a 5:1 or 8:1 soil/sludge

ratio; fuel contaminated soil

Plan

6. FUTURE LAND USE Open Space

San Diego County Integrated Waste Management Plan

Figure 4-6 Ramona Landfill Vicinity Map

San Diego County Integrated Waste Management Plan

Borrego Springs Landfill Fact Sheet

	- 4 077	****	TODA	ET 03 I
1	FACIL	$\mathbf{J} \mathbf{T} \mathbf{Y} \mathbf{H}$	NFOR M	1ATION

a. Facility Name Borrego Springs Sanitary

Landfill

b. Facility Owner County of San Diego

and Operator Department of Public Works

2. PERMIT INFORMATION

a. Solid Waste Facility 37-AA-0006

Permit Number

b. Date of Last August 31, 1992

Permit Review

c. Permit Review Due Date December 4, 1997

d. Permitted Remaining 455,075 Cubic Yards as of 6/30/95

Capacity (estimated 272,500 Tons)

e. Estimate of 113 Years (if current rate

Remaining Site Life of usage continues)

3. MAXIMUM PERMITTED RATE OF DISPOSAL

a. Daily 50 Tons (approx. 83.5 Cubic Yards)

1 Ton = 1.67 Cubic Yards

b. Yearly 7850 Tons (approx. 3110 Cubic Yards)

calculated on a 3-day week

4. AVERAGE RATE OF DAILY WASTE RECEIPT

a. Tons 15.2 (base data used was FY 1995 calculated on 3

days/week)

b. Cubic Yards 25 (1 Ton = 1.67 Cubic Yards)

5. PERMITTED WASTE TYPES Non-hazardous solid waste

6. FUTURE LAND USE Open Space

San Diego County Integrated Waste Management Plan

Figure 4-7 Borrego Landfill Vicinity Map

San Diego County Integrated Waste Management Plan

Las Pulgas Landfill Fact Sheet

1. FACILITY INFORMATION

a. Facility Name Las Pulgas Landfill

b. Facility Owner United States Marine Corps

and Operator Camp Pendleton

2. PERMIT INFORMATION

a. Solid Waste Facility 37-AA-0903

Permit Number

b. Date of Last Permit Review July 1994

c. Permit Review Due Date October 13, 1999

d. Permitted Remaining 569,600 Tons (as of 1/1/94)

Capacity

e. Estimate of 23 Years (if current rate of

Remaining Site Life usage continues)

3. MAXIMUM PERMITTED RATE OF DISPOSAL

a. Daily 270 Tons or 421.2 Cubic Yards

(1 Ton = 1.56 Cubic Yards)

b. Yearly 70,200 Tons (or 109,512 Cubic Yards) based on a 5-day

week

4. AVERAGE RATE OF DAILY WASTE RECEIPT

a. Tons 81 (base data used was calendar year 1993

furnished by the USMC)

b. Cubic Yards 126 (1 Ton = 1.56 Cubic Yards)

5. PERMITTED WASTE TYPES Non-hazardous solid waste

6. FUTURE LAND USE Artillery Area

Figure 4-8 Las Pulgas Landfill Site Development Plan

San Diego County Integrated Waste Management Plan FINAL DRAFT

San Onofre Landfill Fact Sheet

1	FACILITY INFORMATION
1.	

a. Facility Name San Onofre Landfill

b. Facility Owner United States Marine Corps

and Operator Camp Pendleton

2. PERMIT INFORMATION

a. Solid Waste Facility 37-AA-0902

Permit Number

b. Date of Last Permit Review July 1994

c. Permit Review Due Date October 13, 1999

d. Permitted 85,120 Tons (as of 1/1/94)

Remaining Capacity

e. Estimate of 18.5 Years (if current rate of

Remaining Site Life usage continues)

3. MAXIMUM PERMITTED RATE OF DISPOSAL

a. Daily 50 Tons or 78 Cubic Yards

(1 Ton = 1.56 Cubic Yards)

b. Yearly 5,200 Tons (or 8,112 Cubic Yards) based on a 2-day

week

4. AVERAGE RATE OF DAILY WASTE RECEIPT

a. Tons 15 (base data used was calendar year 1993

furnished by the USMC)

Plan

b. Cubic Yards 23 (1 Ton = 1.56 Cubic Yards)

5. PERMITTED WASTE TYPES Non-hazardous solid waste

6. FUTURE LAND USE Artillery Area

Figure 4-9 San Onofre Landfill Site Development Plan

San Diego County Integrated Waste Management Plan FINAL DRAFT



San Diego County Integrated Waste Management Plan

CHAPTER 5 SITING CRITERIA

PURPOSE & REQUIREMENTS

This chapter requires the development of criteria for evaluation of new or expanded solid waste disposal facilities. Specific requirements for the content of this chapter are contained in CCR Section 18756.

THE SITING PROCESS

Siting a new solid waste disposal facility or a major expansion is an intensive and lengthy process. It is characterized by a series of steps during which areas of increasing suitability are successively identified and evaluated. The use of established criteria ensures the objectivity of the site selection process.

Historically, the County has utilized site pass/fail and evaluation criteria to identify a number of potential sites within a given area where a landfill is needed. Applying the criteria to all potential sites results in a ranking of sites from which the most desirable few are selected for more intense evaluation, which could include an Environmental Impact Report. A Siting Study Technical Advisory Committee (SSTAC) was formed to reevaluate and refine the Siting Study Criteria used in previous site selection processes. This committee was comprised of representatives from the following agencies:

California Integrated Waste Management Board
Regional Water Quality Control Board
Air Pollution Control District
Local Enforcement Agency (County Environmental Health Department)
County Planning and Land Use Department
County Public Works Department, Environmental Section
Solid Waste Industry Committee
County Water Authority
Groundwater Geologist (Dr. Huntley from SDSU)

The SSTAC approved eight Pass/Fail and 20 Evaluation Criteria to be used in a landfill siting study. If a candidate site doesn't pass the eight Pass/Fail Criteria in the initial phase of a siting study, it will be dropped from further consideration. Following the initial phase the remaining sites are evaluated using the Evaluation Criteria. These criteria are identified by category later in this chapter as Table 5-1. It should be noted that the Evaluation Criteria and the relative importance of each can vary somewhat with the region of study.

The relative importance of the various evaluation criteria is reflected by a numerical value for each, the sum of which is used to derive specific site recommendations. If a candidate site scores low it will

San Diego County Integrated Waste Management Plan

normally be dropped from further consideration. An evaluation criterion may be added or eliminated based on factors important to the specific region to be studied

The County and City of San Diego have conducted three separate siting studies in recent years and have learned a great deal. Criteria in each of the studies were slightly different depending on the regional needs, the general geological characteristics of the site, distance from waste generation sources, etc. Therefore, different values were used for the criteria in each study. Since the sites reviewed in those studies were assessed under the general criteria used at that time, it is considered that the sites met all requirements applicable at the time they were assessed, and were not reassessed for purposes of inclusion in the Siting Element. They would not need to be reassessed unless a material change in the conditions under which they were studied, such as increase in footprint were to take place.

If a new siting study were undertaken, part of the process would be to create a citizen and technical advisory panel that would rank and provide a weight for each criterion. This ranking and weighting would depend upon the needs at that time and the specific concerns of these interest groups. Finally, since the above referenced siting studies have been completed, the County and City of San Diego may likely pick up the "new landfill" siting process at the next step, that of preparing an EIR.

APPROVAL BY LOCAL AGENCIES

All disposal facilities must be included in the current Countywide Siting Element. Proposals for new or expanded facilities not appearing in the Siting Element require that an amendment to the Siting Element be filed with the County Solid Waste Division, which is responsible for administration of the Element. New proposals must include a full project description and verification that the proposed site is consistent with Siting Element criteria along with a request to amend the Element.

When disposal facilities are proposed within an incorporated area, the local land use procedures of the appropriate jurisdiction within which the facility is proposed, and the provisions of applicable State law, would govern the permitting requirement.

Each jurisdiction in the County will be requested to act upon the Siting Element and its amendments. The County and a majority of the Cities with a majority of the incorporated population must approve any amendment. Failure by any City or County governing body to act upon a Siting Element or an amendment within 90 days is considered as an approval. The resolutions from the jurisdictions will be placed in an Appendix to the Siting Element.

DISPOSAL FACILITY SITING CRITERIA

Because up to this time new landfills have been sited only by the City of San Diego and the County, this section describes the criteria used for establishing these solid waste disposal facilities and for proposing additional facilities. There were slight variations in the criteria used for proposed landfill sites in the North County and the Southwest County siting studies. It can be expected that in the future, if any solid waste disposal (or transformation) facilities or expansions are proposed within the County, similar criteria and procedures will be utilized.

San Diego County Integrated Waste Management Plan

Criteria used by the County and the City of San Diego in choosing new or expansion landfill sites are listed and defined. The following categories of criteria required by the CIWMB in CCR Title 14, Div.7, Ch.9, Art.6.5, Sect.18756 are included.

Environmental Consideration and Impacts Land Use Compatibility Economic Factors Legal Considerations Capacity Facility Life (Capacity)

CRITERIA DEFINITIONS

PASS FAIL CRITERIA

Pass/Fail Criterion No.1 - Proximity to Airports

Federal Regulations pursuant to the Resource Conservation and Recovery Act (40 CFR 258) specify that no landfill shall be located within specified distances from airport runways. Sites not meeting this minimum buffer requirement are eliminated from further consideration.

Pass/Fail Criterion No. 2 - Floodplain

Pursuant to Title 23 Section 2533 of the California code of Regulations and 40 CFR 257.3-1, Class III landfills cannot be sited within the 100-year floodplain. Known 100-year floodplains are identified and excluded as potential landfill sites.

Pass/Fail Criterion No. 3 - Active Faults

Active faults can threaten the integrity of environmental controls at a landfill. Therefore, potential sites that would be located on known active faults are eliminated from consideration.

Pass/Fail Criterion No. 4 - Incompatible Land Use

The purpose of this criterion is to identify land uses that would substantially increase costs or would otherwise not be available to the County for landfill development. Heavily developed industrial/commercial or residential would substantially increase the cost of landfill development. The following are defined as incompatible land uses:

Paved state or federal highways, or county Circulation Element Roads.
Improved municipal, county or state parks
Two or more existing dwellings per acre over the entire site (or 20 homes per site)
Heavily developed commercial or industrial areas
National Parks, or recreation areas having intensive use
schools
cemeteries

Pass/Fail Criterion No. 5 - Threatened or Endangered Species

The active landfill will not be located where there is the known occurrence of rare, threatened or endangered species which would result in impacts that cannot be mitigated to a level of insignificance. Sites with habitat critical to plant and animal species that have been listed by the U.S. Department of Fish and Wildlife as threatened or endangered or by the State of California as rare or endangered are excluded from consideration as potential sites for landfills. The RCRA specifies that no facility or practice shall cause or contribute to the taking of any listed endangered or threatened species of plants, fish or wildlife or result in the destruction or adverse modification of habitat critical to those species.

Pass/Fail Criterion No. 6 - Historic and Archaeological Preservation

This criterion recognizes the need to preserve National and State Register historical and prehistoric sites as well as sites known to be eligible for those registers. Potential sites within a distance of 1000 feet of a National or State Register site or a site known, via record searches, to be eligible for those registers, may not be permitted because of potential direct or indirect impacts.

Pass/Fail Criterion No. 7 - Aquifers

A landfill will not be sited over an alluvial aquifer. Neither will a landfill be sited over a fractured rock aquifer which is the sole source of potable water. The purpose of this criterion is to protect groundwater resources in the State.

Pass/Fail Criterion No. 8 - Distance from major aqueduct

Pass/Fail Criterion No. 8 states that the area of refuse will not be located within 200 feet of an existing or planned Metropolitan Water District or San Diego County Water Authority aqueduct. Refuse areas between 200 and 1,000 feet will be subject to review on a case by case basis by the potentially affected water agency.

EVALUATION CRITERIA

Eight categories of evaluation criteria are used in County/City of San Diego siting studies. Categories and corresponding sub-categories are outlined in Table 5-1 followed by a description of how each category would be evaluated.

Table 5-1 COUNTY OF SAN DIEGO LANDFILL SITING EVALUATION CRITERIA

CATEGORIES OF EVALUATION SUB-CATEGORIES OF EVALUATION

CRITERIA CRITERIA

GROUNDWATER Natural Protection

> **Groundwater Quality** Depth to Groundwater Evidence of Faulting

Beneficial Surface Water SURFACE WATER

Site Runoff Sources

Precipitation Floodplains

NATURAL HABITAT Rare, Threatened or Endangered Species

Land Habitat

CULTURAL RESOURCES Cultural Resources

AESTHETIC Visibility

EXISTING LAND USE Adjacent Land Use

> Buffer Area Current Site Use

HEALTH AND SAFETY Access Routes

Proximity to Aqueducts

Plan

TECHNICAL Site Soils

Site Capacity

Road Construction

Waste San Diego County Integrated Management

EVALUATION CRITERIA DEFINED

Criterion No. 1 - Natural Protection of Groundwater (Environmental Consideration)

This criterion addresses the amount of natural protection that site geology provides to groundwater. The application of this criterion involves estimation of site substrate permeabilities, thickness during site reconnaissance, and potential for alternate design of the liner system. Estimates are approximate and are based on type and coarseness of geologic material making up the soil.

Criterion No. 2 - Groundwater Quality (Environmental Consideration)

This criterion rates the quality of existing groundwater resources underlying the alternative sites. Sites with poor groundwater are more attractive than sites with good quality groundwater.

Criterion No. 3 - Depth to Groundwater (Environmental Consideration)

This criterion addresses the vertical and horizontal distance to groundwater. The deeper the groundwater, the more effective natural protection becomes and the easier it is to monitor for and mitigate leachate.

Criterion No. 4 - Evidence of Faulting (Environmental Consideration)

This criterion rates each area according to the strength of the evidence for faults on, or adjacent to, the site. Sites with stronger evidence for the presence of faults will be rated lower than those without evidence of faulting. Application of this criterion will involve the study of topographic maps and aerial photographs to determine the presence of geomorphic lineations on and adjoining each site.

Criterion No. 5 - Beneficial Surface Water Uses (Environmental Consideration & Impacts)

This criterion rates sites according to the value of the downgradient surface water bodies. Some surface water bodies are considered to be of higher value than others.

Criterion No. 6 - Site Runoff Sources (Environmental Consideration)

This criterion addresses sources of surface water crossing a site which could increase the potential for negative impacts on water quality. The presence of water springs poses a major threat to water quality. Perennial drainage crossing the site will be more difficult to effectively mitigate and comply with NPDES (National Pollutant Discharge Elimination System) than intermittent drainage.

Criterion No. 7 - Precipitation (Environmental Consideration)

This criterion addresses the amount of precipitation at the site. Precipitation can penetrate landfill cover and lead to the creation of leachate. It can also erode landfill surfaces by causing run-on and run-off. Sites with lesser annual precipitation are assigned higher numbers.

Criterion No. 8 - Flood plains or Flood Volumes (Legal & Environmental Considerations)

This criterion addresses the flow volumes that would result from the 100-year frequency storm event occurring on the contributing watershed for each of the candidate sites. The cost of storm water control increases substantially as the flow increases. Sites with lower flow volumes would require less run-on/run-off control and are assigned higher ratings.

Criterion No. 9 - Rare, Threatened, or Endangered Species (Environmental Impacts)

This criterion addresses the presence of State or Federal listed rare, threatened or endangered species; which, if present, can delay permitting and increase the cost of landfill development.

Criterion No. 10 - Land Habitat (Environmental Impacts)

This criterion rates the terrestrial habitat with regard to presence of unique species of local interest which are not on the rare or endangered list. Ratings with respect to the degree to which habitat would be impacted and the extent to which it could be enhanced, replaced, or protected in other areas as mitigation for its disturbance on the landfill site. Important species are those which are ecologically or economically important to an area.

Criterion No. 11 - Cultural Resources (Environmental Consideration & Impacts)

This criterion rates areas on the presence and importance of cultural resources on or adjacent to the site. All archeological sites are protected by The California Environmental Quality Act, The National Historic Preservation Act, and National Environmental Policy Act (40 CFR 1500). Areas close to important archaeological sites will be rated less suitable than those with no known nearby resources in this category.

Criterion No. 12 - Visibility (Environmental Consideration)

This criterion weighs the aesthetic impacts to the local community. Consideration is given the existing environment (how disturbed the area is), the location and number of viewers, the sensitivity of the viewers to aesthetic impacts.

Criterion No. 13 - Adjacent Land Use (Land Use Compatibility)

This criterion recognizes the perceived impact of landfill operations and ranks alternative sites near sensitive land uses lower than more remote sites.

Criterion No. 14 - Extent of Buffer Area (Land Use Compatibility)

This criterion considers the potential impact landfill operations can have on adjacent land uses. It focuses on the nearness of occupied structures to the edge of the landfill footprint. This criterion also incorporates consideration that a landfill is typically less acceptable to the public adjoining a residential area than other uses.

San Diego County Integrated Waste Management Plan

Criterion No. 15 - Current Site Use (Economic Factor)

This criterion recognizes the cost to acquire land and the level of potential opposition by land owners. Development near a landfill tends to reduce the utilization of the site's potential. Planned development, either on-site or adjoining the site, increases the potential for opposition. Vacant sites are generally less costly to acquire and are given a higher rating.

Criterion No. 16 - Access Routes (Environmental Consideration)

This criterion addresses the potential for environmental impacts caused by truck traffic related to landfill operations. It takes into account the relative distances between the major refuse sources (urban centers) and the site. Sites with short and direct haul access routes avoiding residential areas are assigned a higher rating.

Criterion No. 17 - Proximity to aqueducts (Legal & Economic Factors)

This criterion addresses the proximity of the site to aqueducts. Protection of the aqueducts is an important consideration in siting landfills. This criterion gives a higher rating to sites that lie farther from the county's major aqueducts.

Criterion No. 18 - Site Soils (Economic Factor)

This criterion recognizes the economic importance of the availability of cover and liner materials throughout the operating life of the landfill. Landfills require soil to cover trash. Sites are ranked on the distance from the site that suitable liner and cover materials are available.

Criterion No. 19 - Site Capacity (Facility Life & Economic Factors)

This criterion addresses the volume and tonnage of waste that could be accommodated at the site. The ideal site is one which will furnish capacity to accommodate the projected volume of waste which will be generated within the study area over the next 30 years. Smaller sites typically cost more per unit size to develop in terms of both dollars and time. Therefore, larger sites are more cost effective and are rated higher.

Criterion No. 20 - Road Construction Costs (Economic Factors)

This criterion ranks sites according to the expense of construction of necessary roads at and near the landfill. The adequacy of existing access roads to each of the alternative landfill sites is evaluated and ranked.

CHAPTER 6 PROPOSED NEW DISPOSAL FACILITIES DESCRIPTION AND LOCATION

PURPOSE & REQUIREMENTS

This chapter is to contain descriptions and locations of each proposed new or expanded disposal facility within the county and describe how each proposed facility or expansion would contribute to the 15 years of combined permitted disposal capacity. Specific requirements for the content of this chapter of the Siting Element are contained in CCR Sections 18755(c) and 18756.1.

FURTHER REVIEW PROCESS

The discussion of proposals in the Countywide Siting Element is only one step in the review and approval process which is governed by requirements for State and Federal Environmental review, local land use approval, and solid waste facility permitting. The inclusion of a proposed facility in this Element does not substitute for any required review process nor does it guarantee approval of the facility. Each facility is considered individually through the local jurisdiction's land use permitting process, which requires environmental review in accordance with the California Environmental Quality Act (CEQA), and the National Environmental Policy Act (NEPA) for projects on Federal lands, and the State's solid waste facility permitting procedures. Figure 6-1: Solid Waste Facility Permit Tree, graphically depicts the complexity of permitting a solid waste facility under current State and Federal statutes and regulations.

PROPOSED NEW LANDFILLS

It is anticipated that the City of San Diego will develop a new landfill during the planning period. This will be for disposal of the City's municipal solid waste. The site will be one of several under consideration as this Siting Element is being developed. The potential site descriptions and locations for this landfill are listed in Chapter 7 as "tentatively reserved" sites.

The County has also identified potential sites for landfill development in both the North and South County regions. However, a landfill will not be developed in either of these regions unless waste generation and disposal volumes warrant it.

At the present time the capacity of existing landfills along with that of the City of San Diego's planned new landfill will provide disposal capacity for all waste generated within the County beyond the planning period¹.

In a voter initiative on November 8, 1994, Gregory Canyon was approved by the voters of San Diego County as a possible landfill site. This initiative is currently subject to legal challenge. If a landfill is developed there, additional disposal capacity will be available in the region.



CHAPTER 7 TENTATIVELY RESERVED DISPOSAL SITES

PURPOSE & REQUIREMENTS

This chapter identifies areas which are currently being studied to assure 15 years of combined permitted countywide disposal capacity. These facility sites must be consistent with local general plans. Section 18756.3(a) requires that a resolution, notarized statement or affidavit, regarding land use consistency of any "reserved" area be obtained from each affected jurisdiction and included in the Siting Element. At the present time there are **no areas** in the San Diego County designated as **"reserved"** for landfill or transformation facilities.

The Siting Element may identify facility locations that are not consistent with applicable general plans. Ultimately all sites selected must be consistent with applicable general plans as of the first five year revision of the Countywide Integrated Waste Management Plan, or be removed from the Plan at that time if they are found to still be inconsistent with the applicable general plans.

If a proposed facility or expansion is not included in the original Siting Element, it must then be identified and described in an amendment to the Siting Element. Specific requirements for this chapter are contained in CCR Section 18756.3

Several potential landfill sites have been identified in San Diego County. Actual development of any of these sites will be conditioned on waste generation trends, need, economic feasibility and environmental constraints. The City of San Diego expects to develop a landfill within the planning period on one of its tentative sites.

The tentative sites being considered for landfills in San Diego County are:

Oak Canyon (City of San Diego)

Spring Canyon (City of San Diego)

Oak/Spring Canyons combined site (City of San Diego)

Upper Sycamore Canyon (City of San Diego)

Aspen Road (County)

Merriam Mountain South (County)

Gregory Canyon¹ (Private/County)

Wolf Canyon (County)

North Otay Valley (County)

East Otay Mesa (County)

These sites are tentatively reserved based on the North County Landfill Siting Study and the Southwest County Landfill Siting Study. Material changes in a project shall require new consideration under the siting criteria for that tentative site. A description and site map for each tentative site are provided in the following pages.

In a voter initiative, on November 8, 1994, County voters approved Gregory Canyon as a possible landfill site. This initiative is currently subject to legal challenge. This was also one of three preliminary sites identified in the County's New North County landfill siting process.

Figure 7-1 Regional Location of Tentative Landfill Sites

Oak Canyon Landfill Fact Sheet

TYPE This proposed facility location is one of several

alternative sites being considered as a replacement for the City of San Diego's existing Miramar Landfill. The

proposed facility would be a Class II landfill.

LOCATION The proposed facility would be located in the central

eastern portion of the City of San Diego, immediately north of State Route 52, east of NAS Miramar (formerly Camp Elliot) and approximately 1.5 miles west of the City of Santee. The facility would be located in the

eastern portion of Oak Canyon.

SIZE 236 acres of waste placement area. The overall acreage

of the proposed facility site has not been determined.

CAPACITY 65 million cubic yards or 39 million tons. The annual

disposal rate would be approximately at 1 to 1.5 million

tons per year.

LIFE EXPECTANCY 26 to 39 years, depending upon disposal rate. In addition, in

accordance with state and federal landfill requirements, there would also be 30 years of post-closure care and maintenance after the landfill stops receiving waste and is formally closed. During this period the site would

primarily be used as undeveloped open space.

EXPANSION OPTIONS

The western half of the canyon is a federal natural area,

and would not be landfilled. It is possible, but unlikely, that the City could acquire this half of the canyon for expansion. Expansion to the north is similarly constrained. Development to the south is precluded by

State Route 52.

CONSISTENCY WITH WASTE

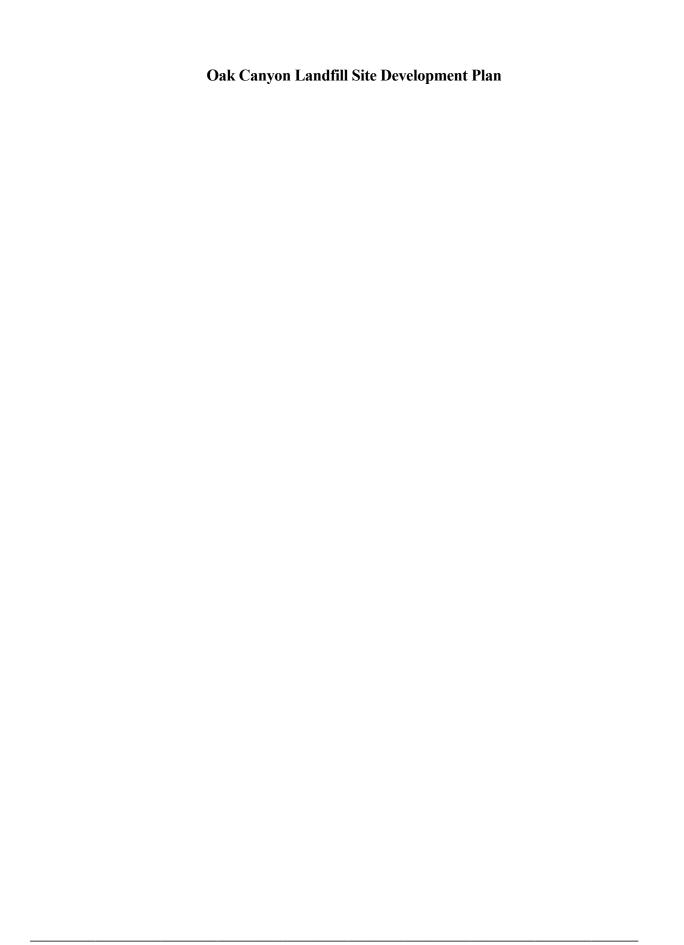
DIVERSION GOALS AND REQUIRED

The proposed landfill would contribute to the minimum 15-year disposal capacity required for the County.

MINIMUM DISPOSAL CAPACITY

Figure 7-2

San Diego County Integrated Waste Management Plan



Spring Canyon Landfill Fact Sheet

TYPE This proposed facility location is one of several alternative sites being considered as a replacement for the City of San Diego's existing Miramar Landfill. The proposed facility would be a Class II landfill. **LOCATION** The proposed facility would be located in the central eastern portion of the City of San Diego, immediately north of State Route 52, east of NAS Miramar (formerly Camp Elliot) and approximately 1.0 mile west of the City of Santee. The facility would be located in the western portion of Spring Canyon. **SIZE** 385 acres of waste placement area. The overall acreage of the proposed facility site has not been determined. **CAPACITY** 134 million cubic yards or 80 million tons. The annual disposal rate would be approximately at 1 to 1.5 million tons per year. LIFE EXPECTANCY 54 to 80 years, depending upon disposal rate. In addition, in accordance with state and federal landfill requirements, there would also be 30 years of post-closure care and maintenance after the landfill stops receiving waste and is During this period the site would formally closed. primarily be used as undeveloped open space. **EXPANSION OPTIONS** The eastern half of Spring Canyon would not be landfilled, in order to preserve a significant wildlife Possible expansion options include the corridor. relocation of the existing wildlife corridor to the east, or development to the north in upper Spring Canyon. Expansion in upper Spring Canyon is not expected because it is federally owned and not available for development. Development to the south is precluded by State Route 52.

CONSISTENCY WITH WASTE DIVERSION GOALS AND REQUIRED MINIMUM DISPOSAL CAPACITY The proposed landfill would contribute to the minimum 15-year disposal capacity required of the County.

Plan

San Diego County Integrated Waste Management

Figure 7-3 Spring Canyon Landfill Site Development Plan

San Diego County Integrated Waste Management Plan
FINAL DRAFT
Countywide Siting Element

SF.-48

Combined Oak/Spring Canyon Landfill Fact Sheet

TYPE This proposed facility location is one of several alternative sites being considered as a replacement for the City of San Diego's existing Miramar Landfill. The proposed facility would be a Class II landfill. **LOCATION** The proposed facility would be located in the central eastern portion of the City of San Diego, immediately north of State Route 52, east of NAS Miramar (formerly Camp Elliot) and approximately 1.0 mile west of the City of Santee. The facility would occupy both the western portion of Spring Canyon, and the eastern portion of the adjacent Oak Canyon. **SIZE** 655 acres of waste placement area. The overall acreage of the proposed facility site has not been determined. **CAPACITY** 225 million cubic yards or 135 million tons. The annual disposal rate is estimated at 1 to 1.5 million tons per year. LIFE EXPECTANCY 90 to 135 years, depending upon disposal rate. In addition, in accordance with state and federal landfill requirements, there would also be 30 years of post-closure care and maintenance after the landfill stops receiving waste and is During this period the site would formally closed. primarily be used as undeveloped open space. **EXPANSION OPTIONS** The eastern half of the Spring Canyon would not be landfilled, in order to preserve a significant wildlife Possible expansion options include the corridor. relocation of the existing wildlife corridor to the east, or development to the north in upper Spring Canyon. Expansion in upper Spring Canyon is not expected because it is federally owned and not available for development. Development to the south is precluded by State Route 52. CONSISTENCY WITH WASTE The proposed landfill would contribute to the minimum 15-year disposal capacity required of the County. DIVERSION GOALS AND REQUIRED

San Diego County Integrated Waste Management

MINIMUM DISPOSAL CAPACITY

Plan

Figure 7-4 Combined Oak/Spring Canyons Landfill Site Development Plan

San Diego County Integrated Waste Management Plan FINAL DRAFT

Countywide Siting Element SF-50

Upper Sycamore Canyon Landfill Fact Sheet

TYPE	This proposed facility location is one of several alternative sites being considered as a replacement for the City of San Diego's existing Miramar Landfill. The proposed facility would be a Class II landfill.
LOCATION	The proposed facility would be located in the northeast corner of the City of San Diego, approximately 0.5 miles south of the City of Poway and 3.0 miles east of the San Diego community of Scripps Ranch, and south of Beeler Canyon Road.
SIZE	240 acres of waste placement area. The overall acreage of the proposed facility site has not been determined.
CAPACITY	68 million cubic yards or 41 million tons. The annual disposal rate would be approximately 1 to 1.5 million tons per year.
LIFE EXPECTANCY 27 to	41 years depending upon disposal rate. In addition, in accordance with state and federal landfill requirements, there would also be 30 years of post-closure care and maintenance after the landfill stops receiving waste and is formally closed. During this period the site would primarily be used as undeveloped open space.
EXPANSION OPTIONS	The entire canyon would be used for this facility. Expansion options would be limited to landfilling adjacent undeveloped canyons.
CONSISTENCY WITH WASTE DIVERSION GOALS AND REQUIRED MINIMUM DISPOSAL CAPACITY	The proposed landfill would contribute to the minimum 15-year disposal capacity required of the County.

Integrated

County

Diego

Waste

Figure 7-5 Upper Sycamore Landfill Site Development Plan

San Diego County Integrated Waste Management Plan

Aspen Road Tentative Landfill Site Fact Sheet

TYPE	This	tentative	landfill	site	is	one	of	several	alternative

sites being considered as a replacement for the County's existing San Marcos Landfill. The proposed facility

would be a Class III landfill.

LOCATION The tentative facility would be located west of Interstate

15, approximately 4 miles northeast of the town of

Fallbrook.

SIZE 140 acres of waste placement area. The overall acreage

of the proposed facility site is estimated at 416 acres.

CAPACITY 35.2 million cubic yards or 21.1 million tons of refuse.

The annual disposal rate is estimated at .8 to 1.0 million

tons per year.

LIFE EXPECTANCY 20 to 25 years depending upon disposal rate. In addition, in

> accordance with state and federal landfill requirements, there would also be 30 years of post-closure care and maintenance after the landfill stops receiving waste and is During this period the site would formally closed.

> > Plan

primarily be used as undeveloped open space.

EXPANSION OPTIONS The entire canyon would be used for this facility.

Expansion options would be limited.

CONSISTENCY WITH WASTE The proposed landfill would enable the County to provide capacity beyond the required minimum 15-year period.

DIVERSION GOALS AND REQUIRED

MINIMUM DISPOSAL CAPACITY

Diego San County Integrated Waste Management

Figure 7-6 Aspen Road Landfill Site Location

San Diego County Integrated Waste Management Plan

Merriam Mountain South Tentative Landfill Site Fact Sheet

TYPE	This	tentative	landfill	site	ic	one	αf	several	alternative
1 1 1 L	1 1113	wiianve	ianum	SILC	13	OHC	O1	Severai	ancinative

sites being considered as a replacement for the County's existing San Marcos Landfill. The proposed facility

would be a Class III landfill.

LOCATION The tentative facility would be located on the west side of

> Interstate 15 (I-15), roughly across I-15 and over a small ridge from Lawrence Welk Village. Access would be

from I-15.

SIZE The overall acreage of the proposed facility site has not

been determined.

CAPACITY 66.4 million cubic yards or 40 million tons of refuse. The

annual disposal rate is estimated at .8 to 1.0 million tons

per year.

LIFE EXPECTANCY 40 to 50 years depending upon disposal rate. In addition, in

> accordance with state and federal landfill requirements, there would also be 30 years of post-closure care and maintenance after the landfill stops receiving waste and is formally closed. During this period the site would

primarily be used as undeveloped open space.

Waste

Management

Plan

EXPANSION OPTIONS The entire canyon would be used for this facility.

Expansion options would be limited to possible expansion

into an adjoining canyon.

CONSISTENCY WITH WASTE DIVERSION GOALS AND REQUIRED MINIMUM DISPOSAL CAPACITY

The proposed landfill would enable the County to provide capacity beyond the required minimum 15-year period.

Integrated

County

San

Diego

Figure 7-7 Merriam Mountain South Landfill Site Location

Gregory Canyon Tentative Landfill Site Fact Sheet

TYPE This proposed facility would be a recycling collection

center and Class III landfill. It is one of several sites considered which, if developed could replace or

supplement the County's San Marcos Landfill.

LOCATION The tentative site is located off State Route 76

approximately 3.5 East of Interstate 15 in San Diego

County.

SIZE Approximately 150 acres of waste placement area with a

total of approximately 250 acres occupied by the landfill and recycling center. The total acreage of the site is

estimated at 1413 acres.

CAPACITY Airspace volumetric capacity is estimated at 55 million

cubic yards. At a 5 to 1 refuse-to-cover ratio, this equates to 47.5 million cubic yards or 28.5 million tons of solid

waste.

LIFE EXPECTANCY Approximately 40 years at a projected disposal rate of .65 to 1.0

million tons per year. In addition, in accordance with state and federal landfill requirements, there would also be 30 years of post-closure care and maintenance after the

landfill stops receiving waste and is formally closed.

EXPANSION OPTIONS Expansion options would be limited.

CONSISTENCY WITH WASTE DIVERSION GOALS AND REQUIRED DISPOSAL CAPACITY A landfill at this site would add solid waste disposal capacity in the North San Diego County region.

IVERSION GOALS AND REQUIRED capacity in the North San Diego County region

Figure 7-8



San Diego County Integrated Waste Management Plan

Wolf Canyon Tentative Landfill Site Fact Sheet¹

TYPE This tentative landfill site is one of several alternative

sites being considered as a replacement for the County's existing Otay/Otay Annex Landfills. The proposed

facility would be a Class III landfill.

LOCATION This tentative facility would be located approximately 1

mile to the east northeast of the existing Otay Annex

landfill.

SIZE The area of this tentative facility site is from 150 to 200

acres.

CAPACITY 40 million cubic yards or 24 million tons of refuse. The

maximum annual disposal rate is estimated at 1 million

tons per year.

LIFE EXPECTANCY Approximately 24 years depending upon disposal rate. Ir

addition, in accordance with state and federal landfill requirements, there would also be 30 years of post-closure care and maintenance after the landfill stops receiving waste and is formally closed. During this period the site would primarily be used as undeveloped

open space.

EXPANSION OPTIONS The entire canyon would be used for this facility.

Expansion options would be limited to possible expansion

into an adjoining canyon.

CONSISTENCY WITH WASTE DIVERSION GOALS AND REQUIRED MINIMUM DISPOSAL CAPACITY The proposed landfill would enable the County to provide capacity beyond the required minimum 15-year period.

Note: This site is subject to the influence of General Plan and General Development Plan amendments

recently adopted for the Otay Ranch.

¹ Note: Map follows the North Otay Valley Tentative Landfill Site Fact Sheet

San Diego County Integrated Waste Management Plan

North Otay Valley Tentative Landfill Site Fact Sheet

TYPE This tentative landfill site is one of several alternative

> sites being considered as a replacement for the County's existing Otay/Otay Annex Landfills. The proposed

facility would be a Class III landfill.

This tentative facility would be located approximately 5 LOCATION

> miles east northeast of the existing Otay Annex landfill. Access would be from proposed State Route 125 which will traverse within 0.5 miles of the western site

boundary.

SIZE The estimated size of this tentative facility site is between

225 and 250 acres.

CAPACITY 48 million cubic yards or 29 million tons of refuse. The

annual disposal rate is estimated at a maximum 1 million

tons per year.

LIFE EXPECTANCY 29 years depending upon disposal rate. In addition, in accordance

> with state and federal landfill requirements, there would also be 30 years of post-closure care and maintenance after the landfill stops receiving waste and is formally closed. During this period the site would primarily be

used as undeveloped open space.

EXPANSION OPTIONS The entire canyon would be used for this facility.

Expansion options would be limited to possible expansion

into an adjoining canyon.

CONSISTENCY WITH WASTE DIVERSION GOALS AND REOUIRED

MINIMUM DISPOSAL CAPACITY

The proposed landfill would enable the County to provide capacity beyond the required minimum 15-year period.

Plan

Note: This site is subject to the influence of General Plan and General Development Plan amendments

recently adopted for the Otay Ranch.

San Diego County Integrated Waste Management

Figure 7-9 Wolf Canyon & North Otay Valley Landfill Site Locations

San Diego County Integrated Waste Management Plan
FINAL DRAFT
Countywide Siting Element

East Otay Mesa Tentative Landfill Site Fact Sheet

TYPE This tentative landfill site is one of several alternative

> sites being considered as a replacement for the County's existing Otay/Otay Annex Landfills. The proposed

facility would be a Class III landfill.

LOCATION This tentative facility would be located approximately 9

miles east of Interstate 805, within one-quarter mile of the

Mexican border.

SIZE The overall acreage of the site is estimated at 470 acres

with approximately 340 acres for waste placement.

CAPACITY 80 million cubic yards or 48 million tons of refuse. The

annual disposal rate is estimated at 1 million tons per

year.

LIFE EXPECTANCY Approximately 48 years depending on disposal rate. In addition,

> in accordance with state and federal landfill requirements. there would also be 30 years of post-closure care and maintenance after the landfill stops receiving waste and is During this period the site would formally closed.

primarily be used as undeveloped open space.

Waste

Management

Plan

EXPANSION OPTIONS The entire canyon would be used for this facility.

Expansion options would be limited to possible expansion

into adjoining canyons.

CONSISTENCY WITH WASTE DIVERSION GOALS AND REQUIRED MINIMUM DISPOSAL CAPACITY

The proposed landfill would enable the County to provide capacity beyond the required minimum 15-year period.

Integrated

County

San

Diego

Figure 7-10 East Otay Mesa Landfill Site Location



CHAPTER 8 STRATEGIES FOR ADDITIONAL CAPACITY (IF NEEDED)

PURPOSE & REQUIREMENTS

This chapter discusses strategies for disposing of solid waste which cannot be handled by existing County and City of San Diego facilities (without new facilities or expansions) CCR Sections 18755(c) and 18756.5 contain the specific requirements for this chapter.

It is the County's policy to provide disposal capacity within the County, without reliance on export of waste. However, jurisdictions within the county may choose to dispose of their waste at any facility, including exporting out-of-county, at their discretion. The Siting Element is presented as a policy document which outlines the main strategy as the development of additional capacity within the County when needed. If experience determines that this main strategy is unsuitable, a contingency would be explored, including export options to landfills outside the County. It should be noted here that some jurisdictions within the County are exporting some or all their solid waste to out-of-county disposal facilities at this time. The Siting Element provides for the disposal of the solid waste from all County jurisdictions at facilities within the County in the event that those jurisdictions now exporting change to using in-county disposal facilities.

COUNTYWIDE CAPACITY

The anticipated development of a new City of San Diego landfill will add disposal capacity, along with remaining capacity of existing County landfills, sufficient to provide for countywide solid waste disposal beyond the planning period of 15 years. This is demonstrated by comparing Table 3-A¹: Disposal Capacity Requirements for San Diego County, on page 7, and Table 8-1: Capacity of Existing & Proposed Landfills in San Diego County (excluding military) on page 60 of this document. As a result no other strategies for additional disposal capacity are being addressed at this time.

County Integrated Waste Management Plan FINAL DRAFT

San

Diego

¹ The total solid waste to be disposed by all San Diego County jurisdictions during the planning period is estimated to be between 75 and 80 million cubic yards. Available present and proposed landfill capacity is estimated to be 206 million cubic yards.

Table 8-1: Capacity of Existing & Proposed Landfills in San Diego County (Excludes Military)

NAME	OWNER	OPERATOR	EXISTING & PROPOSED CAPACITY (cy)
Existing:			
Borrego Springs	County of San Diego	Norcal, Inc.	455,075
Otay/Otay Annex	County of San Diego	Norcal, Inc.	19,248,488
Ramona	County of San Diego	Norcal, Inc.	1,266,695
San Marcos	County of San Diego	Norcal, Inc.	6,134,494
Sycamore	County of San Diego	Norcal, Inc.	28,796,645
Miramar	United States Navy	City of San Diego	34,296,000
	Total Existing Capacity		90,197,397
Proposed:			
New City of San Diego Landfill*	City of San Diego	City of San Diego	134,000,000
New North County**	County of San Diego/SWA	County of San Diego/SWA	35,200,000
New South County**	County of San Diego/SWA	County of San Diego/SWA	58,000,000
TOTAL			317,397,397

^{*} Exact location for this new City of San Diego landfill has not yet been determined. See Chapter 7 for the possible (tentative) site locations.

^{**} These facilities will not be developed unless waste generation and disposal volumes warrant.

CHAPTER 9 IMPLEMENTATION

PURPOSE & REQUIREMENTS

This chapter describes the agencies responsible for implementation of the Siting Element, the schedule and funding sources. CCR Section 18756.7 contains the requirements for this chapter of the Siting Element.

RESPONSIBILITY FOR IMPLEMENTATION & IMPLEMENTATION SCHEDULE

Table 9-1 describes the responsible entity or agency for permitting determinations for siting new or expanded disposal facilities (landfills). The tentative implementation schedule for development of new landfills is outlined in Table 9-2. All dates are subject to change. The site selection task has yet to be completed for the new City of San Diego landfill and for the new County of San Diego North and South landfills. The Gregory Canyon site was approved in a countywide voter initiative on November 8, 1994. However, no development schedule is included for this project in Table 9-2.

In addition to the local land use approval and Solid Waste Facility Permit process, the development of these facilities is subject to trends in waste generation and the waste disposal facility marketplace. The key to developing and maintaining sufficient regional solid waste disposal capacity is regional cooperation among officials of the region's political jurisdictions. The cost-benefit to the citizens should be the primary concern. If the region benefits from postponing the cost of siting new landfills by exporting solid waste, then the decision and its implementation should be made on a regional basis and benefit all.

San Diego County Integrated Waste Management Plan

Table 9-1: Siting Element Implementation Responsibilities

	New County Landfills and Expansions	City of San Diego New Landfill	Gregory Canyon Landfill ¹
Ownership	County of San Diego	City of San Diego	Gregory Canyon Ltd.
Facility Operation	County Solid Waste Division (Norcal)	City of San Diego	Under Consideration
CIWMP Consistency Review	County and Integrated Waste Management Task Force (IWMTF)	City of San Diego and the IWMTF	Done Through a Voter Initiative
Environmental Review	County and City Planning Departments	City of San Diego Development Services Department	County Department of Environmental Health Services Local Enforcement Agency - CIWMB
Local Land Use Authority	County Board of Supervisors	City of San Diego City Council	Done Through a Voter Initiative
Solid Waste Facility Permit Authority	County Department of Environmental Health Services Local Enforcement Agency - California Integrated Waste Management Board (CIWMB)	County Department of Environmental Health Services Local Enforcement Agency - CIWMB	County Department of Environmental Health Services Local Enforcement Agency - CIWMB

San Diego County Integrated Waste Management Plan

¹ If developed during the planning period.

Table 9-2: Implementation Schedule (Tentative)

Task	City of San Diego New Landfill	County New Landfill North*	County New Landfill South*
Design	1996-1998	2007-2008	2009-2010
Environmental Review	1995-1996	2007-2008	2009-2010
Land Use Approval	1997	2007-2008	2009-2010
Permitting	1997-2000	2007-2008	2009-2010
Construction	1999-2005	2008	2010
Begin Operations	2005	2008	2010

^{*} These facilities will not be developed unless waste generation and disposal volumes warrant it.

REVENUE SOURCES

Table 9-3 identifies revenue sources needed to implement the Siting Element. The Gregory Canyon project will be funded by private entities unless an agreement is made with a jurisdiction. Table 9-3 below outlines revenue sources for City of San Diego and County landfills only. Cost estimates are subject to change as economic conditions fluctuate.

Table 9-3: Revenue Sources for City of San Diego and County Landfills Development or Expansion

Facility	Capital Cost Estimate	Revenue Source
City of San Diego New Landfill	\$ 50 to 150 Million	Public Revenue Bond
County New Landfill - North	\$ 150 Million	Public Revenue Bond (Secured by Guarantees of Future User Fees)
County New Landfill - South	\$ 150 Million	Public Revenue Bond (Secured by Guarantees of Future User Fees)



BIBLIOGRAPHY

References For the Countywide Summary Plan & Siting Element

Camp Dresser & Mckee. Source Reduction and Recycling Element and Household Hazardous Waste Elements.

County of San Diego, 1992

City of Carlsbad, 1992

City of Chula Vista, 1992

City of Coronado, 1992

City of Del Mar, 1992

City of El Cajon, 1992

City of Encinitas, 1992

City of Escondido, 1992

City of Imperial Beach, 1992

City of La Mesa, 1992

City of Lemon Grove, 1992

City of National City, 1992

City of Poway, 1992

City of San Marcos, 1992

City of Santee, 1992

City of Solana Beach, 1992

City of Vista, 1992

City of Oceanside. Source Reduction and Recycling Element and Household Hazardous Waste Element, 1992.

City of San Diego. Source Reduction and Recycling Element, 1994 and Household Hazardous Waste Element, 1995.

Recovery Sciences, Inc. County and City of San Diego Waste Characterization and Market Study, Technical Volume I: Waste Characterization Study, May 30, 1990.

Dames & Moore. Southwest San Diego County Solid Waste Facility Siting Study, August 24, 1990.

Ogden Environmental and Energy Services. Site Feasibility Assessment: Southwest San Diego County, February 1993.

Buttler Roach Group. North County Landfill Supplemental Siting Study, January 1992.

CIWMB. Recycling Market Development Zone Program Overview, June 1994.

Progress Guide and General Plan, City of San Diego, 1989.

San Diego Association of Governments (SANDAG). SANDAG/SourcePoint Info, 1993 and 1994.

Nondisposal Facility Elements, as prepared and submitted by:

County of San Diego

City of Carlsbad

City of Chula Vista

City of Coronado

City of Del Mar

City of El Cajon

City of Encinitas

City of Escondido

City of Imperial Beach

City of La Mesa

City of Lemon Grove

City of National City

City of Oceanside

City of Poway

City of San Diego

City of San Marcos

City of Santee

City of Solana Beach

City of Vista

Various Authors. Solid Waste Facilities Permits for:

Borrego Landfill

Las Pulgas Landfill

Miramar Landfill

Otay/Otay Annex Landfills

Ramona Landfill

San Marcos Landfill

San Onofre Landfill

Sycamore Landfill

Proposition C, Voter Initiative for November 8, 1994 Election, Gregory Canyon Landfill.

County of San Diego Regional Solid Waste Management Plan - Update 1986

Ton-to-cubic yard solid waste conversion factor is based on historical landfill density compaction experience. County of San Diego experience is 1 ton = 1.67 cubic yards and City of San Diego experience is 1 ton = 1.56 cubic yards.

California Code of Regulations (CCR) Title 14, Division 7, Chapter 9, Article 8 Sections 18776-18791.

Public Resources Code (PRC) Division 30, Part 2, Chapter 4, Sections 41700-41721.5 and Chapter 5, Sections 41750-41770.5

San Diego County Integrated Waste Management Plan