

# Chapter 6.0

## Alternatives to the Proposed Project

### 6.1 INTRODUCTION

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#### 6.1.1 PURPOSE AND SCOPE

Section 15126(a) of the California Environmental Quality Act (CEQA) Guidelines requires that an EIR:

“Describe a range of reasonable alternatives to the proposed project, or to the location of the project, that would feasibly attain most of the basic project objectives but would avoid or substantially lessen any of the significant environmental effects of the project, and evaluate the comparative merits of the alternatives.”

The “rule of reason” governing the range of alternatives specifies that an EIR should only discuss those alternatives necessary to allow a reasoned choice by the decision makers. The range of feasible alternatives should be selected and discussed in a manner to foster meaningful public participation and informed decision-making.

The EIR must include sufficient information concerning the alternative to allow meaningful evaluation, analysis, and comparison with the merits of the proposed project. CEQA requires that an EIR identify the environmentally superior alternative from among the alternatives. If an alternative would cause one or more significant effects, over and beyond those associated with the proposed project after mitigation is applied, those significant effects must be discussed, but in less detail than the project’s effects.

For each of the following alternatives, the analysis:

- Describes the alternative;
- Discusses the impacts of the alternative and evaluates the significance of those impacts; and
- Evaluates the alternative relative to the proposed project, specifically addressing project objectives, feasibility, the elimination or reduction of impacts, and comparative merits.

The following alternatives were selected and are discussed in this Chapter:

- No Project/No Development Alternative
- Western SDG&E Alignment
- Alternatives to Reduce Unmitigable Impacts:
  - Reduced Visual Impacts
  - Reduced Air Emissions
- Alternative North County Locations:
  - Merriam Mountain
  - Aspen Road
- Long-Term Transport of Wastes to Sites Outside San Diego County
- Waste Reduction and Recycling

- Prescriptive Design with a Single Liner Alternative<sup>1</sup>
- Prescriptive Design with a Double Liner Alternative<sup>2</sup>

In addition, alternatives which were considered but rejected are also briefly described, along with the basis for rejection.

## 6.1.2 CRITERIA FOR SELECTION AND ANALYSIS OF ALTERNATIVES

The criteria for the selection and analysis of alternatives are provided in CEQA Section 15126.6(c). The alternatives should: 1) meet most of the project objectives; 2) be feasible; and 3) avoid or substantially lessen the significant impacts caused by the project.

### 6.1.2.1 Project Objectives

The alternative should feasibly be able to attain most of the basic objectives of the project even though it might, to some degree, impede the attainment of those objectives or be more costly.

The project objectives are as follows:

- Provide a Class III solid waste disposal facility that is locally available, cost effective, and provides a long-term solution (i.e., 25 years) for disposal of waste generated in North County jurisdictions. Such a facility will also provide additional capacity to the County solid waste system as a whole..
- Select a site that can accommodate a Class III nonhazardous municipal solid waste disposal facility designed in compliance with all applicable environmental and permitting requirements for a Class III facility.
- Provide the infrastructure facility necessary to support the long-term economic growth projected in the region.
- Minimize potential impacts of solid waste disposal facilities upon adjoining land uses.
- Preserve competition among solid waste disposal sites in San Diego County to minimize future tipping fees through the provision of additional landfill capacity.

In addition, the Gregory Canyon project has been developed to implement the objectives and purposes of Proposition C, as approved by the voters of San Diego County. One of the stated purposes contained in Proposition C is "...reaffirm the policy of the County of San Diego that each subregion of the County shall be responsible for providing sufficient facilities to handle the solid waste generated in each subregion and solid waste shall not be shipped from one subregion to any other subregion except where an emergency exists."<sup>3</sup>

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<sup>1</sup> A Prescriptive Design Alternative has been added to this Final EIR as a result of comments received on the RDEIR. This alternative does not create any new significant impacts not previously addressed in the Revised Draft EIR.

<sup>2</sup> A Prescriptive Design Alternative has been added to this Final EIR in response to comments received from the Regional Water Quality Control Board. This alternative does not create any new significant impacts not previously addressed in the Revised Draft EIR.

<sup>3</sup> While the language contained in Proposition C states a reaffirmation of a County policy, no existing, written policy has been found. The subregions of the County are considered to be North County, East County, South County, and the City of San Diego.

### **6.1.2.2 Feasibility**

The CEQA guidelines state that factors to be taken into account to determine feasibility include site suitability, economic viability, availability of infrastructure, general plan consistency, other plans for regulatory limits, jurisdictional boundaries and whether the applicant can reasonably acquire control or have access to the alternative site [Guidelines 15126.6(f)(1)]. An alternative does not need to be considered if its environmental effects cannot be reasonably ascertained and if implementation of such an alternative is remote and speculative. This includes alternatives that could be implemented only after significant changes in government policy or legislation.

### **6.1.2.3 Evaluation of Significant Impacts**

According to CEQA, the alternatives discussion should focus on those alternatives that, if implemented, could eliminate or reduce any of the significant environmental impacts not mitigated by the proposed project. The alternatives will be evaluated to determine if, as anticipated when selected as alternatives, they truly eliminate “any significant adverse environmental effects or reduce them to a level of insignificance” (Section 15126.6(b)). The project related impacts are considered to be those that are identified prior to the incorporation or implementation of any mitigation measures.

The performance of the alternative relative to the proposed project will be evaluated to determine the “comparative merits of the alternatives.” This analysis will be based in part on a comparison to the proposed project’s impacts. It will also include a discussion of the relative feasibility of the alternatives.

### **6.1.2.4 Rationale for Selection of Alternatives**

The criteria discussed above and information received during the scoping process were used to select a range of alternatives that would reduce environmental impacts while meeting the objectives of the project and public concerns.

First, CEQA requires the No Project Alternative be addressed. Accordingly, two No Project scenarios are examined in Section 6.2.1, No Development, and Development According to the Existing Land Use Designation and Zoning.

Second, the use of the same general project design but on a reduced scale was assessed, with the intent being to fully mitigate the significant and unmitigable environmental effects to air quality and visual quality. Two reduced capacity alternatives are discussed. Full mitigation of the impact to cultural resources would mean no development of the landfill at this location. No alternative exists capable of reducing significant noise impacts, since traffic noise on SR 76 currently exceeds significance levels for some residences and habitats.

A reduced capacity alternative, discussed in Section 6.3.1, was created to eliminate unmitigable visual impacts. This alternative reduces the height of the landfill so that it is hidden behind an existing ridge to the west of the landfill area and is therefore screened from eastbound travelers on SR 76. Although the landfill would still be visible to westbound viewers on SR 76, the magnitude of the impact is reduced to a level that can be mitigated to less than significant. Impacts to both air quality and cultural resources would remain unmitigable.

Another reduced capacity alternative, described in Section 6.3.2, reduces the maximum landfill capacity to 7.06 million tons with a maximum disposal rate of 1,070 tpd. The size of this alternative (41-acre landfill footprint) was selected to reduce air quality impacts to a less than

significant level. Although impacts to visual quality are also substantially reduced with this alternative, impacts to cultural resources remain significant and unmitigated.

As discussed in Section 4.11, it is not possible to provide an alternative at the same location that reduces the impacts to cultural resources to a less than significant level. According to the Pala Tribe, any development adjacent to Gregory Mountain, no matter what type of land use, would generate significant unmitigable impacts to Native American resources.

Other on-site locations for landfilling further away from Gregory Mountain were examined. This involved attempting to redesign the project in some way to eliminate those environmental impacts associated with the specific landfill footprint while maintaining the landfilling use on the site in conformance with the existing land use designation and zoning. This resulted in the Reconfiguration with the Landfill Footprint in an Alternate On-Site Location, discussed in Section 6.8.1.

Other types of land uses on the site were considered. The Solid Waste Facility (SWF) zone and land use designation prevent most other uses. Agriculture, however, is allowed in all zones in San Diego County. An agricultural alternative is essentially the same as the No Project Alternative, discussed in Section 6.2.1. Finally, although residential uses on the site would require a General Plan Amendment and rezone as well as voter approval, a residential use on the project site is assessed in Section 6.8.2.

Alternate locations in San Diego County were examined to determine how the relative environmental impacts compared between various possible sites. Merriam Mountain and Aspen Road sites, both identified in the San Diego County Integrated Waste Management Plan as tentative landfill sites, are assessed in Sections 6.4.1 and 6.4.2, respectively. Other locations in San Diego County are discussed in Section 6.8.3.

Alternatives that would eliminate the need for a new landfill are examined. Use of existing landfills for waste disposal are evaluated in the No Project Alternative, since existing facilities both in and out of San Diego County are currently being used (Section 6.2.1), and in the Out-of-County Alternative (Section 6.5). Methodologies to reduce waste volume are examined in Section 6.6, and methods to transform the waste to other products (compost and electricity) are assessed in Section 6.8.4 and 6.8.5.

In response to comments received on the RDEIR and agency comments on the JTD, to Prescriptive Design Alternatives have been prepared and are presented in Section 6.7 of this Final EIR. The two Prescriptive Design Alternatives are designed to meet all of the regulatory standards and would not require a variance from the RWQCB under Title 27 CCR for the engineered bottom design. While other on-site alternatives (Reduced Visual Impacts and Reduced Air Emissions) were designed in accordance with CEQA to reduce a significant and unmitigable impact, these alternatives are presented to provide a comparison of a landfill without an engineered bottom design with the proposed project as a result of comments received on the RDEIR and the JTD. The Prescriptive Design Alternatives do not create any new significant impacts not addressed in the RDEIR.

## 6.2 ALTERNATIVES TO THE PROPOSED PROJECT

### 6.2.1 NO PROJECT ALTERNATIVE

The No Project Alternative consists of the existing conditions as well as what would be reasonably expected to occur on the site in the future if the project is not approved (CEQA Guidelines, Section 15126.6(e)(2)).

#### 6.2.1.1 Description of the Alternative

The No Project Alternative would allow the existing uses on the site to remain and would not involve the construction of the new landfill at Gregory Canyon. The agricultural use, the Verboom Dairy, could continue on the site since agricultural uses are permitted in all San Diego County zones. If the Verboom Dairy were to relocate as currently anticipated, the site would remain vacant. The undeveloped portion of the site would continue to serve as passive open space; the part of the site previously used for agriculture could revert to open space. Existing residences on the site could continue to be used.

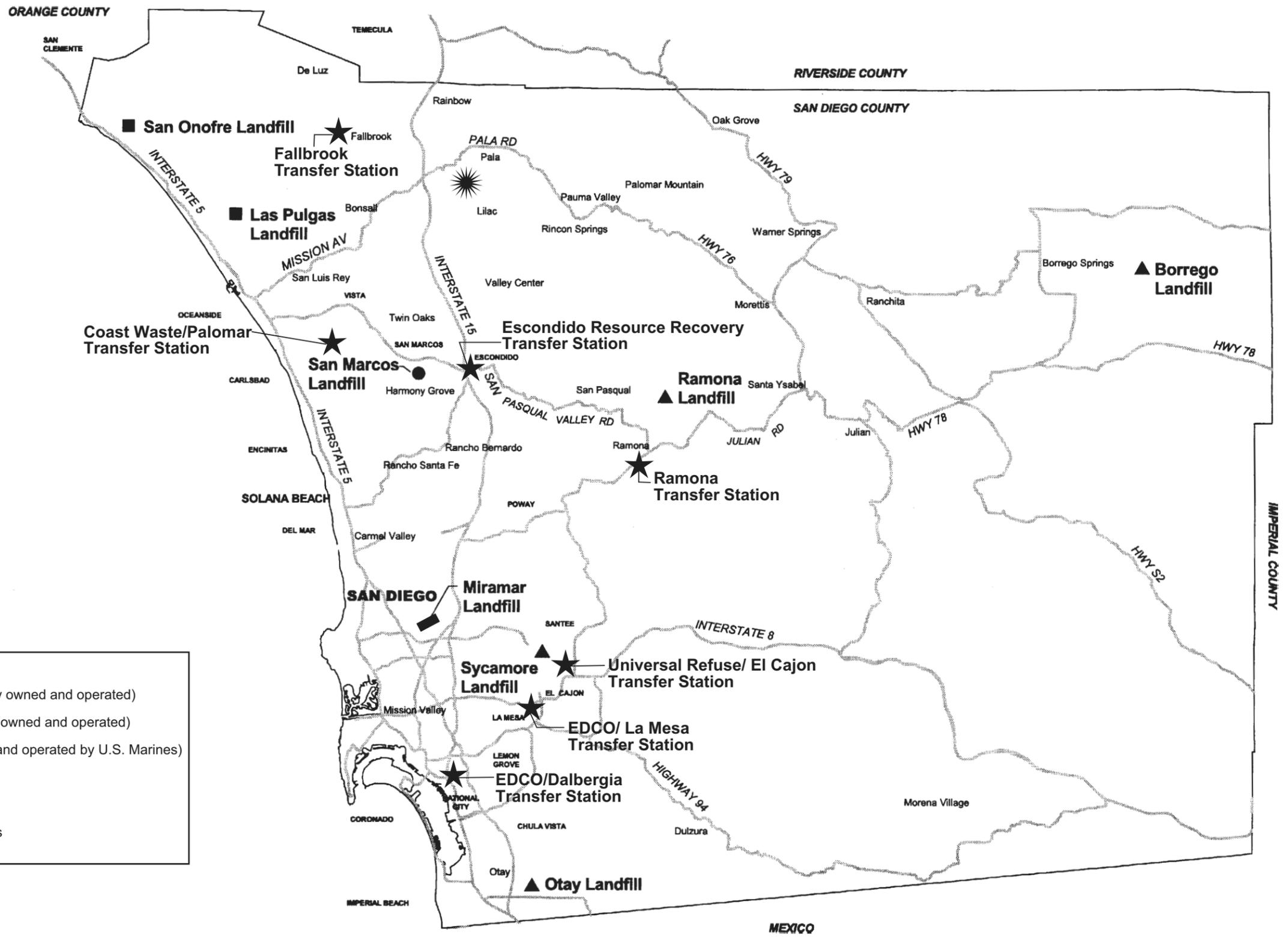
Based on data provided by the San Diego Department of Health in 2000 (refer to Appendix R), approximately 3,283,362 tons of Class III solid waste were generated within the County of San Diego in 1999. Of this, approximately 799,466 tons, or 24 percent, of solid waste were generated by jurisdictions in North County in 1999.<sup>4</sup>

Under the No Project Alternative, waste generated in San Diego County would continue to be disposed of at landfills within the County for the near term, including Borrego, Miramar, Otay, Ramona and Sycamore (see Exhibit 6-1), as well as landfills out of County, including Prima Deshecha in Orange County and Copper Mountain in Arizona. In addition, under the No Project Alternative, the existing disposal pattern, similar to that shown in Table 6-1a, would be followed by northern San Diego County jurisdictions in the near term. Waste generated in North County would continue to be disposed of at Ramona, Otay, Miramar and Sycamore landfills, as well as Prima Deshecha and, to a lesser extent, Copper Mountain. However, as available disposal capacity is exhausted, there would be a greater reliance on out-of-County disposal facilities.

Current waste management practices in the County include direct haul to landfills and the transfer of waste from local collection trucks to larger transfer vehicles at transfer stations. Please see Exhibit 6-1 for the location of existing landfills and transfer stations in San Diego County. As indicated by the data presented in Appendix R and summarized in Table 6-1a, in 1999, 35 percent of the County's solid waste disposed of at landfills was disposed of via the use of transfer stations. North County jurisdictions rely more heavily on transfer stations with approximately 71 percent of the North County waste disposed of via use of transfer stations in 1999.

<sup>4</sup> As shown in Table 6-1B jurisdictions within North County include Carlsbad, Del Mar, Encinitas, Escondido, Oceanside, Poway, San Marcos, Solana Beach, Vista and the northern portion of the unincorporated County of San Diego area. Consistent with SANDAG population data, 27.5 percent of the total waste generated within the unincorporated area of the County of San Diego is assumed to be generated within North County. (The North County area is defined as SANDAG's MSAs 4 (North County West) and 5 (North County East)).

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**LEGEND**

- ▲ Landfill (privately owned and operated)
- Landfill (publicly owned and operated)
- Landfill (owned and operated by U.S. Marines)
- Landfill (Closed)
- ★ Site Location
- ★ Transfer Stations



Sources: David Evans and Associates, 1999; PCR Services Corporation, 2001

Exhibit 6-1  
Locations of Existing Landfills and  
Transfer Stations in San Diego County

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**TABLE 6-1A  
EXISTING DISPOSAL PATTERNS AND VEHICLE MILES TRAVELED (VMT) SUMMARY  
1999**

NORTH COUNTY JURISDICTIONS	TOTAL WASTE GENERATED <sup>a</sup> (TONS)	DISPOSAL TO LANDFILLS VIA DIRECT HAUL AND TRANSFER STATIONS (TONS)																VEHICLE MILES TRAVELED		
		BORREGO		MIRAMAR		OTAY		RAMONA		SYCAMORE		COPPER MTN., AZ		PRIMA—OC		OTHER LANDFILLS <sup>b</sup>		DIRECT HAUL	TRANS-FER STNS. <sup>c</sup>	TOTAL VMT
		DI-RECT	TRANS-FER	DIRECT	TRANS-FER	DIRECT	TRANS-FER	DI-RECT	TRANS-FER	DIRECT	TRANS-FER	DI-RECT	TRANS-FER	DIRECT	TRANS-FER	DI-RECT	TRANS-FER	(10-TON TRUCK)	10-/22-TON TRUCK	TOTAL VMT
Carlsbad	106,124	0	0	4,959	0	1,273	72,630	10	0	19,779	6,764	424	61	49	48	0	0	228,765	377,155	605,920
Del Mar	15,762	0	0	5,109	0	48	999	2	0	5,528	303	0	3,770	0	2	0	0	40,081	95,358	135,439
Encinitas	70,884	0	0	12,967	0	829	48,296	9	0	659	6,837	104	0	0	1,120	3	0	67,320	362,124	429,444
Escondido	136,178	0	0	2,640	0	33	291	399	0	1,944	125,090	50	0	0	4,601	70	0	28,862	421,329	450,190
Oceanside	126,396	0	0	1,556	0	404	1,107	12	0	919	2,763	0	0	119554 <sup>d</sup>	49	30	0	546,614	23,802	570,416
Poway	49,367	0	0	6,259	0	19	1,097	527	23,820	1,591	15,853	0	0	0	200	0	0	23,640	149,879	173,520
San Marcos	76,817	0	0	1,024	0	459	28,873	18	0	748	39,606	0	0	0	6,049	0	0	14,741	379,328	394,068
Solana Beach	17,977	0	0	8,516	0	104	5,256	0	0	1,966	1,091	18	871	0	147	0	0	38,242	65,711	103,954
Vista	97,901	0	0	949	0	851	47,613	26	0	2,222	19,919	0	0	0	26,228	31	0	35,860	633,291	669,151
Unincorporated <sup>e</sup>																				
-North County 1 <sup>f</sup>	30,512	212	0	679	0	1,338	8,796	296	0	4,257	14,042	23	0	274	499	84	0	50,214	137,088	187,301
-North County 2 <sup>f</sup>	71,550	636	0	2,038	0	4,013	0	888	0	12,770	1,574	69	0	821	46,953	253	0	193,985	391,071	585,056
<b>Subtotal</b>	<b>799,466</b>	<b>848</b>	<b>0</b>	<b>46,697</b>	<b>0</b>	<b>9,371</b>	<b>214,958</b>	<b>2,188</b>	<b>23,820</b>	<b>52,385</b>	<b>233,842</b>	<b>688</b>	<b>4,702</b>	<b>120,698</b>	<b>85,896</b>	<b>471</b>	<b>0</b>	<b>1,268,324</b>	<b>3,036,135</b>	<b>4,304,458</b>
<b>Remaining County</b>																				
Chula Vista	139,083	0	0	1,193	0	136,796	28	12	0	1,043	1	0	0	0	0	10	0	227,687	369	228,057
Coronado	43,063	0	0	20,160	0	1,603	11,264	6	0	2,238	7,241	0	0	0	0	0	0	78,002	73,603	151,605
El Cajon	89,498	0	0	1,121	0	321	4,485	12	0	14,079	10,332	0	59,147	0	0	2	0	8,517	1,094,892	1,103,409
Imperial Beach	18,508	0	0	1,715	0	16,601	2	2	0	158	0	0	0	0	0	29	0	34,885	28	34,912
La Mesa	64,507	0	0	1,275	0	0	22,156	16	0	12,530	25,260	0	0	0	2,687	0	0	17,676	80,339	98,015
Lemon Grove	28,376	0	0	429	0	0	5,227	0	0	8,675	8,337	0	0	0	5,386	0	0	13,519	74,127	87,646
National City	66,845	0	0	18,293	0	16,026	27,637	0	0	3,030	186	0	0	0	135	1	0	103,055	76,785	179,841
San Diego	1,709,032	0	0	1,153,656	0	207,657	41,838	61	0	166,423	30,421	0	107,038	5	154	326	0	3,562,275	2,478,309	6,040,585
Santee	55,911	0	0	506	0	0	1,428	4	0	22,956	3,284	0	27,700	0	0	0	0	19,396	521,892	541,289
Remaining Unincorp. County	269,073	2,235	0	7,165	0	14,106	38,381	3,123	29,137	44,890	54,507	243	70,147	2,886	778	889	0	291,692	2,074,196	2,365,888
<b>Subtotal</b>	<b>2,483,896</b>	<b>2,235</b>	<b>0</b>	<b>1,205,512</b>	<b>0</b>	<b>393,111</b>	<b>152,446</b>	<b>3,235</b>	<b>29,137</b>	<b>276,021</b>	<b>139,569</b>	<b>243</b>	<b>264,032</b>	<b>2,891</b>	<b>9,140</b>	<b>1,257</b>	<b>0</b>	<b>4,356,704</b>	<b>6,474,542</b>	<b>10,831,246</b>
<b>TOTAL</b>	<b>3,283,362</b>	<b>848</b>	<b>0</b>	<b>1,252,208</b>	<b>0</b>	<b>402,481</b>	<b>367,404</b>	<b>5,422</b>	<b>52,957</b>	<b>328,405</b>	<b>373,410</b>	<b>931</b>	<b>268,734</b>	<b>123,588</b>	<b>95,036</b>	<b>1,728</b>	<b>0</b>	<b>5,625,028</b>	<b>9,510,676</b>	<b>15,135,704</b>

<sup>a</sup> Total waste generated includes diversion which occurs at various transfer stations. Therefore, in some cases the total waste sent to the landfills is less than the total waste generated.  
<sup>b</sup> Other includes disposal at Republic/Imperial, L.A. County and Lakeside/Inland Pacific landfills.  
<sup>c</sup> Transfer station VMT includes miles traveled to the transfer station based on a 10-ton truck as well as miles traveled from the transfer station to the landfill based on a 22-ton truck.  
<sup>d</sup> Waste to Prima from Oceanside is transported using a pod system. As such, it is assumed that a 6-ton truck takes the waste to a central location. From this location, an 18-ton truck transports the waste to Prima.  
<sup>e</sup> Consistent with population data from SANDAG, the analysis assumes that 27.5 percent of waste generated in unincorporated county area is from North County.  
<sup>f</sup> Refer to map in Appendix R for locations North County 1 and North County 2.

Sources: San Diego County Department of Environmental Health, 1999 data; PCR Services Corporation, 2001

As shown in Exhibit 6-1, in 1999 there were seven active transfer stations operated within San Diego County, including Carlsbad (Palomar)<sup>5</sup>, EDCO/La Mesa, EDCO/Dalbergia, El Cajon, Escondido Resource Recovery, Fallbrook, and Ramona. In disposing of North County waste through transfer stations, haulers primarily used Carlsbad (Palomar) (about 41 percent), Escondido Resource Recovery (about 38 percent), and Fallbrook (about 14 percent). In addition, a small amount of North County waste was disposed of at landfills via Ramona (about six percent) and El Cajon (less than one percent) transfer stations. The EDCO/Dalbergia transfer station was not used for the transfer of North County waste in 1999.

As indicated in Table 6-1a, approximately 15 percent of the County's solid waste disposed of via direct haul or transfer stations was transported to out-of-County landfills. North County is more dependent on out-of-County landfills, with 27 percent of the solid waste generated within North County disposed of at out-of-County facilities. In addition, as indicated by Table 6-1a, the 1999 disposal patterns resulted in approximately 15,135,704 vehicle miles traveled (VMT) for the County of San Diego as a whole and 4,304,455 VMT for North County jurisdictions.

With regard to Countywide landfill capacity, no new landfills have been permitted in San Diego County within the last 25 years. However, an EIR for the expansion of the Otay Annex Landfill located in southern San Diego County was certified in 2000 and the permit was approved in November 2000.<sup>6</sup> As shown in Table 6-1b, as of 1999, San Diego County landfills had an annual permitted inflow of approximately 4,514,000 tons and an average annual inflow of approximately 2,940,350 tons. As of 1999, the remaining permitted landfill capacity within San Diego County was approximately 41,981,998 tons. With the approved expansion of the Otay facility, which will provide approximately 18.5 million tons of additional capacity, the remaining capacity is approximately 60,681,998 tons. In addition, planned capacity is projected for the Sycamore Canyon Landfill with the future phases of that landfill. The projected increase would be approximately 76,000,000 to 106,000,000 cu. yds., which would further extend the remaining capacity for the County. However, the owner of the landfill has not yet submitted applications for the necessary permits for the increase in capacity.<sup>7</sup> Assuming a conservative projection that waste generation will increase at the same annual rate as population growth within the County of San Diego (1.7 percent per year)<sup>8</sup> and excluding out of County disposal<sup>9</sup>, with implementation of the No Project Alternative, permitted landfill capacity within San Diego County including the recently approved Otay expansion, would remain until 2015 (an additional 13 years from 2002). Finally, under the No Project Alternative, a landfill within North San Diego County would not be constructed in the near future, resulting in the continued disposal of solid waste from North County (approximately 24 percent of the total waste generated within the County) to more distant locations within South San Diego County or to other Counties or States.

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<sup>5</sup> The Conditional Use Permit for the Carlsbad transfer station expires in three years.

<sup>6</sup> Telephone conversation, Pam Raptis, DEH, May 20, 2002.

<sup>7</sup> Telephone conversation, City of San Diego, May 23, 2002.

<sup>8</sup> The annual increase of 1.7 represents an average for both North County and South County jurisdictions and is based on 1999 SANDAG population projections for the years 1995, 2005, 2010, and 2020 for each of the jurisdictions.

<sup>9</sup> As indicated previously, in 1999 approximately 15 percent of the total waste in San Diego County was disposed of at out-of-County landfills. However, the adopted CIWMP states on page SE-63: "It is the County's policy to provide disposal capacity within the County, without reliance on export of waste."

**TABLE 6-1B**  
**SAN DIEGO COUNTY LANDFILL OPERATIONS AND PERMITTED CAPACITIES<sup>A</sup>**  
**1999**

FACILITY	DAILY AVERAGE INFLOW (TONS)	DAILY PERMITTED INFLOW (TONS)	ANNUAL INFLOW (TONS) <sup>B</sup>	ANNUAL PERMITTED INFLOW (TONS)	REMAINING PERMITTED CAPACITY (TONS)
Miramar	3,600	8,000	1,116,000	1,400,000	16,392,776
Sycamore <sup>C</sup>	2,830	3,300	877,300	1,204,000	15,137,725
Otay <sup>D</sup>	2,830	5,000	877,300	1,825,000	28,430,539
Ramona	200	295	62,000	76,700	461,078
Borrego Springs	25	50	7,750	7,800	259,880
<b>Total</b>	<b>9,485</b>	<b>16,645</b>	<b>2,940,350</b>	<b>4,514,000</b>	<b>60,681,998<sup>B</sup></b>

<sup>a</sup> This table provides permitted capacities and does not include the planned capacity of the projected expansion of Sycamore Canyon Landfill. The future phases of Sycamore Canyon Landfill could increase the capacity of the landfill by 76 to 106,000,000 cu.yds. However, no application has been filed for the additional capacity.

<sup>b</sup> Calculated by multiplying the daily average inflow by 310 operating days

<sup>c</sup> Does not include the projected increase since it is not permitted capacity

<sup>d</sup> Includes the expansion and increase in daily intake approved for Otay in November 2000

Sources: County of San Diego, Department of Environmental Health, 1999; PCR Services Corporation, 2001

### Development Under Existing Plans

The No Project Alternative would eliminate the Gregory Canyon landfill as currently proposed. The existing Solid Waste Facility zoning and land use designation on the site would remain. Development of the site would result in land uses that are related to solid waste. Although the County zoning ordinance does not give specific regulations for Solid Waste Facility zoning, Proposition C defines potential land uses on the site to include a recycling collection center and a landfill (along with support facilities for these uses) and other possible uses related to solid waste such as a composting facility, waste incinerator, transfer station, maintenance facility for waste haul vehicles and other solid waste related equipment. However, because Proposition C only discusses landfilling and recycling collection, it is reasonable that other future development proposals according to the existing zoning and plan designation for this site would be similar to the project evaluated in this EIR.

Although agricultural use of the site is permitted in the SWF zone, the primary long-term development of this site, under existing plans and zoning defined by Proposition C, is landfilling and recycling. Amendments to the land use designation and zoning would be possible only by a majority vote of the people.

### **6.2.1.2 Environmental Impacts**

#### Land Use and Related Planning

The site is designated and zoned SWF. Existing agricultural uses could remain on-site. Proposition C states that "The voters hereby reaffirm the policy of the County of San Diego that each subregion of the County shall be responsible for providing sufficient solid waste facilities to handle the solid waste generated in each subregion..." As discussed above, the North County region has several existing transfer stations (Fallbrook, Carlsbad, and Escondido). While these

facilities allow for the sorting and recovery of recyclable materials and the concentration of waste, these facilities do not provide for the ultimate disposal of solid waste but require the shipment of waste to landfills in other areas of the County or outside the County. The construction of a landfill on the project site is required to fully meet the intent of Proposition C.

Under the No Project Alternative, the on-site land use impacts associated with the project would not occur. The site could remain as open space unless some other project were developed on the project site. However, there would be no permanent dedication of the 1,313 acres as open space and no active management of the lands by a resource agency or non-profit organization to maintain and enhance its habitat value. No encroachment into the SDG&E easement would occur and the power lines would not need to be relocated.

The No Project Alternative would not increase the landfill capacity within the County. Assuming waste disposal increases with population growth, under the No Project Alternative, the landfill capacity within the County would remain until 2015 (an additional 13 years from 2002). Therefore, the No Project Alternative would rely on out-of-County facilities to meet the County's 15 years of permitted disposal capacity as required by AB939. However, planned increase in capacity of the Sycamore Canyon Landfill is projected with the future phases of that landfill. The projected increase would be approximately 76,000,000 to 106,000,000 cu. yds, which would extend the remaining capacity for the County. However, the owner of the landfill has not yet submitted applications for the necessary permits for the increase in capacity.<sup>10</sup> While the CIWMP states: "It is the County's policy to provide disposal capacity within the County, without reliance on export of waste", the Plan acknowledges that jurisdictions may choose to dispose of their waste at any facility, including exportation to out-of-county landfills.

#### Geology and Soils

No impacts to geology and soils would occur. The project site would not be excavated and landfill development would not occur.

#### Hydrogeology

Impacts to hydrogeologic resources, particularly potential impacts to the groundwater quality, would not occur with the No Project Alternative. However, chemical fertilizers, pesticides and animal waste from agricultural uses, if continued, could adversely impact the groundwater quality. This would continue to be monitored by the County Department of Environmental Health under current practices.

#### Surface Hydrology

Sedimentation and erosion impacts from construction and operation would be avoided. The bridge would not be constructed and the river channel would not be modified. Surface water runoff quantity and quality would remain at the existing levels. Chemical fertilizers, pesticides and animal waste from agricultural uses, if continued, could adversely impact the surface water quality.

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<sup>10</sup> Telephone conversation, City of San Diego, May 23, 2002.

## Traffic and Circulation

The No Project Alternative would eliminate the 2,085 PCE trips generated by the project. Because no impacts would occur from the project, the applicant's contribution to traffic improvements in the vicinity would not occur. Specifically, under the No Project Alternative the contribution of funds to improve traffic safety on SR 76 would not be made to Caltrans,

As indicated by Table 6-1a, the San Diego County solid waste disposal system is dynamic and constantly changing. Waste haulers have been known to change the transfer stations and landfills that they utilize, depending on contracts that have been negotiated and the cost of disposal at each facility. Therefore, it is recognized that numbers presented in Table 6-1a will change over time. However, with the No Project Alternative, traffic associated with waste disposal in the near future would follow waste disposal patterns that are similar to those presented in Table 6-1a. Specifically, waste within San Diego County would continue to be disposed of via direct haul and via transfer stations to landfills within San Diego County, including Borrego, Miramar, Otay, Ramona and Sycamore, as well as out-of-County landfills including those in Orange County and Arizona.

Table 6-1a shows the total waste quantities and primary disposal locations of waste generated in the North County subregion in 1999.<sup>11</sup> The majority of the solid waste from North County was transported and disposed of at San Diego County landfills located an average of approximately 23 to 75 miles from the various North County jurisdictions, and out-of-County landfills that are located an average of approximately 48 to 230 miles from the North County jurisdictions. As stated above, disposal of the North County solid waste (approximately 799,466 tons) via direct haul and via transfer stations to landfills resulted in approximately 4,304,458 vehicle miles traveled (VMT).<sup>12 13</sup> In addition, as shown in Table 6-1a, solid waste disposal for the County as a whole generated 15,135,704 VMT.

Much of the cost of waste handling is associated with collection and transportation activities. Therefore, although many factors (e.g., the cost of disposal at the facility, contracts negotiated between the jurisdictions generating the waste and the hauler, the ownership of the various facilities, and whether the ultimate disposal locations is reached directly or via transfer stations) contribute to the patterns of solid waste disposal, distance to the disposal facility and associated transportation costs are a primary factor in the selection of a landfill facility by a jurisdiction or hauler. As indicated by the map provided in Exhibit 6-1, when compared with other landfills in the County, development of the proposed Gregory Canyon Landfill project would provide the closest location for disposal of solid waste generated in the North County area, an area that generates 24 percent of the total Class III solid waste in the San Diego County. As a result, although North County jurisdictions would continue to have the option of disposing of waste at

<sup>11</sup> Refer to Appendix R for detailed data that is summarized in Table 6-1a.

<sup>12</sup> Appendix R details the calculations, assumptions and information sources used in the analysis of VMT. The number of waste haul trips per jurisdiction were calculated assuming a waste truck capacity of 10 tons for direct haul and 22-ton trucks for waste transported from a transfer station to a landfill. Approximate mileage between the cities and the current disposal sites was measured from the center of each city to the appropriate transfer stations, and then from the transfer station to the landfill. VMT were determined by multiplying the number of trucks by the number of miles in a one-way trip.

<sup>13</sup> Based on the data presented in Appendix R, less than one percent of the North County solid waste was diverted through the use of transfer stations.

more distant landfills, much of which would be disposed of via use of existing or new transfer stations, it is likely that the overall efficiencies associated with transportation costs for disposal of North County waste at Gregory Canyon would generate a demand for disposal at Gregory Canyon, thereby reducing the VMT associated with waste disposal in North County as well as the County of San Diego as a whole. While waste from more distant areas of the County and out-of-County areas could be disposed of at Gregory Canyon, efficiencies associated with transportation costs would likely limit the amount of waste disposed of at Gregory Canyon from such distant locations. As a result, with implementation of the No Project Alternative, the reduction in VMT associated with the location of a landfill within North County in the near future would not result.<sup>14</sup>

#### Noise and Vibration

No short-term or long-term noise impacts from grading, construction, or operation of the landfill would occur with the No Project Alternative. However, noise and vibration from Pipeline No. 6 construction would occur. Impacts would increase in the future as cumulative traffic occurs from future development unrelated to the project. Even with the No Project Alternative, existing and future traffic on SR 76 (without the landfill) are predicted to be sufficient to generate a significant noise impact to residences adjacent to the roadway.

#### Air Quality Health Risk

The No Project Alternative would eliminate on-site air quality impacts associated with the project. Neither the short-term nor long-term air quality impacts described in Section 4.7 would occur if the project is not developed. Without development, grading and site preparation would not be necessary, thereby eliminating the associated emissions, particularly PM<sub>10</sub>. Other emissions resulting from construction activity, including the operation of construction equipment, consumption of energy resources, etc., would also be eliminated. Finally, operational impacts resulting from motor vehicles and stationary source emissions at the project site (i.e., the emissions generated from the consumption of natural gas and electricity, and from the operation of the gas flare) would not occur on the site.

Air emissions, including odor, from decomposition of municipal waste occur wherever the waste is placed. Currently, waste generated in the County goes to a variety of landfills in and outside the County, and decomposition of that waste is occurring in those locations. The No Project Alternative would result in the continuation of the existing situation, and air emissions from decomposing waste would not be generated on the project site. With the continuation of the existing use, odors from the dairy operation would still occur.

Air emissions are currently generated by waste haul trucks transporting municipal waste from North County cities to landfills in the South County or outside the County. Air emissions associated with the transport of waste increase as the VMT increase. As discussed above, with the No Project Alternative, traffic associated with waste disposal within San Diego County in the near future would follow waste disposal patterns that are similar to existing patterns. Based on

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<sup>14</sup> As discussed under the analysis of the Out-of-County Alternative below, other options to reduce VMT such as waste-by-rail, while feasible, have not yet been proven cost-effective and are not widely used. In addition, waste-by-rail is not expected to be cost-effective in the near future given high costs of rail transportation created in part by deregulation of rail rates. Furthermore, exporting waste-by-rail in San Diego County would require a rail transfer station to be permitted.

the most recent data provided by the County, the majority of the solid waste from North County was transported and disposed of at San Diego County landfills located an average of approximately 23 to 75 miles from the various North County jurisdictions, and out-of-County landfills that are located an average of approximately 48 to 230 miles from the North County jurisdictions. Based on the existing disposal patterns and distances to landfills, disposal of the North County solid waste via direct haul and via transfer stations to landfills resulted in approximately 4,304,458 VMT. In addition, solid waste disposal for the County as a whole generated 15,135,704 VMT.

Distance to the disposal facility and associated transportation costs are a primary factor in the selection of a landfill facility by a jurisdiction or hauler. When compared with the locations of other existing landfills, the location of the proposed Gregory Canyon Landfill project would provide a disposal location in close proximity to North County jurisdictions, which generate 24 percent of the total solid waste in the San Diego County. As a result, although North County jurisdictions would continue to have the option of disposing of waste at more distant landfills, it is likely that the overall efficiencies associated with transportation costs for disposal of North County waste at Gregory Canyon would generate a demand for disposal at Gregory Canyon, thereby reducing the VMT associated with waste disposal in North County as well as the County of San Diego as a whole.<sup>15</sup> As a result, with implementation of the No Project Alternative, the likely reduction in VMT associated with the location of a landfill within North County in the near future would not result. Therefore, due to the reduction in VMT that could occur with the operation of the proposed Gregory Canyon landfill, air emissions from waste transportation would be greater for the No Project Alternative than for the project. Over the 30-year lifespan, these emissions would likely have a significant impact on the regional air quality of the San Diego Air Basin.

### Agricultural Resources

The No Project Alternative would not have any effect on the existing or future agricultural uses which surround the site. On-site agricultural uses could remain.

### Biological Resources

Impacts to biological resources on the site from the project would not occur with the No Project Alternative. Sensitive habitats and vegetation communities, and sensitive plant and animal species would not be lost or disturbed in the near term. Paths for wildlife movement between riparian and upland habitats would remain as they currently exist (including existing impacts from the dairy operations) in the near term. Indirect impacts to biological resources from the degradation of water quality in the San Luis Rey River would not occur in the near term. The No Project Alternative would not introduce non-native vegetation, and would not result in increased noise, which could have a detrimental effect on biological resources.

However, under the No Project Alternative there could be future development of the project site, and associated impacts. In addition, there would be no permanent dedication of 1,313 acres of land as open space, with active management by a resources agency or non-profit organization to maintain and enhance its habitat value.

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<sup>15</sup> As discussed under the analysis of the Out-of-County Alternative below, other options to reduce VMT such as waste-by-rail, while feasible, have not yet been proven cost-effective and are not widely used.

### Paleontological, Ethnohistoric, and Cultural Resources

This alternative would avoid potential impacts to sensitive paleontological resources. The unmitigable impacts to significant Native American resources in the project area (Gregory Mountain and Medicine Rock) would not occur with this alternative. The No Project Alternative would not increase the activity in the area and would not result in impacts to the identified archaeological sites.

### Aesthetics

Impacts to visual quality of the area would not occur with the No Project Alternative. The site would remain open and undeveloped in character.

### Socioeconomics

The No Project Alternative would allow the existing residences on the site to remain. No jobs would be created on the site from the landfill.

### Public Services and Utilities

This alternative would not create a need for additional services on the site. The SDG&E transmission towers would not be relocated. This alternative would continue the current use of groundwater, which exceeds the project operational demand (without periodic construction). Additional demands on fire and police protection services would not be made.

The No Project Alternative could result in an impact to energy conservation by causing solid waste generated in the North San Diego County area to be transported considerably farther distances for disposal based on the pattern of disposal shown in Table 6-1a. Over the 30-year life of the project this could be a significant source of energy use in the region.

### Human Health and Safety

No impacts to human health and safety would occur with the No Project Alternative.

### Cumulative Impacts

The No Project Alternative would contribute to cumulative impacts to air quality and traffic circulation. As discussed in Section 4.7, Air Quality and Health Risks, the San Diego air basin is a non-attainment area for ozone and PM<sub>10</sub>, and any increase in air emissions would be considered significant. The No Project Alternative would result in increased air emissions from greater vehicle miles traveled when compared to the project and therefore, would make a greater contribution to the cumulative degradation of air quality in the San Diego air basin than the proposed project.

In addition, because the No Project Alternative is anticipated to result in increased vehicle miles traveled for waste disposal, air emissions from waste transportation would be greater for the No Project Alternative than for the project.

Finally, the No Project Alternative would contribute to a cumulative decrease in the useful life of existing landfills in the County used for waste disposal, and a decrease in competition among disposal sites.

### 6.2.1.3 Comparison to the Project

#### Project Objectives

The No Project Alternative would not meet the project objectives of providing a Class III disposal facility that is locally available to North County jurisdictions nor would the No Project Alternative increase the landfill disposal capacity within San Diego County as no new facility would be developed. In addition, since it is assumed that the current solid waste disposal pattern would continue in the near term if the No Project Alternative were selected, without the increase in landfill capacity resulting from the proposed project, the overall disposal capacity within the County would be reduced at a faster rate. In addition, the No Project Alternative would not provide the infrastructure facility necessary to support the long-term economic growth projected in the region. Furthermore, the No Project Alternative would not help to minimize or reduce tipping fees through the preservation of competition among solid waste disposal sites within the County since the No Project Alternative would not increase the number of facilities or operators within the County. According to the CEQA Guidelines Section 15126.6(c), alternatives must be limited to those that can “feasibly attain most of the basic objectives of the project.” The No Project Alternative does not attain any of the project objectives or the basic goals of Proposition C.

#### Feasibility

The No Project Alternative is feasible. However, in the long-term, the site would remain designated and zoned SWF, and the potential for development with solid waste uses would still exist. A majority approval of the voters would be required to change the zoning and land use designation from SWF to another designation and zone.

#### Evaluation of Significant Impacts

The No Project Alternative would eliminate all significant impacts, both mitigable and unmitigable, related to the construction and use of the site as a landfill. Specifically, the No Project Alternative would eliminate unmitigable impacts in these areas:

- Visual quality impacts;
- Impacts to Native American interests from development of a landfill in close proximity to Medicine Rock and Gregory Mountain;
- Air quality impacts from on-site construction and operations; and
- Noise impacts from traffic to residences along SR 76.

Air quality impacts from waste decomposition would not occur on the site but would still occur at other sites used for waste disposal.

Significant cumulative noise impacts to residences from traffic on SR 76 would still occur in the future as a result of planned development in the area. In addition, cumulative traffic impacts to the capacity of SR 76 would still occur with the planned development in the project area.

In the long-term, and on a regional basis, this alternative would result in increased environmental impacts in these issues:

- Regional traffic impact associated with greater vehicle miles traveled as local jurisdictions continue to transport their waste to locations to more distant disposal facilities within the County or to out-of-County facilities (impacts would be potentially significant).

- Regional air quality impact associated with the increased vehicle miles traveled (impacts would remain unmitigable).
- Regional energy conservation impact associated with greater energy use from the increased vehicle miles traveled (impacts would be mitigable).

### Comparative Merits

As indicated above, the No Project Alternative would not meet the project objectives. In addition, the No Project Alternative would not meet the specific intent and purposes stated in Proposition C with regard to the provision of a regional facility. Long-term disposal capacity within the County as well as in other areas of southern California would be significantly reduced by not constructing the proposed landfill. Under the No Project Alternative, most of the County would be dependent on Sycamore and Otay Annex for disposal, which would force their closure sooner than currently projected. As indicated above, there is additional planned capacity at the Sycamore Landfill which ultimately could extend the capacity by 76,000,000 to 106,000,000 cu. yds. However, the process to implement the planned expansion has not yet started as no applications have been filed with the County for the projected expansion of the facility. As indicated in the County's CIWMP, "It is the County's policy to provide disposal capacity within the County, without reliance on export of waste."<sup>16</sup> The practical availability of disposal capacity can be affected by jurisdictional control. For example, within the County, the City of San Diego has established control over the Sycamore Canyon landfill through a franchise agreement between the City and Allied Waste, the owner of the landfill. Outside of the County, the County of Riverside has created economic disincentives to waste import at the El Sobrante Landfill through an agreement with Waste Management, the owner of that landfill. Therefore, reliance particularly on out-of-County facilities can create uncertainty if the jurisdiction decides to create disincentives or not accept waste from areas out of its jurisdiction.

The No Project Alternative would eliminate significant environmental impacts for almost all issue areas (geology, water quality, traffic, noise, biological resources, cultural resources). Unmitigable impacts to Native American interests, visual quality, and air quality would be avoided. Air emissions from operations and decomposing waste would still occur but in other locations, wherever the County waste is placed for disposal. Vehicle miles traveled and associated air emissions and energy use (e.g., fuel) from waste transport would be greater when compared with the proposed project. Biological resources would not obtain the benefit of permanent dedication as open space and active management to maintain and enhance habitat values.

## **6.2.2 SDG&E WESTERN ALIGNMENT ALTERNATIVE**

### **Description of the Alternative**

Currently, SDG&E maintains a 300-foot wide easement for 230 and 69 kV transmission lines, which cross the landfill footprint in a north-south direction. The project proposes to relocate the easement and transmission towers to the east of the current easement along the eastern perimeter of the landfill footprint. The Western Alignment Alternative would relocate the easement and transmission lines to the western side of the landfill footprint. Exhibit 6-2 shows the location of

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<sup>16</sup> County of San Diego, Integrated Waste Management Plan, 1996, page SE-63

**Note:** For the northern tower, the landfill footprint would be adjusted to accommodate this new tower location.

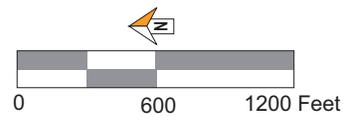
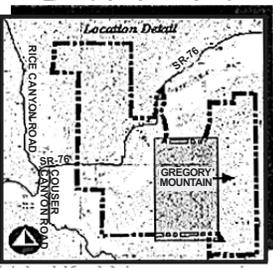
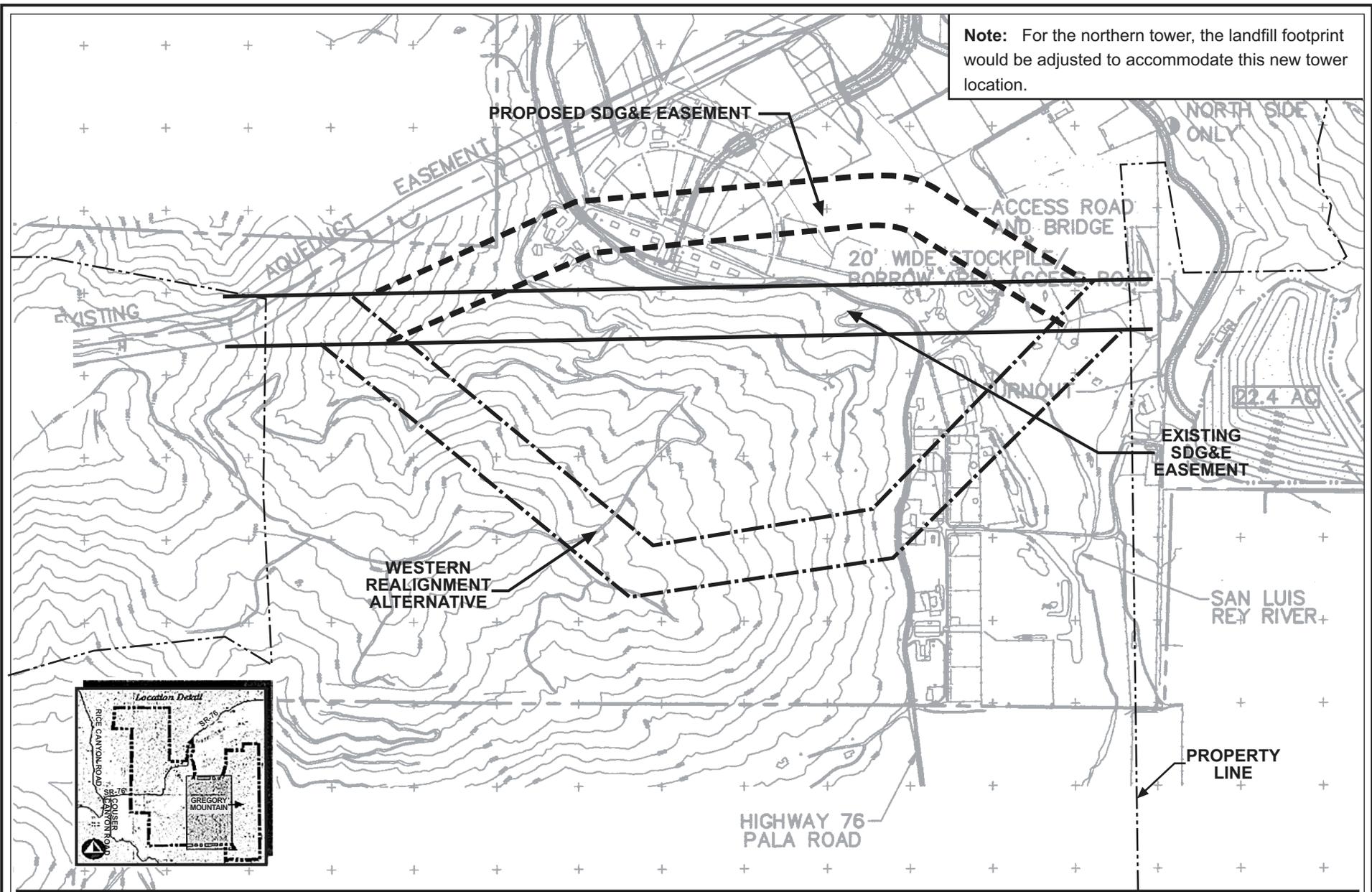


Exhibit 6-2  
SDG&E Western  
Alignment Alternative

Sources: Bryan A. Stirrat & Associates, 2000

the existing easement, the eastern alignment as proposed by the project, and the Western Alignment Alternative.

From the south, the western alignment would separate from the existing easement near the property boundary at the top of the landfill, then continue to the northwest roughly following the western edge of the landfill footprint. The alignment would then cross over to the northeast and reconnect with the existing easement. SDG&E indicated that there would be a conflict regarding access with the San Diego County Water Authority (SDCWA) easement if the easements were jointly located. For this reason, the western alternative was designed not to cross or overlap the SDCWA easement. In an effort to avoid the steeper topography to the west and minimize the length of the replacement segment, the alignment alternative is located close to the landfill rather than west of the SDCWA easement.

As with the proposed eastern alignment, five transmission towers would be required for this alternative. There would be three new locations and the two existing towers where the new alignment separates from the existing lines would be replaced. While the exact locations of the new towers have not been determined, it is likely that the three new towers would be located west of the landfill footprint, between the footprint and the aqueduct. No towers would be located within the footprint area; the transmission line would cross over the landfill footprint at its northern limit.

The cost to construct the western alignment is expected to be considerably greater than for the eastern realignment, since the distance for this alternative would be about 1,400 linear feet greater (5,400 linear feet as opposed to 4,000 feet). In addition, there may be problems with wind and sag between the two northernmost towers where the lines would cross over the landfill, since the distance between these two towers would be greater than 1,900 feet. Nevertheless, this alternative is feasible from an engineering and construction standpoint.

### **6.2.2.2 Environmental Impacts**

#### Land Use and Agricultural Resources

The Western Alignment Alternative would be located entirely within the Gregory Canyon property and would be located close to the landfill footprint. No land use impacts would be expected, since no off-site areas would be disturbed with this alternative, and no conflicts with existing General Plan, Community Plans, zoning ordinance or regional plans would occur. The potential conflict between agency facilities and easements would be avoided by providing separate easements for the transmission line and the aqueduct. The alternative would not affect agricultural resources.

#### Geology and Soils

The Western Alignment Alternative would be located primarily away from Gregory Mountain, and would therefore, avoid the geologic hazards resulting from debris flows and rockfalls on the western slope of the mountain. The Western Alignment Alternative, as with the project, would require the replacement of the northernmost tower on the site. This tower would be subject to rockfall. This hazard could be mitigated by the measure incorporated into the project. The alternative alignment and the proposed project (eastern alignment) would be subject to the same hazards from groundshaking and seismic activity.

### Hydrogeology and Surface Hydrology

The western alternative would not affect groundwater because the footings for the towers would not be deep enough to reach or impact the groundwater. As with the proposed eastern alignment, the towers themselves would be located to avoid impacts to or from the landfill liner and leachate collection system.

Impacts to surface water quality and runoff would be the same for either alignment. There would be a possibility of minimal erosion as a result of ground disturbance during tower construction. There would also be minor erosion from the construction of the access road. However, compared to erosion impacts associated with the landfill construction and operation, effects from the transmission towers would be unnoticeable.

### Traffic and Circulation, Noise and Vibration, and Air Quality and Health Risk

Neither alignment would have impacts to traffic and circulation, noise and vibration, air quality or health risk. No additional traffic would be generated, since the transmission lines are already in existence on the site. Noise associated with the transmission lines would not be increased over the existing levels. No air emissions would be generated except those which are associated with construction. Again, compared to the total air emissions generated by the landfill, the effects of the relocation of the transmission towers would be minimal.

### Biological Resources

The Western Alignment Alternative would cross over coastal sage scrub and native perennial grassland habitats, as shown on Exhibit 4.9-3, Vegetation Impacts. The vegetation in the alternative easement corridor would be substantially removed as part of the development of the proposed landfill footprint and the Borrow/Stockpile Area B. No additional impacts would result from the selection of this alternative. As with the proposed project, the western alignment would be located in an area proposed for disturbance by the landfill footprint.

The SDG&E transmission tower, where Golden eagles have been observed to perch and breed, would be relocated by this alternative so the projects' effects on eagle habitat would be the same as those described in the proposed project. The western alternative is within the eagle forage area and would be a risk to eagles of injury or death from the new location of the lines. Landfill operations could discourage the eagles' use of Gregory Canyon for hunting, but sufficient foraging opportunities exist on- and off-site in the San Luis Rey River valley and above the open fields on-site in the floodplain. Transmission wires located along the western route would rise above the ridgeline over the SDCWA aqueduct where the eagles are not used to them. If those lines crossed the canyon where the eagles forage, rather than paralleling the terrain as the eastern route does, this alignment could result in collisions, injury and possibly even death of eagles.

Impacts can be mitigated by the same measures as with the proposed project: (a) the removal of the northern tower would be done between the months of July and October; (b) transmission towers would follow natural contours or tree lines where possible; and (c) power lines would be spaced so that an eagle cannot touch two lines at once (no less than eight feet between lines). These measures are described in more detail in Section 4.9.4, Biological Resources, Mitigation.

### Paleontological, Cultural and Ethnohistoric Resources

The Western Alignment Alternative would have the same paleontological impacts as the eastern alignment. Since both alignments are located over the same geological formations, the

possibility exists that fossil resources would be uncovered during construction. This would be mitigated by the measures outlined in Section 4.10.4.

No archeological or historic sites would be impacted by the eastern alignment. The western alternative would directly impact one of the fourteen archaeological sites (CA-SDI Site Number P-37-016051 (Pala Road Segment)) within the project boundary. However, this site would already be impacted by the internal haul road. This site is determined to be not important under CEQA. Mitigation would be similar to the measures required for the project and would reduce the impact to a less than significant level.

Because of the transmission alignment's relationship to the landfill project, the impacts to ethnohistoric and cultural resources would be the same with either alternative. The Pala Indians have indicated that any disturbances to Gregory Mountain and Medicine Rock would create unmitigable impacts. Although the western alignment of the transmission line is west of Gregory Canyon and farther away from the mountain, the impacts from the landfill itself would remain. Therefore, the effects on Gregory Mountain and Medicine Rock from moving the transmission line would be negligible.

#### Aesthetics

The Western Alignment Alternative would have greater visual impacts than the project alignment on the eastern side of the landfill footprint. Towers for the western alignment would be located on or close to the ridge line (also the location of the First San Diego Aqueduct). From the east, the towers would remain hidden behind Gregory Mountain. From all other directions, the towers and lines would be silhouetted against the sky rather than backdropped by Gregory Mountain as is the case with the existing location and the proposed eastern alignment.

The biggest viewshed impact of the project as a whole occurs from westbound travelers on SR 76 as they face into the landfill from east of the access road. Although both alternative transmission line alignments would be clearly visible from this view area, the western alignment would be silhouetted against the sky and would be more visible than the eastern alignment, which would be backdropped against Gregory Mountain. No mitigation is possible for this impact.

#### Public Services and Utilities

Impacts from the transmission towers in either location are not significant for these issue areas. No utilities would be required to service the transmission towers or lines other than that already supplied by the existing lines.

There would be some effects from the western or eastern relocation to SDG&E as a result of more equipment to maintain (longer lines and more towers than existing) and more difficult access. The eastern alternative involves steeper slopes, while the western alignment would involve crossing the landfill working face. Both alternatives would be considered feasible. The magnitude of these impacts to public services and utilities would be the same for either alignment. No significant impacts to energy conservation would occur.

#### Socioeconomics

The transmission line already exists in the project vicinity, and would not create or remove housing or add permanent jobs to the local employment base. No impacts to socioeconomics would occur.

### Human Health and Safety

The Western Alignment Alternative, as with the project, would require the replacement of the northernmost tower on the site. Impacts to human health and safety from the acceptance of household hazardous waste, litter, vector generation and electromagnetic fields would result in no impacts for either alignment.

### Cumulative Impacts

The project with the Western Alignment Alternative would result in the same cumulative impacts as the proposed project: water quality degradation from soil erosion and urban runoff, traffic congestion (LOS F) at the I-15/Pala Road northbound ramps, increased traffic noise at residences adjacent to SR 76, air emissions in an area designated as non-attainment for ozone and exceedances to PM<sub>10</sub> standards, loss of sensitive biological habitats and species, loss of significant cultural resources, and change to the visual quality of the region. As with the project, this alternative would mitigate its contribution to cumulative effects for water quality, traffic, noise, and biological resources. Cumulative traffic noise and cumulative impacts to the capacity of SR 76 would remain significant since these would occur without any contribution from the project. Air quality would still be a significant cumulative impact since the San Diego air basin is a non-attainment area for ozone and exceeds the state standards for PM<sub>10</sub>, and any air emissions must be considered significant.

### **6.2.2.3 Comparison to the Project**

#### Objectives

This alternative would not affect the project's ability to meet the project objectives.

#### Feasibility

The Western Alignment Alternative would be considered feasible, in spite of possible impacts from wind and sag between the two northernmost towers and higher costs for construction and maintenance than the proposed eastern alignment.

#### Evaluation of Significant Impacts

This alternative would have the same impacts as the eastern alignment in the areas of land use, agricultural resources, hydrogeology, surface hydrology, traffic and circulation, noise and vibration, air quality and health risk, paleontology, cultural and ethnohistoric resources, socioeconomics, and human health and safety. Biological impacts from the western alternative would be greater than for the eastern alignment, since the length of the lines would be greater and would increase the risk to golden eagles of injury or death from flying into the transmission lines. Mitigation for the golden eagle would reduce impacts to below a level of significance. The Western Alignment Alternative would have less significant impacts as a result of geologic hazards (e.g., debris flows and rockfalls).

Impacts to the ethnohistoric resource of Gregory Mountain resulting from the project are significant and unmitigable, according to the Pala Indians. Changing the alignment of the transmission line from east to west of the landfill would not affect the magnitude of these impacts. The tower relocation is a relatively small part of a larger project. No mitigation is possible for ethnohistoric impacts.

The Western Alignment Alternative would have greater aesthetics impacts than the eastern alignment since the towers of the western alignment would be silhouetted against the sky rather than backdropped by Gregory Mountain. The increased visual impacts would not be mitigable.

### Comparative Merits

This alternative is feasible and would meet the project objectives. Environmental impacts would be less in some areas (e.g., geological hazards) and would be increased in others (e.g., biological resources-golden eagle forage risks, visual quality).

Construction costs and long-term maintenance costs of this alternative would be greater than for the eastern realignment because the alternative route is longer. This alternative is not considered environmentally superior to the eastern realignment because the unmitigable visual quality impacts and risk to the golden eagle would be increased. Mitigation for other impacts are already incorporated into the project. Impacts to ethnohistory cannot be mitigated either for this alternative or for the proposed project.

## **6.3 ALTERNATIVES DESIGNED TO REDUCE UNMITIGABLE IMPACTS**

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### **6.3.1 REDUCED VISUAL IMPACTS ALTERNATIVE**

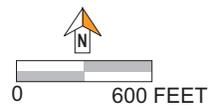
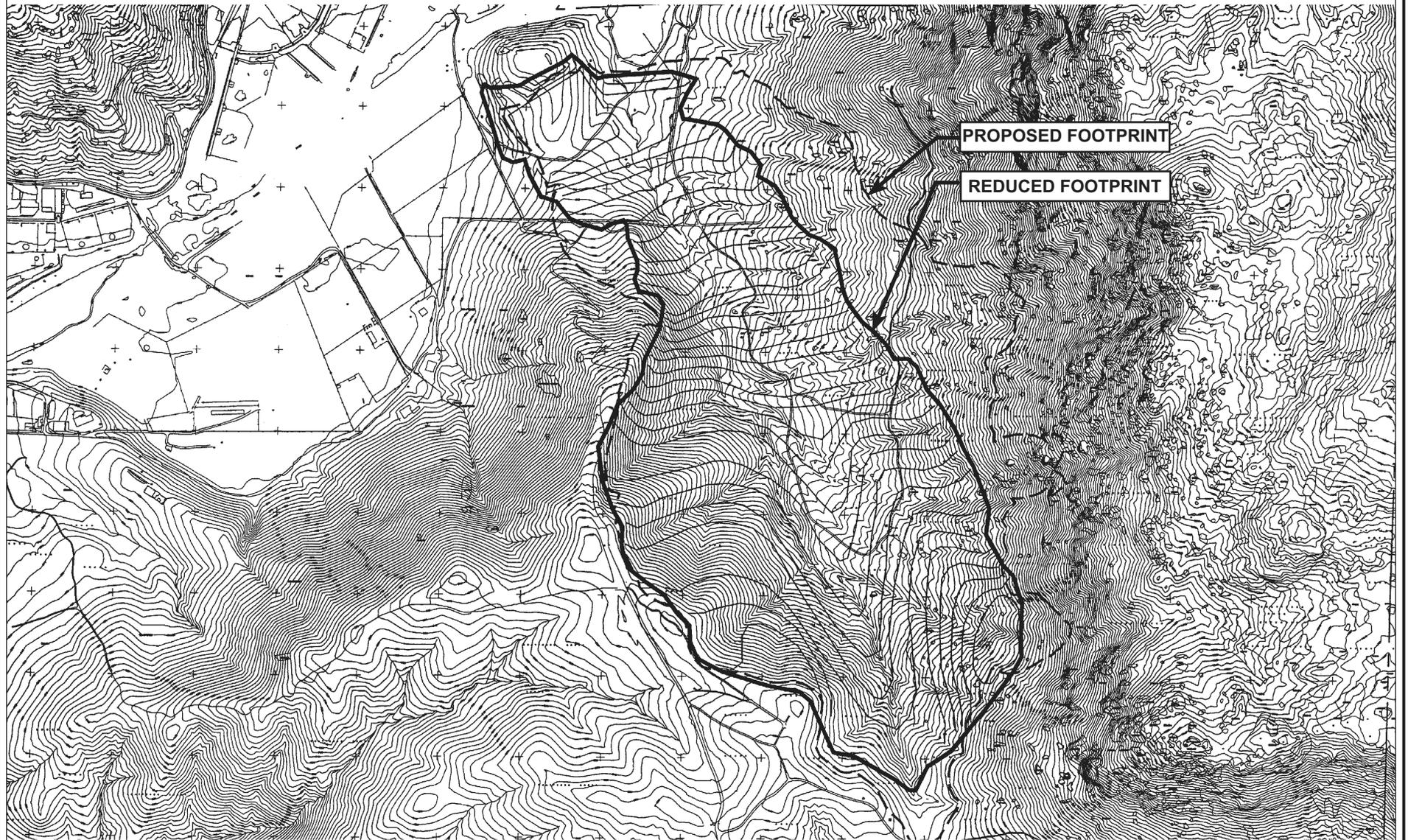
#### **6.3.1.1 Description of the Alternative**

The Reduced Visual Impacts Alternative was developed to eliminate the significant unmitigable aesthetics impacts related to the size and visibility of the landfill footprint. To reduce the impacts to views from SR 76, the maximum height of the landfill would be lowered to 980 feet adjacent to Gregory Mountain and 925 feet on the western side to match existing off-site topography. The shape of the landfill surface would be changed to create a valley effect in the center that reflects the natural topography of Gregory Canyon (Exhibit 6-3). Fill would be placed at higher elevations along the sides of the canyon where it cannot be seen from SR 76, while the center of the canyon, which has a greater visibility to SR 76, would be filled to lower elevations.

The landfill footprint would be reduced from 196 acres to about 150 acres. The 150-acre landfill footprint would be consistent with the Proposition C description. The western boundary of the fill area would be the same as the project. The eastern limits of landfilling would be moved roughly 400 to 600 feet to the west from the proposed fill limits. The southern boundary of the landfill footprint would be moved about 500 feet to the north.

The overall capacity would be reduced from about 33 million tons with a life span of about 30 years to about 10.8 million tons with about an 11 year life span. The maximum allowable tons per day (tpd) would be reduced to 3,200. With the reduction in size, the Borrow/Stockpile Area A would be eliminated.

Project components, including the access road and bridge, the scalehouse, maintenance building and water tank, excavation of the landfill footprint, installation of the liner and waste containment system, perimeter fencing, and operation and maintenance of the facility would remain the same. Hours and days of operation would be the same as for the project. The Reduced Visual Impact Alternative would require the relocation of the SDG&E transmission towers and easement.



Sources: Bryan A. Stirrat & Associates, 1999; David Evans and Associates, 1999;  
PCR Services Corporation, 1999

Exhibit 6-3  
Reduced Visual Impacts Alternative

### **6.3.1.2 Environmental Impacts**

#### Land Use and Related Planning

Land use impacts with this alternative would be the same as the proposed project. This alternative would be in conformance with the General Plan and zoning ordinance, and with regional plans and policies. The Reduced Visual Impacts Alternative would implement the intent of Proposition C and would expand the overall solid waste facility system within the County. However, because of the reduced size and life of the landfill, this Alternative would implement Proposition C and expand the County capacity to a lesser extent than the proposed project. After approximately 11 years the pattern of disposal of solid waste generated in North County would be similar to the existing pattern.

#### Geology and Soils

Impacts from existing geologic hazards (earthquakes and groundshaking, erosion, rockfalls, and debris flows) would remain the same, and would require similar measures as the proposed project. The liner system would be subject to the same threat of sliding failure. Settlement of the landfill surface would still occur, but would be reduced in magnitude from the proposed project because the total quantity of waste would be less.

#### Hydrogeology

The construction of a leachate collection system would control the potential for water quality degradation from surface runoff across waste and from leaking leachate, although the total quantity of leachate generated would be reduced due to the reduced amount of total waste in the landfill. Impacts from the piezometric layer beneath the fill area would remain the same and would require the installation of a subdrain system.

#### Surface Hydrology

The Reduced Visual Impact Alternative would have similar impacts to surface hydrology as the project. The potential for increased erosion would be mitigated by the use of best management practices during construction and operation. The access bridge and road would be the same for this alternative as for the project.

#### Traffic and Circulation

The Reduced Visual Impact Alternative would reduce local traffic impacts by approximately 33 percent. As with the project, traffic impacts end with the closure of the landfill. The Reduced Visual Impact Alternative would operate for 11 years instead of 30 years.

Under this Alternative, a disposal location in close proximity to North County jurisdictions, which generate 24 percent of the total solid waste in the San Diego County, would be provided. As a result, with implementation of the Reduced Visual Impact Alternative, a reduction in VMT associated with the location of a landfill within North County in the near future would likely occur. The annual VMT would remain the same as the project. However, the long-term reduction in VMT would be less than the project as a result of the reduction in total lifespan of the landfill from 30 to 11 years.

### Noise and Vibration

Noise impacts for this alternative would be of less magnitude than those of the project, because the westernmost stockpile would be eliminated, with a corresponding elimination of noise generated by equipment in and around that stockpile. The landfill excavation area would be smaller and the noise generated by equipment during operation of the fill would be separated from the southern property boundary by about 1,250 feet. This would reduce noise levels to the residences south of the site. However, the quantities of waste handled on a daily basis would equal the project average daily volume (3,200 tpd). Noise impacts to the least Bell's vireo would be the same as the project during the life of the Reduced Visual Impact Alternative.

Noise generated by the flare station would be similar to the proposed project since the flare station would be operated as landfill gases are generated. Because the total quantity of waste in the landfill under this alternative would be less than for the project (10.8 million tons instead of 33 million tons), the long-term operation of the flares would be shorter. Nevertheless, the noise impact from the flare would still be significant but mitigable.

### Air Quality and Health Risk

The total capacity of the Reduced Visual Impact Alternative would be about 10.8 million tons rather than the 33 million tons with the proposed project. Therefore, the overall emissions from construction and operation would be reduced by about 64 percent. Table 6-2 shows that these emissions would still be significant for NO<sub>x</sub> and PM<sub>10</sub> during construction and operation. Mitigation (the same measures as for the project) would reduce the impact slightly, but the overall air quality impact from emissions at the project site would remain significant and unmitigable.

**TABLE 6-2**  
**SUMMARY OF AIR EMISSIONS WITH THE REDUCED VISUAL IMPACT ALTERNATIVE**

<b>AIR POLLUTANT</b>	<b>STANDARD</b>	<b>OPERATION</b>
CO	550 lbs/day	814 lbs/day
	100 tons/year	69.7 tons/year
ROC (lbs/day)	None	136 lbs/day
	50 tons/year	22.0 tons/year
NO <sub>x</sub>	250 lbs/day	534 lbs/day
	40 tons/year	58.4 tons/year
SO <sub>x</sub>	250 lbs/day	36 lbs/day
	40 tons/year	4.6 tons/year
PM <sub>10</sub>	100 lbs/day	300 lbs/day
	15 tons/year	15.6 tons/year

*Source: PCR Services Corporation, June 2002*

As with the project, CO impacts during operation would be primarily from the flare. The impacts from the flare in the Reduced Visual Impact Alternative would be no greater than that of the project because the daily wastestream in this alternative would equal the project average daily input and the total volume would be about 22 million tons less.

As indicated above, under this Alternative, a disposal location in close proximity to North County jurisdictions would be provided. As a result, with implementation of the Reduced Visual

Impact Alternative, a reduction in VMT associated with the location of a landfill within North County in the near future would likely occur. Therefore, due to the reduction in VMT that could occur with this Alternative, the Reduced Visual Impact Alternative would likely have a greater beneficial air quality impact associated with the reduction in VMT when compared with the No Project Alternative. However, the reduction in regional emissions would not be expected to be as great as the reduction anticipated under the proposed project. Specifically, the annual VMT and associated emissions would remain the same as the project, but the long-term reduction in emissions would be less than the project as a result of the reduction in total lifespan from 30 to 11 years.

### Cultural Resources

This alternative would slightly reduce the magnitude of the significant unmitigable impact to Native American Interests from intrusion into the sacred site of Gregory Mountain because the footprint does not extend as far up the western slope of the mountain and the height adjacent to the mountain would be reduced. However, the Pala Tribe believes that any disturbance at the mountain would be significant and unmitigable. The slight benefit from pulling back the eastern footprint boundary would not be sufficient to reduce the impact to below significance. This impact, as with the project, would remain significant and unmitigable.

Impacts to archaeological and historic sites would be lessened as the number of impacted sites would be reduced. However, impacts to impacted sites would still remain significant, but mitigable. These impacts are the same as for the proposed project.

### Agricultural Resources

Impacts from the Reduced Visual Impact Alternative would be similar to the proposed project. No impacts to agricultural resources are anticipated.

### Biological Resources

The Reduced Visual Impact Alternative's smaller landfill footprint and the removal of Borrow/Stockpile Area A would decrease the biological impacts compared with those of the proposed project. Roughly three acres of the coast live oak woodland habitat on the western slope of Gregory Mountain would be left undisturbed, reducing the impact to that habitat. An additional ten acres of coastal sage scrub and coastal sage scrub/chaparral would also be left undisturbed.

While no listed species were observed in Borrow/Stockpile A, its removal would reduce project effects on the sensitive cactus wren and the coastal sage scrub habitat present in that area. This alternative would also reduce impacts to potential upland habitat for the arroyo southwestern toad. The reduced landfill footprint would also reduce project effects on potential Quino checkerspot habitat and on the sensitive species present therein. Impacts to arroyo southwestern toad, least Bell's vireo and coastal California gnatcatcher would still be significant under this alternative. This alternative's impacts to the sensitive plants, prostrate spineflower, and Engelmann oaks, would be essentially the same as the proposed project. None of the indirect impacts to sensitive species would be reduced by this alternative. Implementation of the same mitigation measures as for the proposed project would reduce biological impacts of this alternative to below a level of significance.

The elimination of Borrow/Stockpile Area A would thereby reduce impacts to coastal sage scrub by about 15.6 acres. This alternative would reduce roadkill potential on the haul-road and reduce habitat fragmentation and edge effects by eliminating the use of the borrow/stockpile. The smaller landfill footprint would decrease the impacts to some sensitive species and some potential habitat for the Quino checkerspot. However, this alternative's impacts to listed species would remain about the same as the proposed project and could be reduced to a less than significant level through the implementation of proposed mitigation measures.

#### Aesthetics

This alternative would eliminate the Borrow/Stockpile Area A, and the total area of disturbance would be reduced. The smaller size of the fill area and smaller volume of the fill mass would create significant visual impacts, since the landfill would still be visible by westbound travelers on SR 76. However, the magnitude of the impact to views from SR 76 would be substantially reduced compared to the project. Views of the landfill from the south and west would be blocked by existing topography.

Visual impacts from this alternative would be substantially reduced compared to the project, but would still be significant. However, impacts could be mitigated using the project mitigation measures, including on-site revegetation, landscaping along the edges of the landfill footprint where the footprint meets the existing slope, and on-site screening outside the right-of-way along SR 76. These measures would mitigate the visual impacts of this alternative to below significance.

#### Socioeconomics

As with the proposed project, this alternative would not create significant impacts to socioeconomic issue areas. No mitigation would be required.

#### Public Services and Utilities

The effect of this alternative on public services and utilities would be the same as with the proposed project. Water use over the life of the project would be reduced because of the reduced size and reduced life. No significant impacts were identified and no mitigation would be required.

The Reduced Visual Alternative would result in significant but mitigable impact to energy conservation because after closure of the landfill solid waste disposal in the North San Diego County area would return to the current situation discussed in the No Project Alternative. In comparison with the project, this Alternative would result in increased energy consumption for 19 years after closure due to greater vehicle miles traveled anticipated.

#### Human Health and Safety

Potential impacts from the acceptance of household hazardous waste, litter generation, vector generation and electromagnetic fields would be the same as the proposed project. No impacts to human health and safety would occur.

#### Cumulative Impacts

This alternative would still contribute to cumulative impacts to water quality, traffic, noise, visual quality, biological and cultural resources and air quality. Mitigation for project specific

impacts would reduce the alternative's contribution to below significance for all issues except traffic, noise along SR 76, and air quality. Cumulative noise would still be significant since this is significant without the project. Air quality impacts would remain significant since the San Diego air basin is a non-attainment area for ozone and exceeds the state standards for PM<sub>10</sub> and any air emissions must be considered significant. Cumulative impacts to regional traffic and air quality would be greater than with the project after 11 years when the landfill would close and waste-hauling vehicles would travel to more distant solid waste disposal facilities.

### **6.3.1.3 Comparison to the Project**

#### Project Objectives

The Reduced Visual Impact Alternative would meet the project objective of providing landfill capacity that is locally available and cost effective for disposal of waste generated by North County jurisdictions. However, the 11-year life span of this alternative would not provide the same long-term solution for waste disposal as the proposed project and therefore, would not meet the portion of the project objective to provide a long-term solution (i.e., 25 years) of locally available waste disposal. In addition, this alternative would not contribute to the capacity of the County solid waste system as a whole in the same way as the project. Furthermore, the Reduced Visual Impact Alternative would not provide the infrastructure facility necessary to support the long term economic growth projected in the region. Therefore, while the Reduced Visual Impact Alternative would meet a portion of the project objectives, this alternative would not meet all of the project objectives.

#### Feasibility

The Reduced Visual Impact Alternative would be feasible but would result in less locally available waste disposal capacity for North County jurisdictions and would not contribute on the same level to the Countywide system as would the project.

#### Evaluation of Significant Impacts

Impacts from the Reduced Visual Impact Alternative would be less than the project in the following areas:

- Visual quality impacts would be substantially reduced although viewers on SR 76 would still have unobstructed views of the landfill working face. Mitigation (revegetation, edge landscaping and roadway plantings) would reduce this impact to below significance.
- Unmitigable air quality impacts would be reduced by about 64 percent for 11 years, but would still remain unmitigable because state standards would be exceeded.
- Unmitigable impacts to Native American interests would be slightly reduced because of the greater setback between the landfill footprint to Gregory Mountain top and Medicine Rock, but would still remain unmitigable since the landfill would intrude into a part of the mountain.
- Mitigable impacts to biological resources would be reduced. As with the proposed project, remaining impacts would be mitigated to a less than significant level.
- Local traffic would be reduced by approximately 33 percent.

This alternative would be anticipated to result in greater regional air quality emissions when compared with the proposed project due to the anticipated increase in VMT that could occur due

to closure of the landfill 19 years prior to closure under the proposed project. As discussed above, once the landfill closed under this alternative air emissions would be expected to increase as waste haul trucks would be required to transport waste from North County jurisdictions to landfills that are farther away. This alternative would also be expected to have greater regional traffic impacts after 11 years due to the substantial haul distance anticipated to be required. In the long-term and on a regional basis, this alternative would likely result in significant and unmitigable regional impacts to regional air quality, potentially significant impacts to transportation and circulation and significant but mitigable impacts to energy conservation.

### Comparative Merits

The Reduced Visual Impact Alternative would locate a landfill within northern San Diego County and would be considered feasible. However, this alternative, with an 11-year life span, would not meet the long term objective nor contribute to the Countywide system in the same way that the project would, with a 30-year life span.

This alternative would reduce aesthetic impacts to a mitigable level. Within the 30-year time period that is considered with the project, this alternative would have significant and unmitigable air quality impacts associated with regional emissions, potentially significant traffic impacts and significant but mitigable energy impacts from the greater VMT anticipated during the 19 years after closure. These would be avoided by the proposed project.

As discussed above, the Reduced Visual Impact Alternative would not meet the project objective of providing a long-term solution to the waste disposal in North County since the alternative has a capacity of only 11 years. In addition, the Reduced Visual Impact Alternative would not provide the infrastructure facility necessary to support the long term economic growth projected in the region. Although this alternative would reduce some local environmental impacts for the first 11 years, in the long-term and on a regional basis, this alternative would result in greater impacts to air quality, transportation and circulation, and energy conservation over the entire 30 years caused by the disposal of waste to more distant locations.

### **6.3.2 REDUCED AIR EMISSIONS ALTERNATIVE**

The Reduced Air Emissions Alternative was designed to reduce the unmitigable air emissions to below significance. In other words, the air emissions from the landfill with this alternative would meet the criteria for both federal and state standards. The project exceeds the State standards for  $\text{NO}_x$  as a result of the number of trucks used during construction and operation of the landfill and for  $\text{PM}_{10}$  because of the acreage and frequency of use of unpaved areas on the site. Of the compounds for which State thresholds are exceeded, the critical factor is  $\text{PM}_{10}$ . If the acreage of unpaved areas is reduced so that  $\text{PM}_{10}$  thresholds can be met, then all other standards will be met as well.

Sources of  $\text{PM}_{10}$  would have to be reduced to about 21.4 percent of the project for  $\text{PM}_{10}$  emissions to be within the standards. As discussed in Section 4.7, equipment exhaust, automobile exhaust, earth movement and vehicle travel on both paved and unpaved roads create  $\text{PM}_{10}$ . That would result in a reduction in the size of the working face to about 21.4 percent of the proposed level, and the number of waste haul and operational trucks also to about 21.4 percent. That corresponds to a decrease in the amount of waste sent to the landfill from 5,000 maximum daily tons to about 1,070 tpd.

### **6.3.2.1 Description of the Alternative**

Based on the factors discussed above, the Reduced Air Emissions Alternative would have a total capacity of 7.06 million tons, with a maximum daily disposal rate of 1,070 tpd. The landfill would be permitted to accept approximately 211,147 tons annually, for a total lifespan of about 30 years (the same as the proposed project). The size of the footprint would be reduced from 190 acres to about 41 acres. Borrow/Stockpile Area A would be eliminated, and Borrow/Stockpile Area B would be reduced in size. The access road, bridge and support facilities would all remain as currently proposed. All environmental controls would be the same (liner, leachate collection, etc.). A methane flare would be operated, but would be substantially smaller than the facility proposed for the project.

### **6.3.2.2 Environmental Impacts**

#### Land Use and Related Planning

Land use impacts with this alternative would be the same as the proposed project. This alternative would be in conformance with the General Plan and zoning ordinance, and with regional plans and policies.

#### Geology and Soils

Impacts from existing geologic hazards (earthquakes and groundshaking, erosion, rockfalls, and debris flows) would be reduced associated with the construction and operation of a 41-acre landfill footprint. Some impacts would be similar and would require similar mitigation as the proposed project. The liner system would be subject to the same potential of sliding failure. Settlement of the landfill surface would still occur, but would be reduced in magnitude from the proposed project because the total quantity of waste would be less because the landfill footprint would be considerably smaller.

#### Hydrogeology

Impacts to hydrogeology would be reduced with the construction and operation of a 41-acre landfill footprint and the acceptance of a much smaller waste stream. The construction of a leachate collection system would mitigate the potential for water quality degradation. The total quantity of leachate generated would be reduced due to the reduction in the total waste accepted and the size of the landfill. Impacts from the piezometric layer beneath the fill area would require the installation of a system of subdrains to prevent uplift pressure on the liner.

#### Surface Hydrology

Impacts to surface hydrology would be reduced with the construction and operation of a 41-acre landfill footprint and the acceptance of a much smaller waste stream. The potential for increased erosion would be controlled by the use of best management practices during construction and operation. The access bridge and road would be the same for this alternative as for the project.

#### Traffic and Circulation

The Reduced Air Emissions Alternative would reduce traffic impacts by nearly 90 percent. The Reduced Air Emissions Alternative would operate for 30 years, the same as the proposed project. As with the project, a structural analysis of SR 76 to ensure that the foundation could

accommodate the truck traffic would be required. Improvements, if recommended, would be implemented. .

Under this Alternative, a landfill in close proximity to North County jurisdictions would be provided. As a result, with implementation of the Reduced Air Emissions Alternative, a reduction in VMT associated with the location of a landfill within North County in the near future would likely occur when compared with the No Project Alternative. However, the reduction in VMT would not be expected to be as great as the reduction anticipated under the proposed project. Specifically, the annual capacity of the landfill could accommodate only about 26 percent of the 799,466 annual tons generated in North San Diego County in 1999. Therefore, a larger portion of the generated waste would be transported to more distant landfills under this alternative, resulting in an anticipated increase in VMT compared with the project.

### Noise and Vibration

Noise impacts for this alternative would be of less magnitude than those of the project, because Borrow/Stockpile Area A would be eliminated and Borrow/Stockpile Area B would be reduced, with a corresponding elimination of noise generated by equipment in and around the borrow/stockpile areas. The landfill excavation area would be smaller and the noise generated by equipment during construction and operation of the fill would be a further distance from sensitive receptors. This alternative would reduce operational noise since the daily quantity of waste would be decreased. However, this alternative would still result in a significant and unavoidable traffic noise impact to the existing residences located on SR 76 since these residences are located in a degraded environment.

### Air Quality and Health Risk

This alternative was designed to reduce air emissions to levels that would be consistent with the state daily and annual thresholds, assuming the same mitigation measures for PM<sub>10</sub> as the proposed project. Table 6-3 indicates the levels of air pollutant emissions. PM<sub>10</sub> emissions meet the standards, while CO, NO<sub>x</sub> and SO<sub>x</sub> emissions are well below. This alternative would not result in significant air emissions effects.

As indicated above, a reduction in VMT associated with the location of a landfill within North County would likely occur. Therefore, the Reduced Air Emissions Impact Alternative would likely result in reduced regional air emissions when compared with the No Project Alternative. However, the reduction in regional emissions would not be expected to be as great as the reduction anticipated under the proposed project. Specifically, the annual capacity of the landfill could be available to accommodate only about 26 percent of the 799,466 annual tons generated in North San Diego County in 1999. Therefore, the larger portion of the generated waste would be transported to more distant landfills under this alternative, resulting in an anticipated increase in VMT and an associated increase in air quality emissions. .

### Paleontological, Archaeological, and Ethnohistoric Resources

Impacts to paleontological resources would be the same as the project. This alternative would slightly reduce the magnitude of the significant unmitigable impact to Native American Interests from intrusion on the sacred site of Gregory Mountain and Medicine Rock. However, the Pala Tribe believes that any disturbance at the mountain would be significant and unmitigable; the benefit from a smaller footprint (41 acres compared with 190 acres) would not be sufficient to

**TABLE 6-3**  
**SUMMARY OF AIR EMISSIONS WITH THE REDUCED AIR EMISSIONS ALTERNATIVE**

<b>AIR POLLUTANT</b>	<b>STANDARD</b>	<b>OPERATION</b>
CO	550 lbs/day	272 lbs/day
	100 tons/year	23.3 tons/year
ROC (lbs/day)	None	46 lbs/day
	50 tons/year	7.4 tons/year
NO <sub>x</sub>	250 lbs/day	179 lbs/day
	40 tons/year	19.5 tons/year
SO <sub>x</sub>	250 lbs/day	12 lbs/day
	40 tons/year	1.5 tons/year
PM <sub>10</sub>	100 lbs/day	100 lbs/day <sup>a</sup>
	15 tons/year	5.2 tons/year

<sup>a</sup> The 100 lbs/day number is 21.4 percent of the proposed project's PM<sub>10</sub> emissions during operations. However, there are PM<sub>10</sub> emissions associated with the proposed project that would not occur with the Reduced Air Emissions Alternative. For example, Borrow/Stockpile A would be eliminated and Borrow/Stockpile B would be reduced both in size and frequency of use. In addition, less blasting and rock crushing would be associated with this alternative, in comparison with the proposed project, because of the reduced size of the footprint. As a result of the reduction in operational uses, the Reduced Air Emissions Alternative would result in emissions that are below the 100 lbs/day PM<sub>10</sub> standard.

*Source: PCR Services Corporation, June 2002*

reduce the impact to below significance. This impact, as with the project, would remain significant and unmitigable.

Fewer archaeological sites would be directly impacted with the Reduced Air Emissions Alternative compared with the project because of the reduction in the land disturbance. However, impacts to archaeological and historic sites would occur. Impacts would be significant, but mitigable through recordation and study.

#### Agricultural Resources

Impacts to agricultural resources from the Reduced Air Emissions Alternative would not be significant (similar to the proposed project).

#### Biological Resources

The smaller landfill footprint and the removal of Borrow/Stockpile Area A would decrease the biological impacts of the reduced air emissions Alternative compared with those of the proposed project. This alternative would reduce roadkill potential on the haul-road and reduce habitat fragmentation and edge effects. While no listed species were found in the area, its removal would reduce project effects on the sensitive cactus wren and the coastal sage scrub habitat present in that area, and to a certain degree lessen impacts to potential upland habitat of the arroyo southwestern toad.

The reduced landfill footprint would decrease project effects on potential Quino checkerspot habitat and on the sensitive species present there. Impacts to arroyo southwestern toad, least Bell's vireo and California coastal gnatcatcher would still be significant under this alternative. None of the indirect impacts to sensitive species would be reduced by this alternative. This alternative's impacts to the sensitive plants, prostrate spineflower and Engelmann oaks, would be

essentially the same as the proposed project. Implementation of the same mitigation measures for the proposed project would reduce biological impacts of the Reduced Air Emissions Alternative to below a level of significance.

The elimination of Borrow/Stockpile Area A would thereby reduce impacts to coastal sage scrub by about 15.6 acres. The smaller landfill footprint would decrease the impacts to some sensitive species and some potential habitat for the Quino checkerspot. However, the Reduced Air Emissions Alternative's impacts to listed species would remain about the same as those of the proposed project and could be reduced to a less than significant level through the proposed mitigation measures.

#### Aesthetics

Visual impacts from this alternative would be reduced. Borrow/Stockpile Area A would be eliminated, and the area of disturbance would be reduced. The smaller size of the fill area and smaller volume of the fill mass could still create significant visual impacts, which would still be seen by viewers on SR 76.

Mitigation, similar to that proposed by the project would reduce the magnitude of these impacts below significance. Measures include revegetation, edge plantings, and screening along SR 76 (outside the right-of-way).

#### Socioeconomics

As with the proposed project, this alternative would not create significant impacts to socioeconomic issue areas. No mitigation would be required.

#### Public Services and Utilities

The effect of this alternative on public services and utilities would be the same as with the proposed project. No significant impacts were identified; no mitigation would be required.

When compared with the proposed project, the Reduced Air Emissions Alternative would be expected to result in a greater impact to energy conservation by causing solid waste generated in the North San Diego County area to be transported considerably farther distances for disposal.

#### Human Health and Safety

Potential impacts from the acceptance of household hazardous waste, litter generation, vector generation and electromagnetic fields would not occur. No impacts to human health and safety would occur.

#### Cumulative Impacts

This alternative would still contribute to cumulative impacts to water quality, traffic, noise, visual quality, biological and cultural resources. Mitigation for project specific impacts would reduce the project's contribution to below significance for all issues. Cumulative noise would still be significant since this is significant without the project.

### **6.3.2.3 Comparison to the Project**

#### Project Objectives

The Reduced Air Emissions Alternative would meet the project objective of providing a Class III solid waste disposal facility for disposal of waste generated in North County jurisdictions and would provide additional capacity to the County solid waste system as a whole. However, as discussed above, North County jurisdictions generated approximately 799,466 tons of solid waste in 1999. This alternative would allow a total annual capacity of 211,147 tons. Therefore, the smaller capacity and reduced daily and annual waste stream intake under this Alternative would not provide as much long-term capacity for the North County jurisdictions or the County as a whole. The Reduced Air Emissions Alternative would provide the infrastructure facility necessary to support the some economic growth projected in the region, but not to the same extent as the project. Therefore, while the Reduced Air Emissions Alternative would meet to some extent the project objectives, this alternative would not meet the project objectives to the same extent as the project.

#### Feasibility

The Reduced Air Emissions Alternative would be feasible from an engineering design and construction viewpoint, but would result not provide waste disposal capacity for a large portion of the waste generated by North County jurisdictions.

#### Evaluation of Significant Impacts

Impacts from the Reduced Air Emissions Alternative would be less than the project in the following areas:

- Visual quality impacts would be substantially reduced from the proposed project, although viewers on SR 76 would still have unobstructed views of the landfill working face. Mitigation (revegetation, edge plantings and roadside screening) would reduce these impacts below significance.
- Geological hazards would be reduced associated with the construction and operation of a 15-acre landfill footprint.
- Hydrogeologic and surface hydrology impacts would be reduced associated with the construction and operation of a 15-acre landfill footprint and the acceptance of a much smaller waste stream.
- Local traffic would be reduced by nearly 90 percent.
- Noise levels would be reduced at residences south of the project site.
- Air quality impacts which are unmitigable with the project would be reduced substantially (to about 21.4 percent of the project), and would be in conformance with the state standards. Cumulative air impacts would still be significant, since the non-attainment status of the air basin means that any contribution must be considered significant.
- Unmitigable impacts to Native American interests would be slightly reduced because of the greater setback between the landfill footprint to Gregory Mountain and Medicine Rock, but would still remain unmitigable since the landfill would intrude into the mountain.
- Mitigable impacts to biological resources would be reduced. As with the proposed project, remaining impacts would be mitigated to a less than significant level.

This alternative would be expected to have greater regional air quality emissions than the project due to an anticipated increase in VMT resulting from waste disposal to farther distances as a result of the smaller capacity provided under this Alternative. In the long-term and on a regional basis, this alternative would result in significant and unmitigable impacts to regional air quality, potentially significant transportation and circulation impacts and significant but mitigable energy conservation impacts as a result of the transportation of solid waste to more distant disposal facilities.

### Comparative Merits

The Reduced Air Emissions Alternative would locate a landfill within northern San Diego County and would be considered feasible to design and construct. However, this alternative, with a reduced landfill footprint and daily intake capacity, would not fully meet the project objective to provide a long-term solution (i.e., 25 years) for disposal of waste generated in North County jurisdictions since only a portion of the waste generated by North County jurisdictions could be accommodated under this alternative assuming the jurisdictions choose to dispose of their waste at the project site. In addition, the Reduce Air Emissions Alternative would not contribute to the Countywide system in the same way that the project would because of the smaller size. In addition, the Reduced Air Emissions Alternative would provide infrastructure to support the economic growth in the region, again because of the limited capacity, this alternative would not support the projected growth to the same extent as the project. Although this alternative would reduce many of the local impacts of the project, this alternative would have greater regional impacts on traffic and circulation and air quality when compared with the project. Because of the disposal of waste at more distant locations. This alternative would have regionally significant but mitigable impacts with regard to energy use caused by the disposal of waste to more distant locations.

## **6.4 ALTERNATE NORTH COUNTY LOCATIONS**

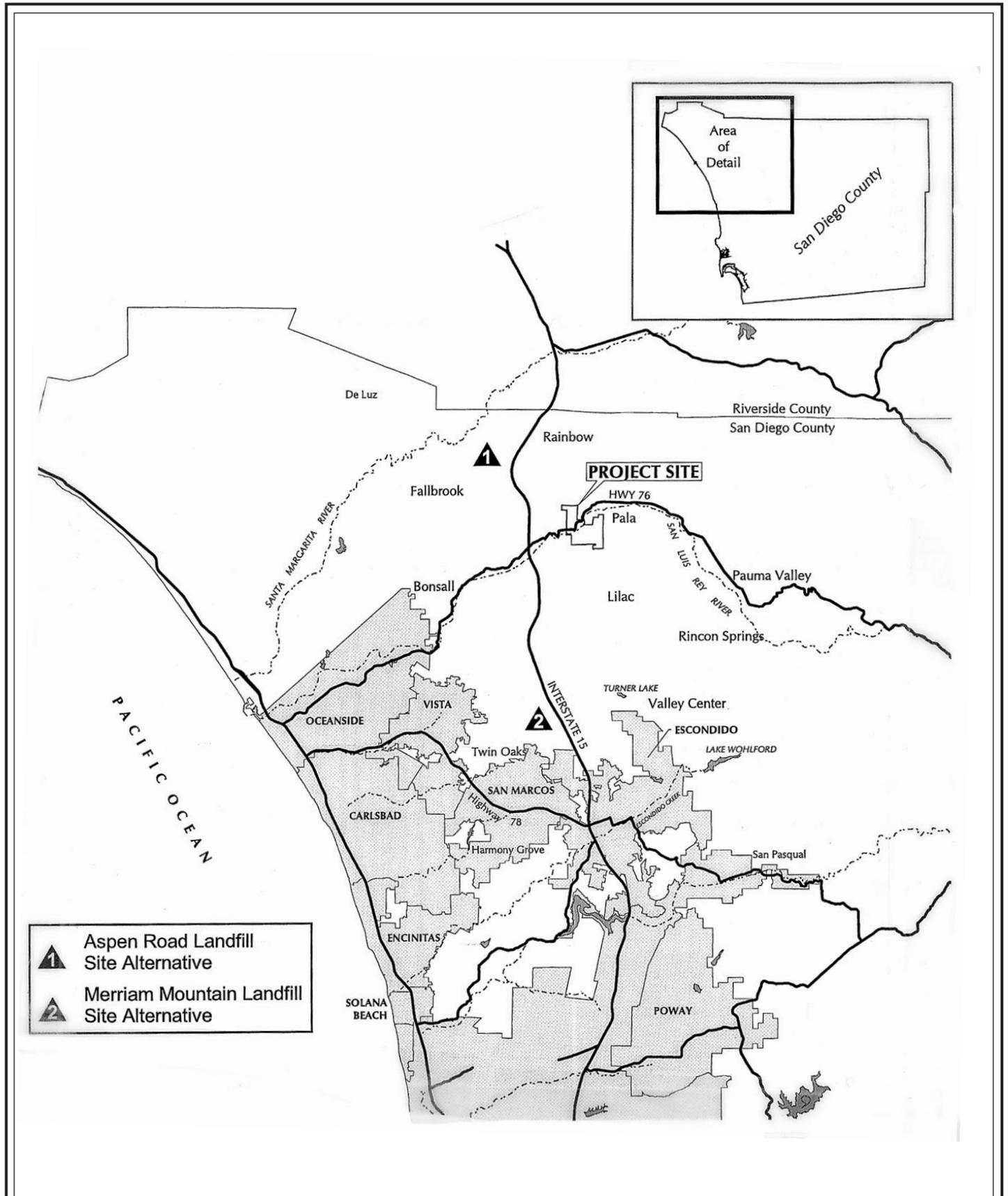
Extensive study by the County determined that three North San Diego County locations were acceptable for future landfills. The three sites are: 1) Gregory Canyon, the subject of this EIR; 2) Merriam Mountain; and 3) Aspen Road. The locations of Merriam Mountain and Aspen Road are shown on Exhibit 6-4. A discussion of other potential sites for a new landfill in North San Diego County, that have been previously studied and rejected by the County, are discussed in Section 6.8.3 of this document.

### **6.4.1 MERRIAM MOUNTAIN**

#### **6.4.1.1 Description of the Alternative**

The Merriam Mountain site is located immediately to the west of I-15, west of Lawrence Welk Village (Exhibit 6-5). It is approximately three miles east of Vista, and six miles south of the Gregory Canyon site. Merriam Mountain was identified as a feasible site in the SCS study (1988) and Edarra study (1986). In addition, the Merriam Mountain site was analyzed in the *1992 North County Landfill Supplemental Siting Study, County of San Diego*.

The roughly 350-acre site is vacant, and features rugged and steep natural slopes. Preliminary engineering indicates the site could accommodate about 66.4 million cubic yards (or approximately 40 million tons) of refuse (San Diego County, *Integrated Waste Management*



-  Aspen Road Landfill Site Alternative
-  Merriam Mountain Landfill Site Alternative



Exhibit 6-4  
 General Location of Aspen Road and  
 Merriam Mountain Alternatives

Sources: CIWMP, 1996; SANDAG GIS Data, 1998; David Evans and Associates, Inc., 1999

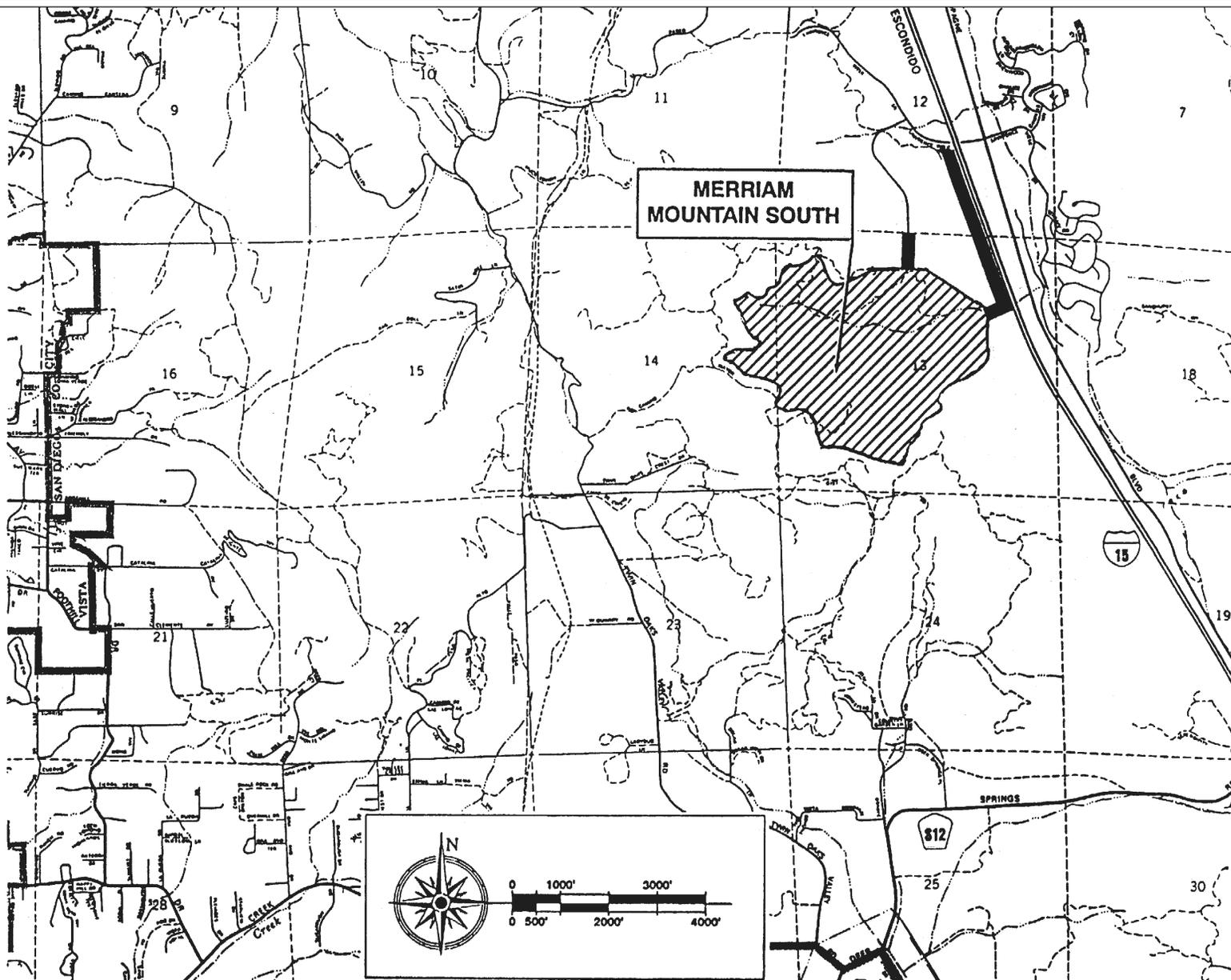


Exhibit 6-5  
Location of Merriam Mountain Site

Sources: Integrated Waste Management Plan, 1996; David Evans and Associates, 1999

*Plan*, 1996). Assuming the same annual disposal rate as the project (about one million tpy) the site could provide disposal capability for about 40 years.

Rezoning and a General Plan Amendment would be required to zone the site and change the land use designations from Estate Development Area to Solid Waste Facilities.

Access to the site would be from I-15 via Deer Springs/Mountain Meadow exit, north on Champagne Boulevard, west on Lawrence Welk Drive and then south on an approximate ¾ mile new access road that would have to be constructed for this landfill site (Exhibit 6-5).

Elevations on the site range from about 700 feet amsl at the eastern side of the site to about 1,500 feet at several locations at the western site boundary. One intermittent stream, flowing from west to east, is shown on the site. Landfilling on the site would occur over an area of about 150 to 250 acres, based on a rough field and map investigation. Support structures would most likely be built close to the access road, in the north area of the site at the lowest elevation. Other components of this alternative would be similar to the project: landfill liner, leachate and methane collection systems, and ancillary facilities. This alternative would be required to abide by the same federal and state regulations as the proposed project.

Due to the geologic formations found on the site, excavation could be difficult and would most likely produce insufficient quantities of material suitable for cover. Cover material would have to be brought to the site or alternative cover materials would have to be used. In addition, the low-permeable material needed for construction of the clay underlining is not present on the site, and this material would also have to be imported.

#### **6.4.1.2 Environmental Impacts**

##### Land Use and Related Planning

The Merriam Mountain site, which is located on the west side of Interstate 15 (I-15) roughly across I-15 from Lawrence Welk Village, is vacant. Lawrence Welk Village is a resort center with a golf course, pools, small shops and residential and guest homes/condominiums. North of the site, land is developed with rural estate density residences. To the east, the steep topography is relatively undeveloped with a few estate density-type residences. To the south, the area is primarily undeveloped, with the exception of the Golden Door Fitness Center, which is located approximately four miles from the site.

The site is within the North County Metropolitan Subregion Planning Area close to the boundary of the Bonsall Community Plan Area, and is designated for Estate Development Area. Immediately north of the site, land in the Bonsall Community Plan is also designated for Estate Development.

Development at Merriam Mountain would have the following land use and related planning impacts:

- Unmitigable impacts to surrounding residential land uses and resort community character.
- Mitigable conflicts with planned land uses and policies, requiring a General Plan Amendment and rezoning.
- Mitigable impacts from the access road and adjacent sensitive uses (residential).

### Geology and Hydrogeology

Existing natural slopes of two canyons are rugged and steep, with slope inclinations typically 1.5 horizontal to 1 vertical (1:5:1) and steeper. Over half the site is covered by large rock outcrops and boulders. The site contains hard rock, unweathered granite at probable depths of five to eight feet below ground surface overlain by a thin veneer of colluvium along the lower hillsides. The abundance of exposed boulders and lack of deep weathering in the up-canyon granitic bedrock, indicate very difficult excavation conditions and small resultant volumes of generated earth materials for landfill cover.

Developing a landfill at this site whose limits would avoid such geologic conditions would result in a reduction of the site capacity (approximately 20 million cubic yards less).

There are six well defined lineaments bordering the Merriam Mountain site which may indicate fault structure. However, no evidence of active faulting is known in the area. No wells exist on-site; however, marginal to good groundwater quality has been documented on-site. Groundwater is present in the fractured rock aquifer at depths from between 50 and 200 feet below surface grade. The main canyon opens and drains to the east. The nearest downgradient beneficial water body is the San Luis Rey River, approximately five miles away.

Potential geology and hydrogeology impacts for Merriam Mountain include:

- Mitigable impacts from the steep slopes and orientation of geologic structure.
- Mitigable impacts from slope instability of natural formations.
- Mitigable impacts from degradation of groundwater quality from possible leaks in landfill liner (leachate).

The Merriam Mountain site is located within the San Luis Rey Hydrologic Unit, Moosa Hydrologic Subarea. The Merriam Mountain site is not located in close proximity to a creek or river. Drainage at the Merriam Mountain site flows to the east and to the south. The Merriam Mountain site is located in a much steeper topographic environment than the Gregory Canyon site. Because of the steepness of the Merriam Mountain site, development of a solid waste facility on this alternative site could result in drainage impacts associated with the rate of runoff in a steep mountainous setting and the associated ability of engineered drainage features (i.e., channels, berms and sedimentation basins) to control the rate of runoff. This impact could be greater than at the Gregory Canyon site. After the incorporation of project design features and other engineering controls, surface water impacts at the Merriam Mountain site (i.e., rate of runoff impacts) and at the proposed project site (i.e., potential impacts to the San Luis Rey River) would be similar and would be less than significant.

### Traffic and Circulation

Access to the site would be from I-15 via Deer Springs/Mountain Meadow exit, north on Champagne Boulevard, west on Lawrence Welk Drive and then south on an approximate  $\frac{3}{4}$  mile new access road that would have to be constructed for this landfill site.

Traffic generation would be similar for this alternative as for the project. Slightly more than 2,000 average daily passenger car equivalent trips could be expected on a peak day. These trucks would contribute to existing traffic using the Deer Springs/Mountain Meadow ramps from I-15 and on Champagne Boulevard.

Potential traffic impacts from this alternative would be:

- Mitigable impacts from heavy truck traffic along a residential street (mitigable with an alternate access road).
- Mitigable potential cumulative impacts to I-15 off and on ramps at Mountain Meadow/Deer Springs Road and the intersections of Mountain Meadow/Champagne Boulevard, Champagne Boulevard/Lawrence Welk Drive and Lawrence Welk Drive/new access road (mitigable by traffic improvements as needed).

Under this Alternative, a disposal location in close proximity to North County jurisdictions would be provided. As a result, with implementation of this Alternative, a reduction in VMT associated with the location of a landfill within North County in the near future would likely occur. Due to the 40 year lifespan provided under this alternative, this reduction in VMT would be expected to be even greater than that expected to be generated by the proposed project.

### Noise and Vibration

Potential noise and vibration impacts include:

- Mitigable noise impacts from the construction and operation of the landfill, including the construction of the access road, on nearby residences (mitigable by providing sufficient buffers and noise barriers between the landfill and the adjacent residences).
- Mitigable noise impacts from truck traffic on residences along Champagne Boulevard and Lawrence Welk Drive.

### Air Quality

The Merriam Mountain Landfill alternative could result in potential dust migration impacts to the Lawrence Welk Village community during high wind conditions. The Lawrence Welk Village is located both downwind (e.g., coastal breezes blowing from west to east) and at a much lower topographic elevation than the proposed Merriam Mountain landfill site location. During high wind conditions, fugitive dust from the construction and operation of the landfill could potentially impact the existing residents of Lawrence Welk Village. Fugitive dust migration, from a solid waste landfill onto an adjacent residential community, where the community is located both downwind and at a much lower topographic elevation than the landfill, historically occurred at both the Lopez Canyon Landfill (e.g., closed in 1996) and the Sunshine Canyon Landfill located in Los Angeles County.

This alternative would be expected to result in a greater reduction in VMT when compared with the proposed project. Regional air emissions resulting from the transport of solid waste under this alternative would therefore be expected to be less than those anticipated for the proposed project.

Potential air quality impacts include:

- Unmitigable NO<sub>x</sub> and PM<sub>10</sub> generated by equipment working at the landfill and by waste haul trucks transporting waste to the disposal area.
- Air emissions (NO<sub>x</sub>, CO, and SO<sub>x</sub>) would be generated by decomposing waste placed in the landfill. Operation of the methane flare could generate CO emissions which exceed the standard.

### Agricultural Resources

No agricultural uses exist on the site. No impacts to agricultural resources would occur.

### Biological Resources

The majority of vegetation on-site is southern mixed chaparral, a non-sensitive vegetation community. Representative plant species of this community on-site are chamise (*Adenostoma fasciculatum*), lilac (*Ceanothus* sp.), sugarbush (*Rhus ovata*), mission manzanita (*Xylococcus bicolor*), mountain mahogany (*Cercocarpus* sp.), coast spice bush (*Cneoridium dumosum*), and black sage (*Salvia mellifera*). Scattered sycamore trees (*Platanus racemosa*) occur in a drainage bottom on-site. This riparian community would be considered sensitive and regulated by the California Department of Fish and Game, and possibly by the U.S. Army Corps of Engineers. Twenty-seven animal species were observed or detected on-site during a field visit on August 14, 1998: four butterfly, fifteen bird, two reptile, and six mammal. Only one of these species, western whiptail (*Cnemidophorus tigris multiscutatus*), is sensitive. This whiptail species is a California Species of Special Concern. Based on the vegetation communities and soils (sandy loams) on-site, no federally or state listed animal species would be expected to occur. One state listed endangered plant species (and federal Category 1), Nevin's barberry (*Berberis nevinii*), has potential to occur; however, no extant populations have been located in San Diego County (Reiser 1994). The species has strong desert affinities and appears to be found primarily in Riverside County near Vail Lake (Reiser 1994). Therefore, the potential to occur on the Merriam Mountain site is very low.

Operation of the landfill at Merriam Mountain could produce indirect impacts related to the introduction of non-native plant species through unauthorized litter and increases in human activity resulting in trampling and degradation of sensitive vegetation, habitat fragmentation and edge effects, vegetation removal, and behavioral changes in breeding animal populations. These impacts would require similar mitigation to that proposed for the project. Potential water quality impacts to species dependent on San Luis Rey River would be, however, avoided by this alternative.

Potential significant impact to biological resources include:

- Mitigable loss of riparian community dominated by sycamore trees.
- Mitigable impacts to western whiptail.

### Cultural and Paleontological Resources

The proposed Merriam Mountain project area has not been intensively surveyed for archaeological resources although three archaeological sites have been recorded in or adjacent to the project area. Two of these sites are prehistoric, primarily bedrock milling stations with associated midden and a few artifacts. An abandoned three-room house is recorded at the same location as one of the prehistoric sites. This house does not appear to meet the age criteria (greater than 100 years old) for historic resources as defined under CEQA. The importance of the three known sites cannot be assessed without implementation of testing and an evaluation program.

Ten other archaeological sites are recorded within a one-mile radius of the proposed Merriam Mountain alternative site. These range from minor artifact scatters, with one to several flakes or milling tool fragments, to large habitation sites and a pictograph site. Some intensive pedestrian surveys have been conducted in surrounding sections, but few of the previously recorded sites are located within these surveyed areas. Overall site density in the region appears to be low, but additional sites are likely to be present within the proposed project area.

The possible presence of archaeological sites considered significant under CEQA cannot be quantified without further data. Implementation of mitigation measures is likely to reduce potential impacts to archaeological resources to below significance level unless unique resources are discovered.

No important Native American cultural or ethnohistoric resources are known to be present at or near this site. Paleontological resources are not expected but may occur on the site. It is anticipated that any significant paleontological resources discovered would be mitigable.

Impacts to cultural resources include:

- Mitigable impacts from disturbance or demolition of archaeological sites.
- Mitigable impacts to potential fossil resources.

### Human Health and Safety

No impacts from household hazardous waste, vector generation and electromagnetic fields would occur. Greater impacts than Project would occur from litter generation. The Merriam Mountain Alternative could result in potential litter migration impacts to the Lawrence Welk Village community during high wind conditions. The Lawrence Welk Village is located both downwind (e.g., coastal breezes blowing from west to east) and at a much lower topographic elevation than the Merriam Mountain landfill site.

- During high wind conditions, fugitive litter from the construction and operation of the landfill could potentially impact the existing residents of Lawrence Welk Village. Fugitive litter migration, from a solid waste landfill onto an adjacent residential community, where the community is located both downwind and at a much lower topographic elevation than the landfill, historically occurred at both the Lopez Canyon Landfill (e.g., closed in 1996) and the Sunshine Canyon Landfill located in Los Angeles County.

### Aesthetics

The Merriam Mountain site is clearly visible from I-15; travelers in both directions would be able to see easily into the site and landfill area. Views are also possible and unobstructed from Lawrence Welk Village, Rim Rock Estates and other points to the east at distances between a few hundred yards to over two miles. Views would also be possible from the north and northeast. The site cannot be seen from the west due to a 1,500-foot high ridge which blocks eastward views.

Significant impacts to aesthetics include:

- Unmitigable visual impacts to Lawrence Welk Village residents associated with views of the landfill operation and views of waste-hauling vehicles traveling on Champagne Boulevard and Lawrence Welk Drive.

### Socioeconomics

The Merriam Mountain Alternative would not create new housing or add permanent jobs to the local employment base. The socioeconomic effects of this alternative would not be significant.

### Public Services and Utilities

No paved access or public service infrastructure (i.e., gas, electrical, telephone, storm drain, water, or sewer services) exists on the Merriam Mountain site. A water line is located near I-15 and water would be provided to the site by extending an existing line. When compared with the proposed project, reduced energy impacts associated with the decrease in VMT resulting from the larger lifespan provided under this alternative would occur. No significant impacts to public services and utilities would occur. No significant impacts to energy conservation would occur.

### **6.4.1.3 Comparison to the Project**

#### Project Objectives

Implementation of the Merriam Mountain Alternative would fulfill the project objective of providing a Class III solid waste disposal facility that is locally available, cost effective, and provides a long-term solution (i.e., 25 years) for disposal of waste generated in North County jurisdictions. In addition, Merriam Mountain Alternative would also provide additional capacity to the County solid waste system as a whole. This alternative would also provide the infrastructure facility necessary to support the long term economic growth projected in the region. The County of San Diego *Integrated Waste Management Plan* identifies Merriam Mountain as a tentative Class III landfill site to handle the solid waste generated by North County jurisdictions. This alternative would meet the project objective of a long-term facility, since it would allow for solid waste capacity for about 40 years.

#### Feasibility

The County's *Integrated Waste Management Plan* indicates that Merriam Mountain is a tentative Class III landfill site, and no technical or physical constraints have been identified that would restrict the feasibility of developing a solid waste landfill at the Merriam Mountain site.

However, there are land use and availability issues that may make this site infeasible. The site is not zoned or designated for Solid Waste Facility, and a rezone and General Plan Amendment would be needed to allow the construction and operation of a long-term landfill on this site. The approval of these land use actions would be highly controversial and political, and would severely restrict the feasibility of this site. In the best case, the requirement for the rezone and General Plan Amendment would add about two years to the approval process. In the worst case, the actions could be denied after a period of three to five years. In addition, this site is not owned by or under the control of the project applicant, and there is no assurance that the existing property owners would sell or make the site available to the applicant. CEQA Guidelines, Section 15126.6(f)(1) provides guidance on factors that can be considered in determining the feasibility of an alternative. Two factors cited in the section are general plan consistency and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.

#### Evaluation of Significant Impacts

Merriam Mountain would have greater impacts than Gregory Canyon in the following areas:

- Unmitigable land use compatibility impact with landfilling and resort/residential community character. Land use impacts for Gregory Canyon are mitigable.

- Mitigable geologic hazards as the Merriam Mountain Alternative site and proposed  $\frac{3}{4}$  mile access road are located within mountainous topography that is very steep and would result in greater risks associated with slope stability and landslides.
- Unmitigable air quality impacts. Greater impacts than the Project associated with the potential for landfill fugitive dust migration, due to the topographic elevation of the site, windflow direction and downwind proximity of Lawrence Welk Village.
- No human health and safety impacts from household hazardous waste, vector generation and electromagnetic fields. Greater impacts than the Project with the potential for landfill fugitive litter migration, due to the topographic elevation of the site, windflow direction and downwind proximity of Lawrence Welk Village.

The following impacts would be reduced for Merriam Mountain compared to Gregory Canyon:

- Biological impacts would be much less for Merriam Mountain than Gregory Canyon because there is one sensitive animal species and there are no sensitive plant species on-site. A sensitive riparian community dominated by sycamore trees would be affected. Biological impacts at Gregory Canyon, though significant, are mitigable to a less than significant level. Impacts to cultural and ethnohistoric resources would be less at the Merriam Mountain site, primarily because no important cultural or ethnohistoric sites are known to exist on or adjacent to the site. At the Gregory Canyon site, impacts to Gregory Mountain, a known ethnohistoric site would be significant and unmitigable. No such resource is known to exist at Merriam Mountain.

Due to the even greater long-term reduction in VMT that would be anticipated under this alternative, regional and long-term air quality, traffic and energy impacts would be less than those anticipated under the proposed project. The remaining issues would be similarly affected by the Merriam Mountain Alternative and the project: hydrogeology and surface hydrology, traffic and circulation, noise and vibration, agricultural resources, paleontological resources, socioeconomics, public services and utilities and aesthetics.

### Comparative Merits

The Merriam Mountain Alternative would result in greater environmental impacts to land use and related planning, geologic hazards, air quality, and human health and safety than the proposed Gregory Canyon Landfill project. The Merriam Mountain landfill alternative would result in reduced environmental impacts to biological resources and Native American interests than the Gregory Canyon Landfill project. The Merriam Mountain site is not zoned for a Solid Waste Facility and the site is not owned or under control of the Gregory Canyon Landfill project applicant, and there is no assurance that the existing property owners would sell or make this alternative site available to the applicant. For these reasons, the site is not a feasible alternative.

## **6.4.2 ASPEN ROAD**

### **6.4.2.1 Description of the Alternative**

The Aspen Road site is located west of I-15 near the Mission Road exit, approximately four miles northeast of the town of Fallbrook and about one mile west of Rainbow (Exhibit 6-6). If this alternative were selected, approximately 790 acres of land would need to be purchased, with about 416 acres being used for landfilling and ancillary structures and other facilities. Three

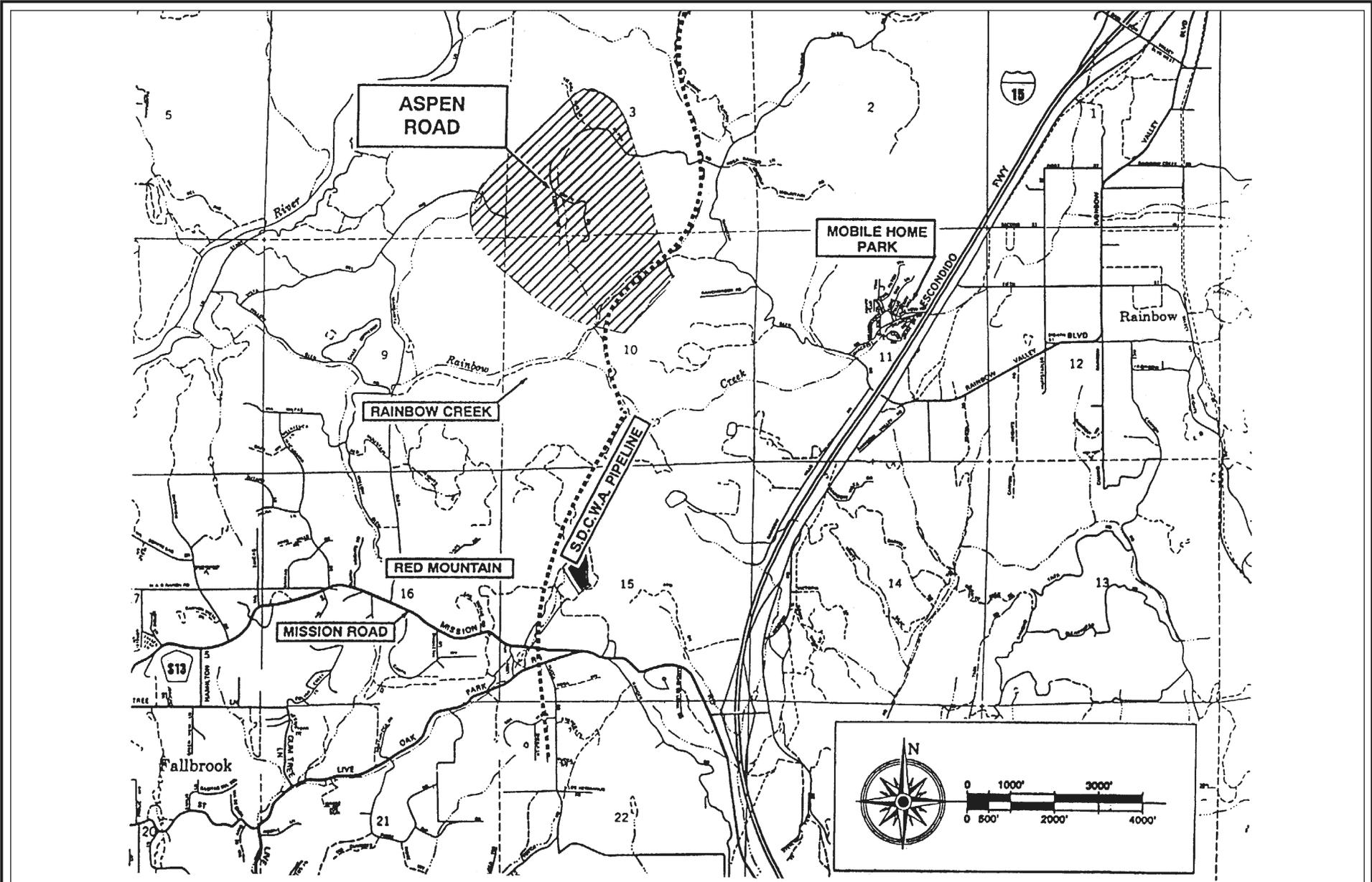


Exhibit 6-6  
Location of Aspen Road Site

Sources: Integrated Waste Management Plan, 1996; David Evans and Associates, 1999

homes exist on the site and the existing Metropolitan San Diego Pipelines No. 4 and 5 cross underneath the proposed site along the eastern property boundary.

The site is designated and zoned for rural residential and agricultural use and would require a rezone and General Plan Amendment to allow a solid waste facility.

Based on preliminary engineering design completed by the County, approximately 140 acres of the site would be used for the landfill footprint. The site is capable of accommodating about 35.2 million cubic yards (or 21.1 million tons) of municipal solid waste. Assuming the same annual disposal rate as the proposed project (about 1 million tpy), the site could provide disposal capacity for about 21 years.

Site access would be from a newly constructed, 1.7-mile road from Rainbow Glen Road to the site. The site topography is moderately rugged, cut by one major drainage and several minor drainage channels. Elevations on-site range from 820 feet amsl in the Rainbow Creek drainage at the southern site boundary to a peak of 1,474 feet amsl near the eastern site boundary. The proposed final landfill grade would rise to approximately 1,500 feet amsl near the northeastern edge of the landfill footprint.

The Aspen Road site would have to be designed, constructed, and operated in conformance with all applicable state and federal provisions, the same as the Gregory Canyon site. According to the preliminary engineering design, Aspen Road Landfill would include a subdrain to collect water generated by an on-site spring. Additionally, a cutoff wall would be proposed due to the proximity of an unnamed stream and the Metropolitan San Diego Pipelines No. 4 and 5 to the waste placement area. Detention basins would be placed downstream of the footprint to control surface water quality.

Operational water would be obtained from the Rainbow Municipal Water District. To implement a landfill at Aspen Road, the following off-site improvements would be needed: relocation of two water lines belonging to the De Luz Heights and Rainbow Municipal Water Districts; installation of signs to mark the perimeter of the parcel; and extension of utilities to the facilities area.

#### **6.4.2.2 Environmental Impacts**

The following material was summarized from in-depth environmental and engineering studies conducted in 1988 and 1989, which were included in the *1990 Draft EIR/EIS for the Proposed North County Class III Landfill*. Material in the 1990 document was reviewed and field checked for accuracy before use in this EIR.

##### Land Use and Related Planning

The Aspen Road site is generally undeveloped, with three residences located on the site. It is surrounded by low density residential and agricultural uses. Immediately to the west are residential and agricultural land (i.e., orchards) on 4 to 20 acre parcels. Approximately 100 to 120 homes exist within a 1 mile radius of the Aspen Road site. Many of these homes are associated with small to medium sized agricultural operations, primarily citrus and avocado groves. To the east is a mobile home park, near I-15. The more concentrated development occurs in the communities of Fallbrook (three miles west) and Rainbow (one mile east). The project area is designated for multiple rural use and agricultural preserve (under a Williamson Act contract) by the Fallbrook Community Plan. It is zoned for agricultural uses.

Development of a landfill at the Aspen Road site would result in the following land use impacts:

- Unmitigable impact on existing residential land uses and community character.
- Mitigable incompatibilities with planned land uses/policies, requiring a General Plan Amendment and rezoning.
- Mitigable conflicts with water lines beneath the footprint, requiring the relocation of the existing 8-inch water line, and the protection of the nearby Metropolitan San Diego Pipelines No. 4 and 5.
- Unmitigable access road impacts (e.g., incompatible use of an unclassified rural road) to adjacent sensitive existing and future residential uses along Rainbow Glen Road.

### Geology and Hydrogeology

The Aspen Road site is underlain by intrusive rock and alluvium/colluvium formations. Debris flow deposits are also located on-site. The Elsinore fault zone is approximately 4.5 miles away. The intermittent drainage on the property flows southward and is a minor tributary to an unnamed stream that joins Rainbow Creek (over 1,000 feet southwest of the site). Rainbow Creek drains westerly into Santa Margarita River, which provides groundwater resources for Camp Pendleton in the Santa Margarita Coastal Basin. Groundwater is encountered on-site at depths of 50 to 60 feet below ground surface. No active water production wells are known to exist in the vicinity. Groundwater quality is generally poor in the project area.

Potential impacts to geology and hydrogeology for this site include:

- Mitigable impacts from lack of suitable cover and liner materials on the site.
- Mitigable impacts to water quality from possible leachate leakage.
- Mitigable impacts from the perched groundwater underlying the site and an underground spring, requiring a subdrain system similar to Gregory Canyon. In addition, a cutoff wall would be placed between the landfill and the Metropolitan San Diego Pipelines No. 4 and 5 which runs adjacent to the landfill area.

### Traffic and Circulation

Access to the site would be from I-15, Old Highway 395 and Rainbow Glen Road. A new access road would be constructed to connect to the site. Traffic generation would be the same for this alternative as for the project. Slightly more than 2,000 average daily passenger car equivalent trips would be expected on a peak day. These trucks would combine with existing traffic on I-15 and Rainbow Glen Road and contribute to a cumulative traffic effect. Rainbow Glen Road currently serves primarily rural and residential uses and the addition of these waste haul trucks would create a significant impact to residences along the roadway.

Traffic impacts as a result of this alternative would include:

- Unmitigable traffic safety impacts (e.g., obstruction of sight distances) caused by the construction of noise barriers at off-site noise-sensitive locations.
- Mitigable cumulative impacts to I-15 on and off ramps at Old Highway 395 (mitigable by the installation of traffic signals at the I-15 ramps and reconstruction of the Old Highway 395/Rainbow Glen Road intersection).

Under this Alternative, a disposal location in close proximity to North County jurisdictions would be provided. As a result, with implementation of this Alternative, a reduction in VMT

associated with the location of a landfill within North County in the near future would likely occur. Due to the somewhat reduced lifespan provided under this alternative, this reduction in VMT would be expected to be less than that expected to be generated by the proposed project.

### Noise and Vibration

Noise would be generated on-site from construction and operation, and would be generated along Rainbow Glen Road and the new access road from traffic. There are residences in the vicinity of the Aspen Road site and along Rainbow Glen Road which may be subject to noise levels in excess of County standards.

Noise and vibration impacts from this alternative would include:

- Mitigable impacts from noise from the construction and operation of the landfill on nearby residences (mitigable by providing sufficient buffers and noise barriers between the landfill and the adjacent residences).
- Mitigable impacts from noise from truck traffic on residences along Rainbow Glen Road by providing noise barriers along the roadway.

### Air Quality and Health Risks

The local meteorology of the Aspen Road area includes prevailing winds which blow southwest-northeast to coincide with the regional onshore flow. Daytime winds travel to the west-northwest; at night wind speeds drop and flow from the northeast down into Rainbow Creek and the Santa Margarita River.

Impacts to air quality from this alternative would include:

- Unmitigable impacts from PM<sub>10</sub> and NO<sub>x</sub> generated by heavy equipment working at the landfill and by waste haul trucks transporting waste to the disposal area.
- Air emissions (NO<sub>x</sub>, CO and SO<sub>x</sub>) would be generated by decomposing waste placed in the landfill. Operation of the methane flare could generate CO emissions which exceed the standard.

As indicated above this alternative would be expected to result in slightly greater VMT when compared with the proposed project. Regional air emissions resulting from the transport of solid waste under this alternative would therefore, be expected to be greater than those anticipated for the proposed project.

### Agricultural Resources

On-site agricultural uses would be eliminated, and the Williamson Act contract would have to be canceled. Off-site agricultural uses are primarily associated with and secondary to residential uses. Continued agricultural production from these lands would not be significantly disrupted by landfill operations, if fugitive dust is controlled.

Impacts to agricultural resources from landfilling at this alternative site would include:

- Mitigable impacts from the cancellation of the on-site Williamson Act contract.
- Mitigable impacts from PM<sub>10</sub> (dust) on adjacent agricultural operations.

## Biological Resources

The Aspen Road site was visited by field biologists to verify natural vegetation on the site. The majority of vegetation on-site is southern mixed chaparral, a non-sensitive vegetation community. Representative plant species of this community on-site are chamise (*Adenostoma fasciculatum*), lilac (*Ceanothus* sp.), and black sage (*Salvia mellifera*). Other vegetation communities include coastal sage scrub, native and non-native grasslands, and sycamore/oak riparian forest. The coastal sage scrub and native grasslands would be considered sensitive, and the riparian communities, particularly along Rainbow Creek, would be considered sensitive and regulated by the California Department of Fish and Game, and possibly the U.S. Army Corps of Engineers.

Animal species encountered or expected on-site are common species. Typical species observed/detected include wrentit (*Chamaea fasciata*), white-crowned sparrow (*Zonotrichia leucophrys*), scrub jay (*Aphelocoma coerulescens*), and coyote (*Canis latrans*). No least Bell's vireos (*Vireo bellii pusillus*), an endangered species, or coastal California gnatcatchers (*Polioptila californica californica*), a federally threatened species, have been observed, nor have any other listed plant or animal species (Butler/Roach Group, Inc. 1990). Individuals of the sensitive, but not listed, San Diego horned lizard (*Phrynosoma coronatum blainvillei*) and orange-throated whiptail (*Cnemidophorus hyperythrus beldingi*) have been collected in the Aspen Road area (Butler/Roach Group, Inc. 1990).

In comparison with the Gregory Canyon site, the Aspen Road alternative would reduce and/or eliminate project impacts to endangered species such as the arroyo toad (*Bufo microscaphus californicus*) and least Bell's vireo, as well as U.S. Army Corps of Engineers and California Department of Fish and Game jurisdictional areas. The Aspen Road alternative would not impact some of the sensitive vegetation communities/habitats that are present on the Gregory Canyon site (such as southern willow scrub, mule fat scrub, and freshwater marsh) since they do not occur at this alternative location. The majority of the site is southern mixed chaparral, a non-sensitive community (non-sensitive because it does not support listed species). Sensitive riparian communities dominated by sycamore (*Platanus racemosa*) and coast live oak (*Quercus agrifolia*) trees could be impacted, however. No Engelmann oaks (*Quercus engelmannii*) would be impacted, since none was observed on the Aspen Road site. The Aspen Road alternative would not significantly impact potential golden eagle foraging habitat. Golden eagles prefer grasslands, agricultural lands, and open shrublands for foraging, and these communities are extremely limited on-site or absent from the Aspen Road site. In terms of local wildlife movement, the Aspen Road alternative would not inhibit local wildlife movement between a significant wildlife riparian resource, such as the San Luis Rey River, and upland habitat.

As with Gregory Canyon, operation of the landfill at Aspen Road could produce indirect impacts related to the introduction of non-native plant species through unauthorized litter and increases in human activity resulting in trampling and degradation of sensitive vegetation, habitat fragmentation and edge effects, vegetation removal, and behavioral changes in breeding animal populations. These impacts would require similar mitigation to that proposed on the Gregory Canyon site. Potential water quality impacts to species dependent on San Luis Rey River would be avoided by this alternative. Overall, potential impacts to biological resources at the Aspen Road site would be reduced in comparison to the Gregory Canyon Landfill project.

Potential impacts to biological resources at the Aspen Road site would be as follows:

- Mitigable disturbance of unique and sensitive habitats (coast live oak woodland, riparian forest, coastal sage scrub, non-native grassland, and native grassland).
- Mitigable impact to sensitive, but not listed, animal species (San Diego horned lizard and orange-throated whiptail).
- Significant, but mitigable, impacts to sensitive habitats and species associated with off-site access road and utilities, introduction of non-native plant species, habitat fragmentation and edge effects, vegetation removal, and behavioral changes in breeding animal populations, etc.
- Cumulative unmitigable impacts to coastal sage scrub, and native grassland.

### Cultural Resources

The Aspen Road site is underlain by granitic rock which does not contain fossils. This site does not have the potential to yield paleontological resources.

The Aspen Road site is located on a Native American trail passage and contains food and medicinal plant species historically used by local bands. In addition, a survey concluded that ten prehistoric (nine bedrock milling sites and one flaked lithic scatter) and one historic site (rock wall) exist on the property.

Impacts to cultural resources would include:

- Mitigable impacts from disturbance or demolition of up to ten recorded prehistoric sites.
- Unmitigable impacts from disturbance and interference with the Native American interests related to the trail passage and historic use of the site by local bands.

### Human Health and Safety

No impacts from household hazardous waste, litter generation, vector generation or electromagnetic fields would occur. No significant impacts to human health and safety would occur.

### Aesthetics

The hilly terrain, abundance of open land and orchards of the vicinity offer a visually attractive landscape. The site is visible from several local vantage points, none of which are designated scenic viewsheds.

The Scenic Highway Element designates I-15 north of SR 76 and Mission Road between Willow Glen Road and I-15 as scenic highways. Although both of these scenic highways are within two miles of the site, Aspen Road is not visible from these portions of either highway.

Potential aesthetic impacts include:

- Unmitigable impacts to Red Mountain and Willow Glen residential area viewsheds. Residents would have views of the landfill and waste haul vehicles traveling on Rainbow Glen Road. Partial mitigation would include landscape screening, landform grading, rock outcrop placement, major tree groupings, native revegetation and landscaping, contrast and color matching, and architectural design of buildings.

### Socioeconomics

The Aspen Road Alternative would not create new housing or add permanent jobs to the local employment base. Impacts to socioeconomics would not be significant.

### Public Services and Utilities

Public services are not currently available to the Aspen Road site but would be extended to the site. The site is within the Rainbow Municipal Water District. An 8-inch water distribution line belonging to the Water District traverses the site and would be located under the proposed landfill area. The site is within the North County Fire Protection District. No sewer connection exists nearby. When compared with the proposed project, somewhat greater energy impacts associated with the slightly greater increase in VMT anticipated to result from the reduced lifespan provided by this alternative could occur. Environmental impacts to public services and utilities would not be significant. No significant impacts to energy conservation would occur.

### **6.4.2.3 Comparison to the Proposed Project**

#### Project Objectives

Development of the Aspen Road Alternative would meet the project objective of providing a Class III solid waste disposal facility for disposal of waste generated in North County jurisdictions and would provide additional capacity to the County solid waste system as a whole. However, it would not provide a long-term solution (25 years or greater) to waste disposal in the region. The development of the Aspen Road Alternative would provide a capacity of about 21 years, falling short of this portion of the objective. The Aspen Road Alternative would provide the infrastructure facility necessary to support the some economic growth projected in the region, but not to the same extent as the project. Therefore, while the Aspen Road Alternative would meet to some extent the project objectives, this alternative would not meet the project objectives to the same extent as the project.

#### Feasibility

The County's *Integrated Waste Management Plan* designates Aspen Road as a tentative Class III landfill site, and no technical or physical constraints have been identified that would restrict the feasibility of its implementation.

However, as with the Merriam Mountain Alternative, there are serious land use and availability constraints that may make this site infeasible, pursuant to the requirements of the State CEQA Guidelines, Section 15126.6(f)(1) for determining the feasibility of an alternative. The site is not zoned or designated for Solid Waste Facilities, and a rezone and General Plan Amendment would be needed to allow the construction and operation of a long-term landfill on this site. The need for these land use actions could add significantly to the length of time needed before a landfill could be operational on this site, and there is no guarantee that the actions would be approved. In the best case, the General Plan Amendment and rezone could add two years to the processing time; in the worst case, the actions could be denied after a period of three to five years. In addition, this site is not owned by or under the control of the Gregory Canyon Landfill project applicant and there is no assurance that the existing property owners would sell or make the site available.

#### Evaluation of Significant Impacts

Aspen Road would have greater impacts than Gregory Canyon in the following areas:

- Mitigable conflicts between the use of the site for landfilling and the adopted community plan designation and zoning. This would be mitigated through a General Plan Amendment

and a rezone. Gregory Canyon is already zoned for a solid waste facility and is in conformance with the adopted plans and policies.

- Unmitigable land use compatibility impacts associated with landfilling and the residential community surrounding the site. Land use impacts associated with Gregory Canyon are mitigable. The Aspen Road alternative would result in unmitigable impacts associated with conflicts between the access road and adjacent land uses. The Gregory Canyon site avoids this issue because the access road does not cross any off-site property.
- Unmitigable traffic safety impacts (e.g., obstruction of sight distances) caused by the construction of noise barriers at offsite noise sensitive locations.
- Mitigable noise impacts from waste haul vehicles associated with the Aspen Road landfill site that would travel up and down steep grades on Rainbow Glen Road, generating truck noise in close proximity to several single-family residential uses located along Rainbow Glen Road. Many of these existing single-family residential uses located along Rainbow Glen Road have a minimal setback from the roadway. This would result in a greater noise impact than Gregory Canyon.
- Mitigable impacts from the conflict with the existing Williamson Act contract on the site. No Williamson Act contracts exist on Gregory Canyon.

The following impacts would be reduced with the Aspen Road Alternative compared to Gregory Canyon:

- No paleontological resources exist at Aspen Road. Gregory Canyon is underlain by geologic formations that have the potential to contain fossil resources and would require measures to mitigate potential impacts to these resources.
- Both the Aspen Road Alternative and Gregory Canyon would result in a significant and unmitigable impact to Native American interests. However, this impact would be reduced with the Aspen Road alternative.
- Biological impacts would be reduced. No least Bell's vireos, coastal California gnatcatchers, or arroyo toad have been observed on the Aspen Road site. Southern willow scrub, mule fat scrub and freshwater marsh do not occur at this location. No Engelmann oaks are located on the site, and the golden eagle does not appear to use this site for foraging. The Aspen Road site would not inhibit local wildlife movement between a significant wildlife riparian resource (such as the San Luis Rey River) and upland habitat.

Aspen Road and Gregory Canyon would have similar impacts to geology, hydrogeology and surface hydrology, air quality, human health and safety, aesthetics, socioeconomics and public services and utilities. When compared with the proposed project, greater regional and long-term air quality, traffic and energy impacts associated with the greater increase in VMT resulting from the reduced lifespan of this alternative could occur.

#### Comparative Merits

The Aspen Road Alternative would result in greater environmental impacts to land use and related planning, traffic and circulation, agricultural resources and noise than the proposed Gregory Canyon Landfill project. The Aspen Road Alternative would result in reduced environmental impacts to biological resources and cultural resources (e.g., paleontology and Native American interests). The Aspen Road site is not zoned for a Solid Waste Facility and the site is not owned or under control of the Gregory Canyon Landfill project applicant, and there is

no assurance that the existing property owners would sell or make this alternative site available to the applicant. For these reasons, this site is not a feasible alternative.

## **6.5 LONG TERM TRANSPORT OF WASTE TO SITES OUTSIDE SAN DIEGO COUNTY**

### **6.5.1 DESCRIPTION OF THE ALTERNATIVE**

Implementation of the Long Term Transport of Waste to Sites Outside San Diego County (Out-of-County) Alternative would mean that all waste generated by north San Diego County jurisdictions would be shipped to landfills in other counties. Under existing conditions, 73 percent of the total waste stream from these North County jurisdictions is disposed of at landfills in other locations in San Diego County, primarily the Sycamore and Otay landfills located in southern San Diego County. In addition, approximately 26 percent of the waste generated in north San Diego County cities is shipped to the Prima Deshecha Landfill in Orange County, with the remaining one percent shipped to other out-of-county landfills including Copper Mountain in Arizona and landfills in Imperial and Los Angeles Counties. With the Out-of-County Alternative, all waste would be shipped to these and several other active out-of County landfills located in Orange, Riverside, Los Angeles, Imperial, and San Bernardino Counties. Table 6-4 summarizes the size, location, permitted daily capacity/average intake and approximate remaining capacity for additional landfills that are able to accept out-of-county solid waste. As indicated by Table 6-4, the El Sobrante Landfill in Riverside County has the largest remaining capacity of these landfills. Under the Out-of County Alternative, waste to these landfills would be transported by truck, either hauled directly from collection routes or carried from existing and possibly new transfer stations and associated infrastructure in the north San Diego County subregion.

As indicated above, approximately 71 percent of North County waste disposal currently occurs through the use of transfer stations. Under the Out-of-County Alternative, disposal with use of transfer stations could allow waste to be sorted at the transfer stations and recyclables removed prior to shipping to landfills. In addition, use of a material recovery facility with disposal by truck or rail could create additional diversion.

With the Out-of-County Alternative, waste may also be disposed of at out-of-County landfills via use of rail. Waste disposal efficiencies result from the use of rail due to the weight capacities provided by rail. Use of waste-by-rail for disposal of waste from North County jurisdictions would require rail loading facilities near the population centers. Such loading facilities must be capable of loading large-scale unit trains. According to the County's Integrated Waste Management Plan, there are no rail loading facilities permitted in the County at this time. It should be noted that some permitted solid waste facilities in San Diego county are currently sited adjacent to rail spurs or lines (i.e., Escondido Resource Recover, Waste Management of North County, and EDCO Station in La Mesa). Waste-by-rail may require infrastructure modifications relating to these facilities and associated solid waste facility permits revisions to allow these sites to become rail-loading transfer stations. However, waste-by-rail has not yet been proven cost-effective, due in part to deregulation of rail rates, and is not widely used. However, several waste-by-rail facilities located in remote places have been recently approved or are seeking the necessary approvals, including Mesquite in Imperial County, Eagle Mountain in Riverside

**TABLE 6-4  
ADDITIONAL EXISTING LANDFILLS ABLE TO ACCEPT OUT-OF-COUNTY SOLID WASTES<sup>a</sup>**

NAME OF LANDFILL	SIZE (ACRES)	LOCATION	OWNER	PERMITTED DAILY CAPACITY/ AVERAGE INTAKE (TPD)	APPROXIMATE REMAINING CAPACITY ( TONS)	ANTICIPATED CLOSURE DATE
<b>Orange County</b>						
Frank Bowerman (FRB)	360	Irvine	Orange County	7,000 (permitted for 8,500)	44,230,000	2024
Olinda Alpha	335	Brea	Orange County	7,500 (permitted for 8,000)	33,900,000	2013
Prima Deshecha	1,000	San Juan Capistrano	Orange County	2,500 (permitted for 4,000)	45,750,000	2040
<b>Riverside County</b>						
Badlands <sup>b</sup>	1,081	Moreno Valley	Riverside County	1,000 (permitted for 1,400)	7,347,856	2014
El Sobrante	178	Corona	USA Waste Services	1,500 (permitted for 10,000)	100,000,000	2030
Lamb Canyon <sup>b</sup>	788	Beaumont	Riverside County	1,000 (permitted for 1,900)	1,041,619	2019
<b>Los Angeles County</b>						
Chiquita Canyon	594	Newhall	Republic Services	5,000 (permitted for 6,000)	23,000,000	2019
Sunshine Canyon	215 <sup>c</sup> +205	Los Angeles	Allied Waste Industries, Inc.	5,000 (permitted for 6,600) +5,500	16,900,000 <sup>d</sup> +73,000,000	2042
<sup>a</sup> As previously discussed and indicated in Appendix R, North County waste is currently disposed of at other out-of-county landfills including Copper Mountain in Arizona and landfills in Imperial and Los Angeles Counties. <sup>b</sup> Use of these sites for import from outside Riverside County is limited under a non-compete provision in a contract between Riverside County and the owner of the El Sobrante Landfill. <sup>c</sup> This figure is for the portion of Sunshine Canyon in unincorporated Los Angeles County. Sunshine Canyon has an additional 205 acres within the City of Los Angeles. The portion within the City is currently closed. <sup>d</sup> Planned expansion to 11,000 tpd, 90,000,000 ton capacity. Sources: Orange County Integrated Waste Management Department, October 1999. Riverside County Waste Management Department, October 1999						

County and sites in Arizona and Utah (refer to Table 6-5A). In addition, a waste-by-rail landfill facility was previously proposed on the Campo Indian Reservation in southeastern San Diego County. However, recent information provided by the County Department of Environmental Health indicates that this landfill is no longer being pursued.

The Eagle Mountain Landfill, currently under purchase contract with the Sanitation Districts of Los Angeles County (LASAN) to be used for waste from Los Angeles, will accept 20,000 tpd of waste and have a total capacity of approximately 708 million tons. The projected landfill life is approximately 117 years. The majority of the waste received at the landfill will be transported by train via the Southern Pacific rail system and an existing 52-mile, Kaiser-owned rail line that

**TABLE 6-5A  
OUT-OF-COUNTY RAIL HAUL LANDFILLS**

<b>NAME OF LANDFILL</b>	<b>LOCATION</b>	<b>OWNER</b>	<b>STATUS</b>	<b>DAILY PERMITTED INCOMING WASTE (TPD)</b>	<b>APPROXIMATE REMAINING CAPACITY/SITE LIFE</b>
East Carbon	East Carbon, Utah	Allied Waste Industries, Inc.	Active	No limit	N/A
La Paz	La Paz, Arizona	Allied Waste Industries, Inc.	Active	No daily limit	N/A
Franconia	Mojave County, Arizona	Waste Management, Inc.	Awaiting Construction	No daily limit	N/A
Eagle Mountain	Riverside County	Mine Reclamation Corporation <sup>a</sup>	Fully Permitted, Not Constructed	20,000	708 million tons/117years
Mesquite Regional	Imperial County	USA Waste Service, Inc. <sup>a</sup>	Fully Permitted, Not Constructed	20,000	600 million tons/100 years
N/A = Not Available					
<sup>a</sup> The Eagle Mountain and Mesquite Regional Landfills were purchased by the Los Angeles County Sanitation District in August 2000.					
Note: The Eagle Mountain, Mesquite Regional and Campo Landfills could accept limited volumes of solid waste via truck-haul.					
Sources: Los Angeles County Sanitation Districts 1995, updated by BAS, 1998, updated by PCR Services Corporation, 2002					

extends from Ferrum Junction to the Eagle Mountain Mine.<sup>17</sup> Most of the remaining waste received at Eagle Mountain will be transported by transfer trucks. Waste transported by train or transfer truck to Eagle Mountain will be transported in enclosed containers. Only a small percentage of waste will be accepted at the landfill site from self-haul, commercial operations serving local communities within the Chuckwalla Valley area. The development of Eagle Mountain Landfill would necessitate the siting, permitting, construction and operation of several waste-by rail transfer stations to serve the landfill.

The Mesquite Regional Landfill, also currently under purchase contract with LASAN to be used for waste from Los Angeles, is located in eastern Imperial County, north of State Route 78 (SR 78). The site is approximately 75 miles south of the proposed Eagle Mountain site in open desert adjacent to the active Mesquite Gold Mine and Ore Processing Facility. The Mesquite Landfill would occupy approximately 4,250 acres of land, of which approximately 2,290 acres are currently disturbed lands on which the landfill would be located. The landfill would accept up to 20,000 tons of solid waste per day, with a total estimated disposal capacity of 600 million tons. The projected landfill life is approximately 100 years.

The Mesquite Regional Landfill could accept solid wastes from the entire Southern California region, including Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura Counties. Rail access to the landfill would be provided by the Southern Pacific main line to a new 4.5 mile railroad spur at the site. Operation would initially be 100 percent rail, with possible subsequent truck transport of waste from Imperial County. The project would necessitate the

<sup>17</sup> Based on LASAN estimates provided in the Puente Hills Expansion EIR certified in January 23, 2002, the cost of using the Eagle Mountain and Mesquite Landfills for waste disposal from Los Angeles is \$17.00 to \$22.00 per ton greater than the current per ton costs for waste disposal in North County. Costs for disposal of North County waste via waste-by-rail to these landfills would be even greater based on the additional transportation costs associated with the use of Burlington Northern Santa Fe railway that would be required to transport the waste to Los Angeles and then to the Southern Pacific rail system to the Eagle Mountain or Mesquite landfills.

siting, permitting, construction and operation of several waste-by rail transfer stations to serve the landfill.

Due to the lack of rail loading facilities and associated infrastructure permitted in the County at this time and the additional costs currently associated with the disposal of waste via rail, waste-by-rail, while feasible, is not expected to be widely used in the County in the immediate future. Therefore, the Out-of-County Alternative assumes that the majority of the waste disposed of at out-of-County landfills will be disposed of using trucks via use of transfer stations and direct haul.

## **6.5.2 ENVIRONMENTAL IMPACTS**

As indicated above, some permitted solid waste facilities in San Diego County are sited adjacent to rail spurs, some infrastructure modification may be necessary as well as permit revisions for these facilities. However, due to the lack of rail loading facilities and associated infrastructure permitted in the County at this time and the additional costs currently associated with the disposal of waste via rail, waste-by-rail, while feasible, is not expected to be widely used for the final disposal of waste generated in San Diego County in the immediate future. Therefore, this comparative analysis of environmental impacts assumes that the majority of the waste disposed of at out-of-County landfills will be disposed of using trucks via use of transfer stations and direct haul. With the Out-of-County Alternative, the majority of the waste from North County jurisdictions would be shipped to out-of-County landfills that currently receive waste from North County jurisdictions including Copper Mountain in Arizona and landfills in Imperial and Los Angeles Counties as well as several other active out-of County landfills located in Orange, Riverside, Los Angeles, Imperial, and San Bernardino Counties (refer to Table 6-4). A portion of the waste would also be disposed of via waste-by-rail at the landfills listed in Table 6-5A.

With this alternative all impacts associated directly with the Gregory Canyon site would be eliminated. On-site open space would not be dedicated. The site would remain zoned and designated SWF according to the terms of Proposition C. The SDG&E towers would not be affected.

### Land Use and Related Planning

Under the Out-of-County Alternative, the on-site land use impacts associated with the project would not occur. The use of the site would be similar to the No Project Alternative in that the site could continue in agricultural uses or as open space unless some other project were developed on the project site. However, there would be no permanent dedication of the 1,313 acres as open space and no active management of the lands by a resource agency or non-profit organization to maintain and enhance its habitat value. No encroachment into the SDG&E easement would occur and the power lines would not need to be relocated.

No impacts to land use and related planning would occur as a result of the disposal of the majority of waste via trucks since the additional disposal of imported solid wastes would occur at existing, permitted landfill facilities outside of San Diego County. Although the adopted CIWMP indicates that the County's policy is to provide capacity within the County, without reliance on export of waste, the Plan acknowledges that jurisdictions may choose to dispose of their waste at any facility, including landfills out-of-county. Impacts would result from the construction of facilities or the modifications to existing permitted facilities adjacent to rail spurs or lines, and operation of waste-by-rail transfer stations and associated infrastructure that would

be necessary to transport the smaller portion of waste via rail under this Alternative. This would represent a significant but mitigable impact to land use.

### Geology and Hydrogeology

Future phases of landfill excavation and development at out-of-county landfill facilities could result in impacts to geologic hazards and hydrogeology that would be significant but mitigable. In addition, impacts to geology and hydrogeology would result from the construction of facilities or the modifications to existing permitted facilities adjacent to rail spurs or lines, and operation of waste-by-rail transfer stations and associated infrastructure needed for the transport of the smaller portion of waste from North County jurisdictions. This would represent a significant but mitigable impact.

### Surface Hydrology

While surface hydrology impacts could occur at the permitted out-of-County landfills that would be used for the final disposal of waste generated in North County, each landfill operates under WDRs issued by the RWQCB as well as any applicable local regulations. In addition, impacts to surface hydrology could result from the construction of facilities or the modifications to existing permitted facilities adjacent to rail spurs or lines, and operation of waste-by-rail transfer stations and associated infrastructure needed for the transport of the smaller portion of waste from North County jurisdictions. However, surface hydrology impacts would not occur due to compliance with the recently adopted County of San Diego Watershed Protection, Stormwater Management and Discharge Control Ordinance (Stormwater Ordinance) and the County Stormwater Standards Manual.

### Traffic and Circulation

If the majority of municipal waste is transported to disposal sites in Orange, Los Angeles, Riverside Imperial Counties or Arizona via direct haul or use of transfer stations, due to the distances of these landfills from North County jurisdictions, the number of VMT would be expected to increase when compared with existing conditions and with the proposed project. (As indicated above, approximately 27 percent of waste from North County Cities is currently disposed of at out-of-County landfills). In addition, under the Out-of-County Alternative, VMT would also be associated with the smaller portion of waste disposed of through the use of rail due to the VMT associated with transport of the waste via trucks to the rail transfer facility. Additional traffic would also be generated as a result of the construction of facilities or the modifications to existing permitted facilities adjacent to rail spurs or lines, and operation of new County waste-by-rail transfer stations and associated infrastructure that would be necessary to transport the smaller portion of waste generated under this Alternative to landfills via rail.

### Air Quality and Health Risk

Due to the anticipated increase in VMT resulting from increased distances for trucks traveling from North County jurisdictions to landfills, the Out-of-County Alternative would generate increased air pollutant emissions when compared with the existing waste disposal patterns and with the proposed project. In addition, air emissions would be generated as a result of the construction of facilities or the modifications to existing permitted facilities adjacent to rail spurs or lines, and operation of new County waste-by-rail transfer stations that would be necessary to transport the smaller portion of waste generated under this Alternative to landfills via rail. Air

emissions, including odor, associated with the operation and decomposition of landfilled wastes would occur at whichever site the waste transported via truck and rail is placed. Air emissions would not be generated on the Gregory Canyon site, but would still be occurring in other locations. These would be considered significant and unmitigable since California state standards would be exceeded at any of the landfill sites in Orange, Riverside and Los Angeles Counties for the same total amount of waste.

#### Noise and Vibration

Waste haul vehicles would continue to utilize existing access roads for out-of-county landfill facilities. Increased noise impacts could occur as truck volumes increase along these roadways, associated with increased waste intake volumes. This could result in a significant but mitigable impact. Impacts would also result from the construction of facilities or the modifications to existing permitted facilities adjacent to rail spurs or lines, and operation of waste-by-rail transfer stations. This would represent a significant but mitigable impact.

#### Agricultural Resources

No impacts to agricultural resources would occur at existing, permitted landfill facilities. In addition, impacts to agricultural resources would not be expected to occur as a result of the construction of new infrastructure necessary to support the smaller portion of waste disposed of under this Alternative via rail.

#### Biological Resources

Future phases of landfill excavation and development at out-of-county landfill facilities could result in impacts to biological resources that would be significant but mitigable. In addition, impacts to biological resources could result from the construction and operation of waste-by-rail transfer stations and associated infrastructure. This would represent a significant but mitigable impact

#### Cultural and Paleontology

Future phases of landfill excavation and development at out-of-county landfill facilities could result in impacts to cultural and paleontological resources that would be significant but mitigable. No known impacts to ethnohistoric and Native American interests at the permitted out-of-County landfills would result from the disposal of North County waste. However, impacts to cultural (including Native American interests) and paleontological resources could result from the construction of waste-by-rail transfer stations and associated infrastructure. This would represent a significant but mitigable impact.

#### Human Health and Safety

Impacts caused by household hazardous waste in the solid waste stream, litter generation and vector generation would not be significant since each landfill would be required to implement programs to avoid these impacts.

#### Aesthetics

Future phases of landfill excavation and development at out-of-county landfill facilities would result in impacts to aesthetics that could be significant but mitigable. In addition, significant but

mitigable impacts to aesthetics could occur as a result of the development of new waste-by-rail transfer stations and associated infrastructure.

#### Socioeconomics

No impacts to socioeconomics would occur.

#### Public Services and Utilities

No impacts to public services and facilities would occur. This alternative could result in an impact to energy conservation by causing solid waste generated in the North San Diego County area to be transported by truck considerably farther distances for disposal.

### **6.5.3 COMPARISON TO THE PROJECT**

#### Project Objectives

The Out-of-County Alternative would not meet the project objectives of providing a Class III disposal facility that is locally available to North County jurisdictions nor would the Out-of-County Alternative increase the landfill disposal capacity within San Diego County as no new facility would be developed. In addition, since it is assumed that the current solid waste disposal pattern would continue in the near term if the Out-of-County Alternative were selected, without the increase in landfill capacity resulting from the proposed project, the overall disposal capacity within the County could be reduced at a faster rate. In addition, the Out-of-County Alternative would not provide the infrastructure facility within the County to support the long-term economic growth projected in the region. Furthermore, the Out-of-County Alternative would not help to minimize or reduce tipping fees through the preservation of competition among solid waste disposal sites within the County since this alternative would not increase the number of facilities or operators within the County.

#### Feasibility

The Out-Of-County Alternative is feasible. However, the practical use of this alternative would depend on the economics of the tipping fees and transportation costs associated with disposal at the out-of-County landfill sites. Most of the existing landfills that accept solid waste generated from other counties via truck haul have restrictions on the amount of solid waste these facilities may receive on a daily basis from other counties. This is often done to ensure that there will be sufficient daily and long-term disposal capacity to serve the home county. In the future, as other landfill facilities close, and other jurisdictions with landfill capacity shortages attempt to utilize these facilities, these landfills may not be able to accommodate regional solid waste streams.

As discussed above, some permitted solid waste facilities in San Diego County are sited adjacent to rail spurs and some infrastructure modification may be necessary as well as permit revisions for these facilities. However, due to the lack of rail loading facilities and associated infrastructure permitted in the County at this time and the additional costs currently associated with the disposal of waste via rail, waste-by-rail, while feasible, is not expected to be widely used in the County in the immediate future. In addition, the landfills that currently or in the near future are expected to accept waste via rail are not owned by or under the control of the Gregory Canyon Landfill project applicant. Therefore, there is no assurance that the existing property owners would make the site available for disposal of waste from North County jurisdictions.

### Evaluation of Significant Impacts

The Out-of-County Alternative, primarily using trucks and to a much lesser extent rail, would eliminate or reduce the following local impacts associated with the development and operation of the proposed Gregory Canyon Landfill.

- Unmitigable visual quality impact
- Unmitigable air quality impact
- Unmitigable impact to Native American interests
- Unmitigable traffic noise impacts to existing residences along SR 76

The Out-of-County Alternative, using long-haul trucks, would be expected to result in greater impacts to the following issues:

- Regional air quality impact associated with an anticipated increase in vehicle miles (impacts would remain unmitigable)
- Regional traffic and circulation impact associated with an anticipated increase in vehicle miles (impacts would be potentially significant)
- Regional energy conservation impact associated with an anticipated increase in vehicle miles (impacts would be mitigable)

Similar impacts would occur to the following issues: geology and hydrogeology, noise, biological resources, paleontology, human health and safety, and socioeconomics.

### Comparative Merits

As discussed above, the Out-of-County Alternative would not meet the project objectives of providing a Class III disposal facility that is locally available to North County jurisdictions nor would the Out-of-County Alternative increase the landfill disposal capacity within San Diego County since no new facility would be developed.

This alternative would reduce or eliminate many of the on-site environmental impacts, including the unmitigable impacts to visual quality, air quality and conflicts with Native American interests. Significant and unmitigable impacts to air quality from on-site operations and waste decomposition would not occur at the Gregory Canyon site. However, significant traffic and air quality impacts would still occur at whichever landfill sites are selected for disposal for truck haul landfills and at the landfills and transfer stations for rail-haul facilities. In addition, the Out-of-County Alternative would be expected to have a significant and unmitigable impact on regional air quality of the Southern California region due to the anticipated increase in VMT when compared with the project. Regional traffic impacts would be potentially significant and energy conservation impacts would be significant but mitigable.

The Out-of-County Alternative would not meet the development objective of preserving competition among solid waste disposal sites in San Diego County to minimize future tipping fees since this alternative would not result in a new landfill in San Diego County to provide the increased supply of disposal facilities. In addition, the cost of transport of waste further distances (i.e., out of County) could increase the overall disposal costs rather than provide competitive prices.

Although the adopted CIWMP indicates that the County's policy is to provide capacity within the County, without reliance on export of waste, the Plan acknowledges that jurisdictions may choose to dispose of their waste at any facility, including landfills out-of-county. However,

relying on out-of-county landfills would not provide a secure and reliable source for disposal of solid waste generated in north San Diego County. In addition, the use of out-of-county landfills for waste generation in the north San Diego County region would adversely affect the capacity of these landfills by increasing the waste disposal stream over the projections each landfill used. Furthermore, the shipment of waste by trucks and rail to out-of-county solid waste landfills could result in higher transportation costs due to greater distances and/or the need for additional infrastructure for the exportation of waste to occur. For example, the use of out-of-county waste-by-rail landfills could result in higher costs associated with the development of waste-by-rail transfer stations and the associated rail line necessary for the waste-to-rail approach to be functional.

## **6.6 WASTE REDUCTION AND RECYCLING**

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### **6.6.1 DESCRIPTION OF THE ALTERNATIVE**

The California Integrated Waste Management Act of 1989 (AB 939) required that waste diversion level of 25 percent be achieved by cities and unincorporated areas within San Diego County by 1995, with a waste diversion level of 50 percent by the year 2000. Although source reduction and recycling cannot replace landfilling, a successful waste reduction and recycling program can reduce the amount of waste entering the landfills, extend the service life of existing landfills, and postpone the need for new landfills.

The County's Integrated Waste Management Plan incorporates alternatives to landfilling including recycling waste by source separation, recycling waste by separation at transfer stations, manufacturing secondary products (composting), converting waste to electrical energy by incineration, and proposing legislative measures for reducing the generation of waste (source reduction). These alternative means of waste disposal would not eliminate the need for a landfill, but could reduce the volume of the waste stream to the landfill. Some of these alternatives (source reduction, recycling and composting) are currently being implemented successfully in San Diego County.

As indicated in Table 6-5B, by 1997 the majority of the cities in North San Diego County achieved the AB 939 goal of diverting 50 percent of the solid waste generated. However, between 1998 and 2000, the diversion rates for these same jurisdictions declined and as of 2000, the majority of the jurisdictions were no longer achieving the 50 percent diversion goal set forth by AB 939. This decline could illustrate that programs to divert waste can be exceedingly more difficult as the percentage diverted increases. In other words, the easy items, such as newspaper, bottles, and cans, are diverted first and it is increasingly more difficult to reduce the remaining waste stream.

**TABLE 6-5B**  
**NORTH COUNTY WASTE DIVERSION BY JURISDICTION**  
**1997-2000**

CITY	1997 DIVERSION RATE	1998 DIVERSION RATE	1999 DIVERSION RATE	2000 DIVERSION RATE
Carlsbad	50%	44%	41%	44%
Del Mar	35%	NA	24%	34%
Encinitas	51%	40%	47%	50%
Escondido	48%	43%	43%	46%
Oceanside	49%	47%	47%	46%
Poway	53%	51%	53%	49%
San Marcos	51%	48%	44%	42%
Solana Beach	53%	42%	47%	46%
Unincorporated	50%	45%	48%	44%
Vista	55%	51%	42%	38%
<i>Source: California Integrated Waste Management Board, October 2001</i>				

### 6.6.1.1 Recycling

Recycling is defined in AB 939, as:

“. . . the process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace.”

For the purposes of CIWMP planning, the practice of producing mulch at centralized yard and wood waste grinding facilities for reuse as mulch is identified as recycling.

Recycling programs provide the most effective way to divert large quantities of material from disposal facilities. Data obtained from County waste characterization studies indicates that approximately 30 percent of the unincorporated area waste stream is composed of readily recyclable material such as glass, paper, metal, yard and wood waste (County of San Diego, 1992). Waste characterization studies conducted in 1989 and 1990 for the composition of waste generated in San Diego County concluded that up to 20.5 percent of the County’s waste consists of yard waste. Utilizing the waste composition analysis, a countywide mulching program for yard waste with a reduced tip fee was instituted at all landfills in the County. The mulch produced is marketed to commercial consumers and/or given away to individuals. Regional collection programs to divert these and other marketable materials from disposal have recently been implemented in conjunction with the implementation of the County Mandatory Recycling Ordinance (MRO). The MRO contributes to increasing recycling rates for designated recyclables and helps to ensure that participation rates in recycling programs can be the best possible.

The County MRO requires permitted waste haulers in the unincorporated areas of the County to provide source separated collection of designated recyclable materials from their customers. The County is working cooperatively with waste haulers to ensure a smooth transition to mandatory recycling and collections expansion. For residential curbside recycling, the County is providing

haulers with “Recycling Reminder” enforcement tags that explain the MRO and how to participate. In the event that participation is not forthcoming, County public nuisance abatement staff have the authority to issue citations. Based on a national study of MRO programs, participation in mandatory recycling programs was almost twice as high as in cities where recycling was voluntary (County of San Diego, 1992).

The success of a recycling program is most dependent on the development of markets for recyclable materials and for these markets to be long-term and dependable. The materials for which market development is most needed are mixed paper, newspaper, used tires, plastics, glass and tin cans. Market development may benefit other materials such as cardboard, scrap metals and high grade paper. Aluminum is now being recovered at a rate equal to demand and needs no further market development.

The State of California has established the Recycling Market Development Zone (RMDZ) program to build markets for recyclable material recovered from the wastestream in compliance with AB 939. The CIWMB offers low interest loans for 50 percent of the development costs, up to \$1,000,000, to attract businesses that will use recyclable material as feedstock in a secondary manufacturing process. Help with financing strategies, marketing, and technical assistance is also available from the CIWMB. The RMDZs develop markets through advertising and outreach. There are two RMDZs within the County of San Diego.

### **6.6.1.2 Source Reduction**

Source reduction refers to any action which causes a net reduction in the generation of solid waste and includes, replacing disposable materials and products with reusable materials and products, reducing packaging, and increasing the efficient use of materials. Although individual source reduction measures are difficult to quantify and document, the cumulative effect of several such measures, in conjunction with an effective recycling program, could significantly reduce the volume of solid waste going to disposal facilities. As a county policy, source reduction programs are designed to conserve energy, avoid collection and disposal costs, increase public awareness of waste disposal issues, and contribute to the overall success of solid waste management plans (County of San Diego, 1992).

### **6.6.1.3 Mechanical Volume Reduction**

Generally speaking, mechanical volume reduction involves physically diminishing waste volumes through compaction, baling, shredding, or other similar measures. Mechanical reduction takes place prior to disposal at the landfill either at a dedicated facility or at the landfill site itself.

#### Compaction

The compaction of wastes can occur one or more times starting from the point of residential, commercial, or industrial generation to final disposal. Typical compaction methods include:

- Compaction units at the waste source such as under the counter garbage compactors in homes, and larger units capable of servicing large businesses or industrial refuse.
- Compaction of wastes by collection vehicles, which can also maximize load capacities and collection efficiency.
- Compaction of refuse at a transfer station.
- Compaction at the landfill site during fill operations.

### Baling

Baling, or the balefill method, is a special type of compaction in which waste material is bound into uniform size bales prior to being placed in a fill area. Baling can result in reduction in volume. Because the amount of waste surface is reduced by baling compaction, the balefill method can also result in a significant reduction in stray litter, rodents, and birds (Mosley, 1990). If baling occurs prior to transport of the wastes to the landfill, economic advantages could include reduced transportation costs owing to the high density and uniform bales that increase efficiency of transport vehicle space.

Other segments of the solid waste industry have argued that the balefill method is not without problems. Refuse density governs the degree to which the service life of a landfill can be extended. Common densities achieved by conventional landfilling range from 1,100 to 1,300 pounds per cubic yard for in-place refuse. In some instances, these densities can be higher depending on the quality of compaction efforts and the types of refuse being received. Depending on the baling equipment, the balefill method can achieve a refuse density that could exceed 2,000 pounds per cubic yard. Even though the waste is highly compacted (dense), the bales do not resemble perfect blocks. When stacked in the landfill, air space voids between the bales reduce the effective refuse density by approximately five percent. This five percent reduction, if accurate, would significantly increase the refuse-to-cover material volume ratio over that of a conventional landfill operation. This would mean that if daily soil requirements were not available from excavation activities on-site, this soil would need to be imported from an off-site location or alternative daily cover (ADC) would need to be used.

### Shredding

Shredding, or the shredfill method, is the process whereby solid waste is shredded prior to placement in a landfill. One shredfill operation in Lewiston Maine, attributed a 35 to 40 percent reduction in waste volume at a city operated landfill to the shredfill method. The primary advantage of shredding is that it can potentially eliminate the need for daily soil cover. This would result in reduced cover material requirements and an extended service life of the facility. Potential disadvantages of shredding may include increased wind erosion and wind dispersal of fugitive dust. To date, the economics of shredfills as compared to conventional fills have been discouraging. It is possible that future conditions will result in greater emphasis on the value and benefits of extending landfills service life, maximizing transport vehicle densities, and reducing daily cover requirements. Such a shift could serve to offset the relative additional costs of both baling and shredding.

## **6.6.2 COMPARISON TO THE PROPOSED PROJECT**

### Project Objectives

While the Waste Reduction Alternative would reduce project related impacts, it would not achieve the proposed project goals and objectives of providing a Class III solid waste disposal facility that is locally available, cost effective, and provides a long-term solution (i.e., 25 years) for disposal of waste generated in North County jurisdictions. This alternative would also not increase the final disposal capacity in the County solid waste system as a whole. Although the Waste Reduction Alternative would reduce the wastestream disposed of in landfills, thereby increasing the life expectancy of existing landfills, it would not eliminate the need for landfills.

### Feasibility

Some of the components of this alternative are feasible. Recycling, for example, can be successful in San Diego County;. As indicated above, although the majority of the North County jurisdictions have not recently achieved the 50 percent diversion goal set forth by AB 939, as of 1997 most of these jurisdictions had achieved the 50 percent diversion goal. However, other components are not as feasible. Baling and shredding to reduce the waste volume prior to landfilling may not be feasible, given past experiences with other jurisdictions.

### Elimination/Reduction of Significant Impacts

Implementation of the Waste Reduction Alternative would not avoid the need for landfilling, since even very successful reduction programs still require a landfill to dispose of the wastes which cannot be recycled or reused. Accordingly, impacts associated with the project would still occur.

### Comparative Merits

Waste reduction methods are not complete alternatives to the use of landfills. Successful waste reduction and recycling programs can reduce the amount of waste entering landfills and can extend the service life of existing landfills. However, waste reduction does not eliminate the need for landfills, since some waste will always remain that cannot be recycled, composted or otherwise eliminated. Based on present recycling efforts, more than 50 percent of all waste within North County must still be landfilled.

## **6.7 PRESCRIPTIVE DESIGN ALTERNATIVES**

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### **6.7.1 PRESCRIPTIVE DESIGN ALTERNATIVES**

This section includes two alternatives that have been designed to meet the regulatory standards and would not require a variance for the engineered bottom design. The first Prescriptive Design Alternative contains a single liner and the second Prescriptive Design Alternative contains a double liner.

#### **6.7.1.1 DESCRIPTION OF THE PRESCRIPTIVE DESIGN WITH A SINGLE LINER ALTERNATIVE**

The Prescriptive Design with a Single Liner Alternative was developed for the Gregory Canyon Landfill in response to comments received on the RDEIR. This alternative is designed to meet the regulatory standards and would not require a variance for the engineered bottom design from the RWQCB under Title 27 CCR. This Prescriptive Design Alternative would situate the waste containment unit five feet above the highest anticipated groundwater level. The landfill liner system, subdrain system, leachate collection and removal system (LCRS), and landfill gas and flaring system would all be the same as the proposed project.

The lowest depths of excavation for the Prescriptive Design Alternative ranges from between approximately 400 feet above mean seal level (amsl) at the northern toe of excavation to approximately 700 feet amsl at the southern toe. The quantity of excavated rock and soil material would be about 7.93 million cubic yards (mcy), of which 1.48 mcy will be used in the formation of the landfill bottom prior to placement of the containment system. Therefore,

approximately 6.44 mcy of rock and soil material would be available for use as final, intermediate, and daily cover soil. The amount of cover material needed for daily, intermediate, and final cover is estimated at 12.7 mcy. As with the project, excavated rock would be processed on-site for use as cover material and the excess could be transported off-site.<sup>18</sup> In addition, as with the project, alternative daily cover (ADC) materials will be used to supplement on-site cover material needs.

The finished elevations for the Prescriptive Design Alternative would be the same as the proposed project. The final elevation of the last phase of the landfill would be approximately 1,100 amsl. The access road/bridge, ancillary facilities, borrow/stockpile areas, desilting basins, internal haul roads, and all other operational and environmental control/monitoring features would be the same as the proposed project. The Prescriptive Design Alternative would also include the relocation of the SDG&E transmission lines and towers. For analysis purposes, it is assumed that the First San Diego Aqueduct would remain in its current location. The 1,313-acre dedication of open space would still occur. This alternative would utilize the same amount of acreage as the proposed project and would result in the same amount of above ground disturbance as the proposed project.

The overall capacity of the Prescriptive Design Alternative would be reduced from 33.4 million tons (49.4 million cubic yards) to 31 million tons (45.9 million cubic yards) and would reduce the estimated site life from approximately 30 to 28 years. Exhibit 6-7 shows a cross-section of the bottom contours for both the Prescriptive Design Alternative compared with the proposed project. The hatched area on the exhibit provides a comparison of the lost airspace between the proposed project and the alternative, as well as the respective relationship to the highest anticipated groundwater level. The daily solid waste intake for the Prescriptive Design Alternative would be the same as for the project, with an average of 3,200 tons of solid waste per day and a maximum of 5,000 tons per day.

### **6.7.1.2 ENVIRONMENTAL IMPACTS**

#### Land Use and Related Planning

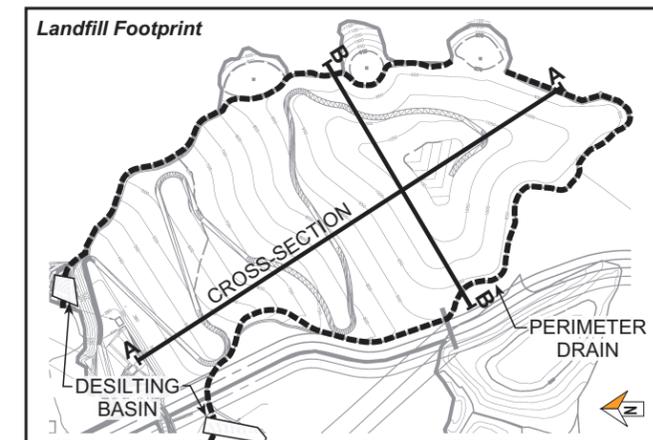
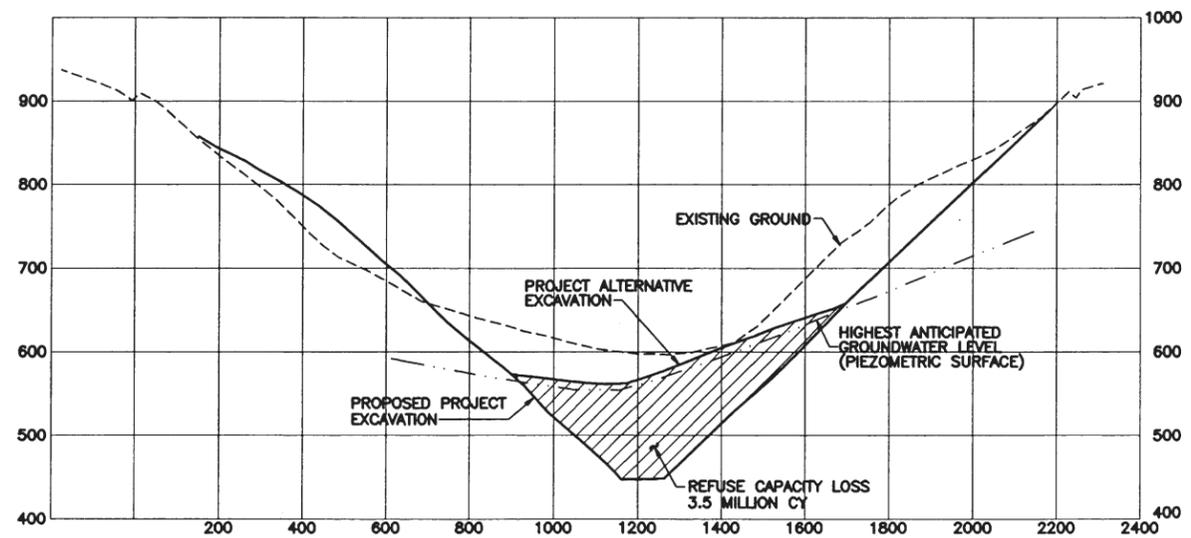
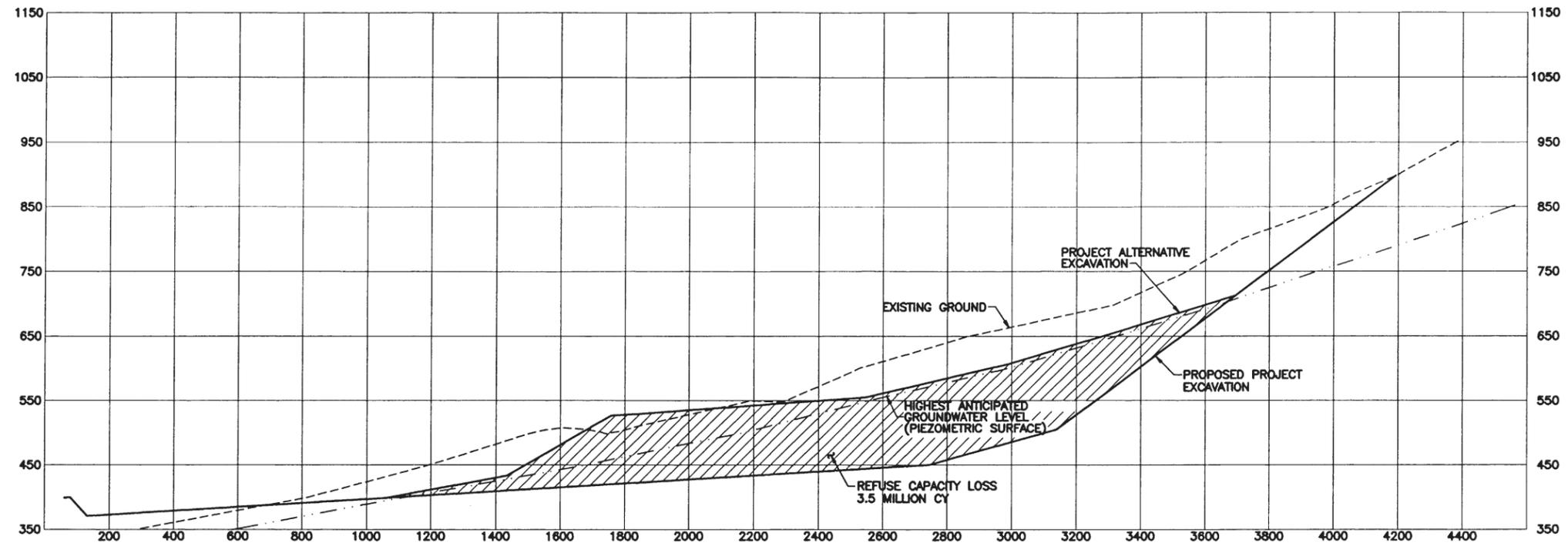
Land use impacts with this alternative would be similar to the proposed project. This alternative would be in conformance with the General Plan and zoning ordinance and with regional plans and policies. As with the proposed project, the Prescriptive Design Alternative would be compatible with surrounding land uses and would not result in any significant land use impacts. Mitigation measures for land use for this alternative would be the same measures as those for the proposed project.

#### Geology and Soil

Impacts from geologic hazards (earthquakes and groundshaking, erosion, rockfalls, and debris flows) would be similar to the proposed project. Measures to minimize impacts, such as the use of gabion dams or other diversion structures to mitigate potential debris flows and removal of rock outcroppings, would remain the same as for the proposed project. Settlement of the landfill surface would be similar for the Prescriptive Design Alternative and the proposed project. Although the amount of blasting that would need to be employed for the Prescriptive Design

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<sup>18</sup> As for the project, the exportation and sale of aggregate material would require a Major Use Permit



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Alternative would be somewhat reduced in comparison to the proposed project because of reduced excavation into the bedrock, with the implementation of the same project design features and mitigation measures, this Prescriptive Design Alternative and the proposed project would result in similar significant but mitigable impacts to geology and soils. As with the proposed project, ADC materials would be required to supplement on-site cover material resources. Given the reduced excavation volumes, the Prescriptive Design Alternative would require more efficient use of ADCs and a higher overall waste-to-soil ratio. The volume reduction from excavation would be obtained solely within the proposed landfill footprint and, as a result, potential impacts to above-ground resources would be similar and no mitigation would be required.

### Hydrogeology

For potential impacts to hydrogeology during construction, excavation for the Prescriptive Design Alternative would be above the piezometric surface, and, as a result, the amount of dewatering may be less than that required for the proposed project. However, construction engineering practices and controls for the proposed project would be employed so that no significant impacts to groundwater flow, direction, depletion, or quality would occur during construction. Therefore, hydrogeology impacts during construction for the Prescriptive Design Alternative and the proposed project would be similar and no mitigation would be required.

As with the project, the Prescriptive Design Alternative with a Single Liner would not result in any significant impacts to groundwater flow, direction, or depletion during operations. For potential impacts to hydrogeology during operations related to groundwater quality, both the Prescriptive Design Alternative with a Single Liner and the proposed project would be engineered and designed to include the same landfill liner system, subdrain, LCRS, and gas collection and flaring system. Both the project and the Prescriptive Design Alternative would maintain the required five feet of separation between the highest anticipated groundwater level and the refuse. The groundwater monitoring system for the Prescriptive Design Alternative would be the same as for the proposed project and would employ the same number of upgradient and downgradient groundwater monitoring wells. The Prescriptive Design Alternative with a Single Liner and the proposed project would both include a subdrain system. For both the proposed project and the alternative, in the unlikely event of a release from the landfill, remediation technologies would be employed by the operator under the Evaluation Monitoring Program (EMP) and Corrective Action Program (CAP) as required by regulations. Therefore, hydrogeology impacts during operations for the Prescriptive Design Alternative and the proposed project would be the same. With the implementation of the design features and mitigation measures described in this Final EIR, no significant impacts to groundwater would occur with the Prescriptive Design Alternative.

### Surface Hydrology

The surface water drainage system for the Prescriptive Design Alternative with a Single Liner would be the same as with the proposed project and would be designed to collect and convey 100-year, 24-hour storm flows in conjunction with a rupture of the adjacent existing and future pipelines. The access road and bridge would be the same for this alternative as for the proposed project. Therefore, the Prescriptive Design Alternative would have the same impacts to surface hydrology as the project. Project design features, including engineered Best Management Practices (BMPs), for surface hydrology would be the same for the Prescriptive Design

Alternative as with the proposed project. With the implementation of the project design features described in Section 4.4 of this EIR, no significant impacts to surface water quality would occur. If the SDCWA Pipelines are relocated, the relocation would be designed so that no flooding impacts to the relocated pipelines would occur as described in Mitigation Measure MM 4.4-1.

#### Traffic and Circulation

Due to the fact that the Prescriptive Design Alternative and the proposed project would have the same daily waste intakes and truck trips, impacts to traffic and circulation would be significant but mitigable for the Prescriptive Design Alternative and for the proposed project. Project design features and mitigation measures for traffic and circulation would be the same for the Prescriptive Design Alternative and the proposed project. Regional traffic impacts would be somewhat greater than those anticipated for the project as the reduced lifespan would be expected to result in an increase in VMT.

#### Noise and Vibration

Noise impacts would be similar for both the Prescriptive Design Alternative with a Single Liner and the proposed project. Noise from landfill construction and operational activities would be similar for both the Prescriptive Design Alternative and the proposed project. Although it is anticipated that less blasting would be employed for the Prescriptive Design Alternative due to the reduced excavation, noise impacts from blasting would be significant but mitigable for both the Prescriptive Design Alternative and the proposed project. In all other aspects noise from this alternative would be the same as the proposed project. Project design features and mitigation measures for noise would be the same for the Prescriptive Design Alternative and the proposed project. The project's design and mitigation measures identified in Section 4.6.4 would reduce construction and operational noise and vibration impacts from this alternative to a level of less than significant. Noise from traffic on some residences would remain significant and unmitigable under this alternative as with the Proposed Project.

#### Air Quality

Regarding air quality and air toxics health risks, initial construction activities for the Prescriptive Design Alternative and the proposed project would be the same as both include construction of the landfill, bridge/access road and the landfill and ancillary facilities. Even though there would be some reduction in the amount of blasting, emissions from stationary and mobile heavy construction equipment would result in similar air emissions for the Prescriptive Design Alternative and the proposed project, and would result in significant and unmitigable PM<sub>10</sub> and NO<sub>x</sub> emissions. Project design features and mitigation measures for air quality/health risks during construction would be the same for both projects.

Regarding air quality and air toxics health risks during operations, operational activities for the Prescriptive Design Alternative and the proposed project would be the same. Both projects would have the same daily average and maximum waste intake rate. Both projects would require the landfilling of solid wastes, the construction of future landfill cells, and the use of borrow/stockpile materials, as well as future closure and postclosure maintenance activities. Emissions from waste-hauling vehicles, as well as stationary and mobile equipment, would result in similar air emissions for the Prescriptive Design Alternative and the proposed project. This would result in similar air emissions for PM<sub>10</sub> and NO<sub>x</sub>. The generation of landfill gas for the Prescriptive Design Alternative and the proposed project would be similar. The Prescriptive

Design Alternative would have the same landfill gas collection and flaring system as the project. The landfill gas collection and flaring system would be monitored throughout the operational life and during the mandated 30-year postclosure maintenance period for the Prescriptive Design Alternative and the proposed project. Potential impacts to health risks would be similar for the Prescriptive Design Alternative and the proposed project. Therefore, no significant health risk impacts would occur. Regional and long-term air quality emissions associated with VMT would be somewhat greater than those that would be generated by the proposed project due to the emissions that would result from the increase in VMT that would occur upon the closure of the landfill two years prior to the closure of the landfill under the proposed project.

#### Agricultural Resources

Since the area of above-ground disturbance would be the same for the Prescriptive Design Alternative and the proposed project, impacts to agricultural resources would be similar to the proposed project, and no impacts to agricultural resources would occur. In addition, no impacts to agricultural resources would occur from dust generation from either the Prescriptive Design Alternative or for the proposed project. No mitigation for agricultural resources is required for the Prescriptive Design Alternative or the proposed project.

#### Biological Resources

Impacts to biological resources would be the same as with the proposed project since the Prescriptive Design Alternative would result in the same amount of above-ground disturbed area in the same areas and the same level of activity on the site. Measures to minimize impacts, such as restoration of habitat and acquisition of off-site habitat, would remain the same as for the proposed project. Impacts to listed sensitive plant and animal species would be significant but mitigable for the Prescriptive Design Alternative and the proposed project. Mitigation measures for biological resources would be the same for the Prescriptive Design Alternative and the proposed project.

#### Ethnohistoric, Cultural and Paleontological Resources

Since the areas of above-ground disturbance would be the same for the Prescriptive Design Alternative and the proposed project, impacts to Native American Interests would be the same as with the proposed project. Mitigation measures for ethnohistory and Native American Interests would be the same for both projects. Based on traditional technical measures of air quality, noise, and aesthetics, the impacts after mitigation are less than significant for the Prescriptive Design Alternative and the proposed project. However, the Pala Indians have indicated that any disturbances to Gregory Mountain and Medicine Rock would create unmitigable impacts. Their belief of significant impact is based on their intangible use and relationship to Gregory Mountain and Medicine Rock. Therefore, impacts to ethnohistory and Native American Interests would remain significant and unmitigable for the Prescriptive Design Alternative and the proposed project.

As a result of the same amount of above-ground disturbance in the same areas, impacts to archaeological and historic sites under this alternative would be the same as the proposed project and would be significant but mitigable. Project design features and mitigation measures for archaeological and historic sites would be the same for both projects. Impacts to paleontological resources would be significant but mitigable for the alternative and mitigation measures would be the same as for the proposed project.

### Aesthetics

Regarding aesthetics, the Prescriptive Design Alternative would result in the same visual impacts to landform as for the proposed project since the final fill elevations would be the same. Visual impacts from the borrow/stockpile areas would also be the same since the design and use of these areas would not change. Impacts to aesthetics would, therefore, remain significant and unmitigable for landform alteration associated with the landfill footprint. Project design features and mitigation measures for aesthetics would be the same for the Prescriptive Design Alternative and the proposed project.

### Socioeconomics

As with the proposed project, the Prescriptive Design Alternative would not create significant impacts to socioeconomic issue areas, and no mitigation measures would be required.

### Public Services and Utilities

Impacts to public services and utilities would be the same as the proposed project. There would be no change in project demand for water or for fire protection service. No mitigation measures for public services and utilities would be required for the Prescriptive Design Alternative or for the proposed project. No significant impacts to energy conservation would occur with the Prescriptive Design Alternative or the proposed project, and no mitigation would be required.

### Human Health and Safety

Potential impacts to human health and safety associated with the acceptance of household hazardous waste, litter generation, vector generation, and electromagnetic fields would be the same for the Prescriptive Design Alternative and the proposed project. Project design features for human health and safety would be the same for both projects. The Hazardous Waste Exclusion Program, Load-Checking Program, Litter Control Program, and Vector Control Program would be implemented for both the Prescriptive Design Alternative and the proposed project.

### Cumulative Impacts

Cumulative impacts of implementation of the Prescriptive Design Alternative with a Single Liner, in conjunction with other related projects, would be the same as with the proposed project since the construction, operations, solid waste inflow rate, and closure and post-closure maintenance period for the Prescriptive Design Alternative would be similar to the proposed project.

## **6.7.1.3 COMPARISON TO THE PROPOSED PROJECT**

Based on the environmental analysis provided above, all environmental impacts and mitigation measures would generally be similar for the Prescriptive Design Alternative compared with the proposed project. The Prescriptive Design Alternative would not create any new significant environmental impacts not previously analyzed in the RDEIR or require any new mitigation measures not analyzed in the RDEIR.

The Prescriptive Design Alternative would meet all of the project objectives and would be feasible. Overall, impacts of the Prescriptive Design Alternative would be very similar to the proposed project.

## 6.7.2 PRESCRIPTIVE DESIGN WITH A DOUBLE LINER ALTERNATIVE

### 6.7.2.1 DESCRIPTION OF THE ALTERNATIVE

This alternative was developed for the Gregory Canyon Landfill in response to comments received from the Regional Water Quality Control Board (RWQCB). to provide additional protection to groundwater resources in the area. This alternative would situate the waste containment unit five feet above the highest groundwater level. Therefore, this alternative would meet all requirements of the RWQCB and a variance would not be required for the engineered bottom design.

This alternative would include a double composite liner system instead of the single liner system included as part of the proposed project. The double liner system provides greater protection of groundwater resources in the area since it includes additional layers as part of the liner system making it less likely that a hole will develop in the liner system allowing the transport of leachates into groundwater in the area. A double liner composite system exceeds Regional Board requirements for a non-hazardous waste landfill such as the proposed project and is typically required only for hazardous waste landfills.

This alternative includes two alternative double composite liner systems as follows: Alternate A would include both an additional GCL layer and an additional geomembrane layer as part of the liner system; and Alternate B would be the typical double composite liner system required by the Regional Board for hazardous waste landfills. Alternate B would add four layers to the liner system compared with the proposed project including a GCL layer, a geonet or LCRS gravel layer, a 12 oz. cushion geotextile layer, and an additional 60 mil HDPE geomembrane layer, textured on both sides. Alternate B may include either a gravel or geonet layer for the liner system. The Alternate B double composite liner system is similar to Alternate A except that an additional drainage layer and cushion geotextile layer are included between the GCL and HDPE geomembrane layers of the liner system. The components, from top to bottom, for each double composite liner system being proposed are described below:

#### Alternate A

- 24-inch-thick protective soil cover
- 8 oz. geotextile
- 12 inch LCRS gravel layer
- 12 oz. cushion geotextile
- 60 mil HDPE geomembrane, textured both sides
- GCL
- 60 mil HDPE geomembrane textured both sides
- 24-inch-thick low permeability ( $1 \times 10^{-7}$ ) soil layer
- 8 oz. geotextile
- 12-inch-thick subdrain gravel layer

#### Alternate B

The Alternate B double composite liner system is similar to Alternate A except that an additional drainage layer and cushion geotextile are included between the GCL and HDPE geomembrane layers as noted below. The Alternate B double composite liner system, from top to bottom is as follows:

- 24-inch-thick protective soil cover
- 8 oz. geotextile
- 12 inch LCRS gravel layer
- 12 oz. cushion geotextile
- 60 mil HDPE geomembrane, textured both sides
- GCL
- Geonet or LCRS gravel (thickness varies)
- 12 oz. cushion geotextile
- 60 mil HDPE geomembrane, textured both sides
- 24-inch-thick low permeability ( $1 \times 10^{-7}$ ) soil layer
- 8 oz. Geotextile
- 12-inch-thick subdrain gravel layer

Exhibit 6-8 shows the liner details for each of the alternate double composite liners being considered.

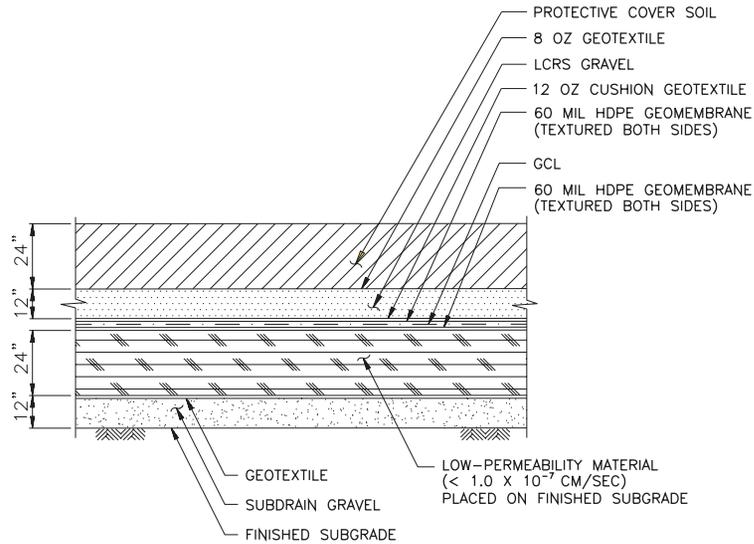
The lowest depths of excavation for the Prescriptive Design with a Double Liner Alternative range from between approximately 400 feet above mean sea level (amsl) at the northern toe of excavation to approximately 700 feet amsl at the southern toe. As with the Prescriptive Design with the Single Liner Alternative, this alternative would reduce the excavation as compared with the project. The quantity of excavated rock and soil material would be about 7.93 million cubic yards (mcy), of which 1.48 mcy would be used in the formation of the landfill bottom prior to placement of the containment system. This alternative would reduce total excavation for the project by approximately 3.5 mcy in comparison to the proposed project. Approximately 6.44 mcy of rock and soil material would be available from the refuse footprint area and 4.5 mcy would be available from the stockpile/borrow areas for use as final, intermediate and daily cover soil. The amount of cover material needed for daily, intermediate, and final cover is estimated at 12.7 mcy. As with the project, excavated rock would be processed on-site for use as cover material and the excess would be transported off-site.<sup>19</sup> In addition, as with the project, alternative daily cover (ADC) material would be used to supplement on-site cover material needs.

As with the project, the final elevation of the landfill would be approximately 1,100 amsl. The access road/bridge, ancillary facilities, borrow/stockpile areas, the desilting basins, internal haul roads, and all other operational and environmental control/monitoring features would be the same as the proposed project. This alternative would also include the relocation of the SDG&E transmission lines and towers in the same manner as the proposed project. To ensure a worst case environmental analysis, it is assumed that the First San Diego Aqueduct would remain in its current location as was assumed for the proposed project. The 1,313 acre dedication of open space would still occur. This alternative would utilize the same amount of acreage as the proposed project and would result in the same amount of above-ground disturbance as the proposed project.

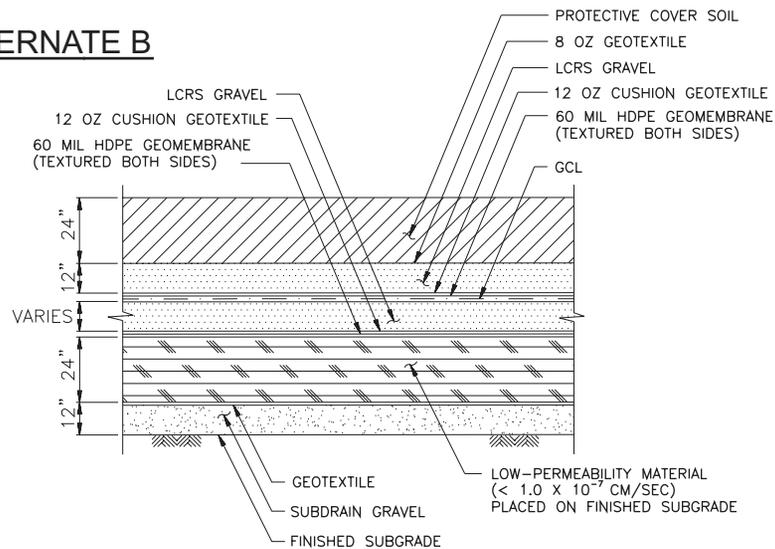
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<sup>19</sup> As with the project, the exportation and sale of aggregate material would require a Major Use Permit.

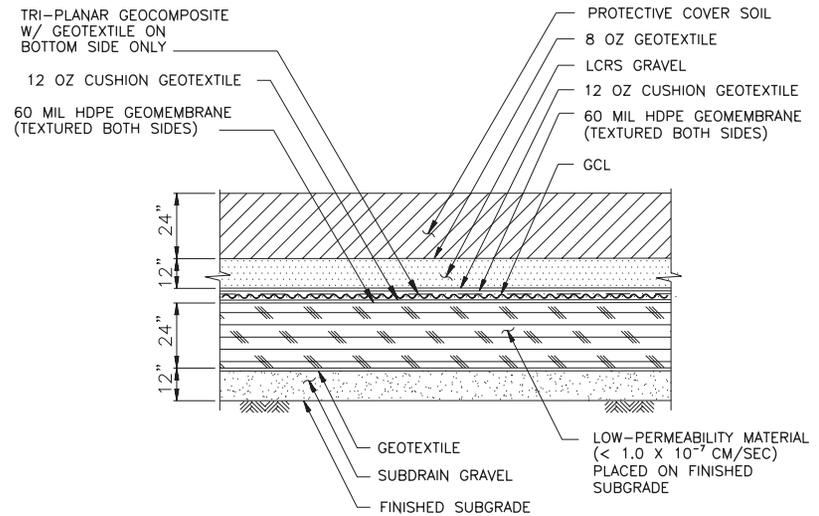
# ALTERNATE A



# ALTERNATE B



Alternate B (with Gravel Second Drainage Layer)



Alternate B (with Geocomposite Second Drainage Layer)



The overall capacity of the Prescriptive Design with a Double Liner Alternative would be reduced from 33.4 million tons to 31 million tons and would reduce the estimated site life from approximately 30 to 28 years. Exhibit 6-7 shows a cross-section of the bottom contours for this alternative compared with the proposed project. The daily solid waste intake for this alternative would be the same as for the project, with an average of 3,200 tons of solid waste per day and a maximum of 5,000 tons per day.

All design features and mitigation measures included as part of the proposed project would also be adopted for this alternative.

### **6.7.2.2 ENVIRONMENTAL IMPACTS**

#### Land Use and Related Planning

Land use impacts with this alternative would be similar to the proposed project. This alternative would be in conformance with the General Plan and Zoning Ordinance and with all regional plans and policies. As with the proposed project, this alternative would be compatible with surrounding land uses and would not result in any significant land use impacts. Mitigation measures for land use for this alternative would be the same measures as those for the proposed project.

#### Geology and Soils

Impacts from geologic hazards (earthquakes and ground shaking, erosion, rock falls and debris flows) would be similar to the proposed project. Measures to minimize these impacts to a level of insignificance, such as the use of gabion dams or other diversion structures to mitigate potential debris flows and removal of rock outcroppings, would remain the same as for the proposed project. Settlement of the landfill surface would be somewhat reduced for this alternative compared with the proposed project. The amount of the blasting that would need to be employed for this alternative would be somewhat reduced in comparison to the proposed project because of reduced excavation into bedrock. With implementation of the same project design features and mitigation measures, this alternative and the proposed project would both result in similar significant but mitigable impacts to both geology and soils. As with the proposed project, ADC materials would be required to supplement on-site cover material resources. Given the reduced excavation volumes, this alternative would require more efficient use of ADCs and a higher overall waste-to-soil ratio. The volume reduction from excavation would be obtained solely within the proposed landfill footprint and, as a result, potential impacts to above-ground resources would be similar to the proposed project and no mitigation for potential impacts to geologic hazards would be required.

#### Hydrogeology

With respect to potential impacts to hydrogeology during construction, excavation for this alternative would be above the piezometric surface, and, as a result, the amount of dewatering may be less than that required for the proposed project. However, construction engineering practices and controls for the proposed project would be employed so that no significant impacts to groundwater flow, direction, depletion, or quality would occur during construction. Therefore, hydrogeology impacts during construction for this alternative and the proposed project would be similar and no mitigation would be required.

As with the proposed project, this alternative would not result in any significant impacts to groundwater flow, direction, or depletion during operations. With this alternative, the waste containment system will be constructed at least five feet above the highest anticipated groundwater level thereby providing additional separation between groundwater resources and future refuse as compared with the project. In addition, this alternative includes a double rather than a single composite liner system. The two double liner systems being proposed add two to four additional layers of liners compared to the liner proposed as part of the project. These additional layers of liner substantially reduce the risk that a hole or tear in one of the layers of the liner system would permit leachate to be transported through the entire liner system. The Regional Board has determined that a double composite liner would be more protective of groundwater resources in the area.

The groundwater monitoring system for this alternative would be the same as the proposed project and would employ the same number of upgradient and downgradient groundwater monitoring wells. This alternative and the proposed project would both include a subdrain system. For both the proposed project and this alternative, in the unlikely event of a release from the landfill, remediation technologies would be employed by the operator under the Evaluation Monitoring Program (EMP) and Corrective Action Program (CAP) as required by regulations.

As discussed in detail in Section 4.3 of this EIR, design features and mitigation measures adopted for the proposed project would not result in any significant impacts to hydrogeology even without the additional groundwater protections included as part of this alternative.

Although with the design features and mitigation measures included as part of the proposed project, the project would not result in any significant impacts to hydrogeology in the area, this alternative is more protective of groundwater resources than the proposed project. The Regional Board has indicated that the combination of additional separation between the groundwater table and refuse and the double composite liner proposed in this alternative would provide additional protection of groundwater resources in the area.

#### Surface Hydrology

This alternative would adopt all of the project design features to minimize surface hydrology impacts to a level of insignificance that are also being adopted for the proposed project. Excavation in the river channel would be implemented upstream and downstream of the new bridge to maintain the 100-year flood elevations at or below existing levels. The proposed bridge structure would be founded on deep pile-supported foundations to protect against potential stream scour effects. Sediment and erosion would be controlled by using the same BMPs that are proposed as part of the project. As a result of the adoption of these design features, impacts of this alternative upon surface hydrology would be the same as the proposed project and no significant surface water impacts would occur.

#### Traffic and Circulation

Impacts to traffic and circulation associated with operation would be significant but mitigable for the Prescriptive Design with a Double Liner Alternative and for the proposed project. Project design features and mitigation measures for traffic and circulation would be the same for the Prescriptive Design Alternative and the proposed project. Regional traffic impacts would be somewhat greater than those under the proposed project due to the increase in VMT that could occur with the closure of the landfill two years earlier than the closure under the project

The Prescriptive Design with a Double Liner Alternative (as with the Prescriptive Design with a Single Liner Alternative) would result in less truck traffic than the proposed project during both the initial and periodic construction periods assuming that exportation of rock were to occur with the project.<sup>20</sup> During initial construction (9-12 months), this alternative would excavate 400,000 cubic yards less of soil and rock than the proposed project. As a result, during the initial construction period this alternative would reduce daily truck trips by 108 truck trips per day on and off site. During periodic construction this alternative would result in the excavation of 3.1 million cubic yards less of soil and rock than the proposed project. This would reduce daily truck trips associated with excavation activities by 104 truck trips a day.

However, during both initial and periodic construction this alternative would result in a slight increase in truck trips associated with the importation of additional materials needed for the double composite liner system. For both the Alternate A and Alternate B double liner system with the geonet rather than the gravel layer, this alternative would increase daily truck trips by less than one truck trip per day during the initial construction period. If Alternate B with the gravel rather than geonet layer were approved, this alternative would increase daily truck trips during the initial construction period by 28 truck trips per day. The gravel layer for Alternate B causes the principal increase in truck traffic for this alternative since very few additional truck trips would be needed to import the additional materials needed for Alternate A and Alternate B with the geonet rather than the gravel layer.

During periodic construction, the increase in truck traffic associated with the additional imported materials for this alternative would be substantially reduced since the gravel layer would be placed in the bottom of the landfill during the initial construction and not during the later periodic construction. It is currently anticipated that construction of the double composite liner system would occur periodically over an eight year period after the initial construction activities. As a result, each of the alternative double liner systems being proposed as part of this alternative would increase truck traffic during periodic construction by substantially less than one truck trip per day for the additional import materials needed.

When compared to the proposed project, this alternative would reduce truck trips during both initial and periodic construction. During initial construction this alternative would result in a reduction of 108 truck trips per day on and off site associated with the reduced excavation and would increase truck trips by no more than 28 truck trips per day for Alternate B with the gravel layer thereby resulting in a net savings of 80 truck trips per day. During periodic construction, this alternative would reduce daily truck trips by 104 truck trips a day due to the elimination of 3.1 million cubic yards of excavated material and would increase daily truck trips by less than one truck per day for imported materials needed for any of the double liner systems resulting in a net savings of approximately 103 truck trips per day when compared to the proposed project.

### Noise and Vibration

Noise impacts associated with the proposed project would be reduced with this alternative due to the elimination of 3.1 million cubic yards of excavation activities with associated excavation

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<sup>20</sup> The County has indicated that a Major Use Permit would be required for the exportation or sale of aggregate material. However, the analysis contained in the EIR provides a worst-case for each topical area. For example, for traffic, the worst-case would be the exportation of material as this would increase the number of trips while for aesthetics, the storage of material on site would be worst-case since this would maximize the use of the borrow/stockpile areas. The project has been designed to accommodate all excavated material on the project site.

equipment and less blasting due to the reduced excavation. Noise from landfill construction and operational activities would be reduced for this alternative but would be similar to the proposed project. Both the proposed project and this alternative would result in significant but mitigable construction and operational noise impacts. Although it is anticipated that less blasting would be employed with this alternative due to the substantial reduction in excavation, noise impacts from blasting would remain significant but mitigable for both this alternative and the proposed project. As with the proposed project, the heavy construction equipment would cross the existing low flow crossing once and remain in the landfill footprint area until the permanent bridge is complete when construction equipment will utilize the permanent bridge for access to the footprint area. Project design features and mitigation measures for noise would be the same for this alternative and the proposed project. The project's design and mitigation measures identified in Section 4.6.4 of this EIR would reduce construction and operational noise and vibration impacts from both the proposed project and this alternative to a level of less than significant. Noise from traffic on some residences would remain significant and unmitigable under this alternative as with the proposed project.

#### Air Quality and Health Risk

During construction, air quality and air toxics health risks from this alternative would be similar to the proposed project as both include construction of the landfill, bridge/access road and the landfill and ancillary facilities. Even though there would be some reduction in the amount of excavation and blasting, emissions from stationary and mobile heavy construction equipment would result in similar air emissions for this alternative and the proposed project and would result in significant and unmitigable PM<sub>10</sub> and NO<sub>x</sub> emissions. Project design features and mitigation measures for air quality and health risks during construction would be the same for this alternative and the proposed project.

Air quality and air toxics health risks during operations would be similar for this alternative and the proposed project. Both the project and this alternative would have the same daily average and maximum waste intake rate. As with the project, this alternative would include the landfilling of solid waste, the construction of future landfill cells, and the use of borrow/stockpile materials as well as future closure and post-closure maintenance activities. Emissions from waste-hauling vehicles, as well as stationary and mobile equipment, would result in similar air emissions for this alternative and the proposed project. This would result in similar air emissions for PM<sub>10</sub> and NO<sub>x</sub>. The generation of landfill gas for this alternative and the proposed project would be similar. The landfill gas collection and flaring system would be monitored throughout the operational life and during the mandated thirty-year post-closure maintenance period for this alternative and the proposed project. Potential impacts to health risks would be similar for this alternative and the proposed project. Therefore, no additional health risk impacts would occur with this alternative. Regional and long-term air quality emissions associated with VMT would be somewhat greater than those that would be generated by the proposed project due to the earlier closure of the landfill under this Alternative.

#### Agricultural Resources

Since the area of above-ground disturbance and the features of the project would remain the same for this alternative and the project, impacts to agricultural resources would also be similar to the proposed project and no impacts to agricultural resources would occur. No impacts to agricultural resources would occur from dust generation from either this alternative or the

proposed project. No mitigation for agricultural resources is required for this alternative or the proposed project.

### Biological Resources

Impacts to biological resources would be the same as with the proposed project since this alternative would result in the same amount of above-ground disturbed area, the same level of activity on the site, and the same use of the low flow crossing. Measures to minimize these biological impacts, such as restoration of habitat and acquisition of off-site habitat, would remain the same as for the proposed project. Impacts to listed sensitive plant and animal species would be significant but mitigable for this alternative and the proposed project. Mitigation measures for biological resources would be the same for this alternative and the proposed project.

### Ethnohistoric, Archaeological, and Paleontological Resources

Since the areas of above-disturbance would be the same for this alternative and the proposed project, impacts to Native American interests would be the same as with the proposed project. Mitigation measures for ethno-history and Native American interests would also remain the same for both projects. Based on traditional technical measures of air quality, noise and aesthetics, the impacts to Native American interests after mitigation are less than significant for both this alternative and the proposed project. However, the Pala Indians have indicated that any disturbances to Gregory Mountain and Medicine Rock would create unmitigable impacts. Their belief of significant impact is based on their intangible use in relationship to Gregory Mountain and Medicine Rock. Therefore, impacts to ethno-history and Native American interests would remain significant and unmitigable for this alternative and the proposed project.

As a result of the same amount of above-ground disturbance, impacts to archeological and historic sites would be similar to the proposed project and would be significant but mitigable. Project design features and mitigation measures for archeological and historic sites would be the same for both projects.

Impacts to paleontological resources would be significant but mitigable for this alternative and mitigation measures would be the same as for the proposed project.

### Aesthetics

This alternative would result in the same visual impacts to landform as for the proposed project since the final fill elevations would be the same. Visual impacts from the borrow/stockpile areas would also be the same since the design and use of these areas would not change. Project design features and mitigation measures for aesthetics would be the same for this alternative and the proposed project. Impacts to aesthetics would, therefore, remain significant and unmitigable for landform alteration associated with the landfill footprint. With the exception of landform alteration, this alternative and the proposed project would not result in any significant and unmitigable visual impacts.

### Socioeconomics

As with the proposed project, this alternative would not create significant impacts to socioeconomic issue areas, and no mitigation measures are required.

### Public Services and Utilities

Impacts to public services and utilities would be the same as the proposed project. There would be no change in project demand for water or for any other utility services. No mitigation measures for public services and utilities would be required for this alternative or for the proposed project. No significant impacts to energy conservation would occur with this alternative or the proposed project, and no mitigation would be required.

### Human Health and Safety

Potential impacts to human health and safety associated with the acceptance of household hazardous waste, litter generation, vector generation, and electromagnetic fields would be the same for this alternative and the proposed project. Project design features for human health and safety would be the same for both projects. The hazardous waste exclusion program, load-check in program, litter control program and vector control program would be implemented the same for both the proposed project and this alternative. Consequently, this alternative would not result in any additional impacts to human health or safety.

### Cumulative Impacts

Cumulative impacts of implementation of this alternative in conjunction with other related projects would be similar to the proposed project since the construction, operations, solid waste inflow rate and closure and post-closure maintenance for this alternative would be similar to the proposed project.

## **6.7.2.3 COMPARISON TO THE PROPOSED PROJECT**

Based upon the environmental analysis that has been completed, this alternative would reduce construction and operational noise, construction traffic and groundwater impacts of the proposed project when compared with the project. (For the project, these impacts are not identified as significant and unavoidable.) All other impacts of this alternative are similar to the proposed project.

Although this alternative would reduce initial construction traffic by approximately 80 trucks per day and periodic construction by approximately 103 trucks per day, both project traffic and cumulative traffic impacts would remain similar for this alternative and the proposed project. Project traffic impacts would remain significant and mitigable for both the proposed project and this alternative. Cumulative traffic impacts would remain significant and unmitigable for both the project and this alternative. While this alternative would also reduce construction noise associated with the project, the project's design and mitigation measures identified in Section 4.6.4 would reduce construction and operational noise and vibration impacts from both the project and this alternative to a level of less than significant. Noise from traffic on some residences would remain significant and unmitigable under both this alternative and the proposed project.

This alternative would result in less potential impacts to groundwater resources in the area than the proposed project due to the additional separation between the liner system and groundwater in the area and the double composite liner. However, as discussed in Section 4.3 of this EIR, design features and mitigation measures adopted for the proposed project would not result in any significant impacts to hydrogeology even without the changes being considered as part of this alternative. Nonetheless, this alternative would provide additional protection to groundwater

resources in the area by further minimizing the likelihood of groundwater contamination by leachate.

Although there would be some reduction in the amount of excavation and blasting with this alternative, emissions from stationary and mobile heavy construction equipment would result in similar air emissions for this alternative and the proposed project and would result in significant and unmitigable PM<sub>10</sub> and NO<sub>x</sub> emissions for both the proposed project and this alternative. All other environmental impacts would be similar for this alternative and the proposed project. This alternative does not create any new significant environmental impacts not previously analyzed in this EIR and in prior circulated drafts of this EIR. This alternative would meet all of the project objectives and is feasible. Overall, impacts from this alternative would be similar to the proposed project. However, this alternative would potentially provide greater protection of groundwater resources in the area than the proposed project.

## **6.8 ALTERNATIVES CONSIDERED BUT REJECTED**

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These alternatives were considered briefly but rejected for one or more reasons which became apparent after cursory review.

### **6.8.1 RECONFIGURATION OF THE LANDFILL FOOTPRINT IN ALTERNATE ON-SITE LOCATION**

This alternative would involve relocating the landfill footprint and ancillary facilities to another part of the Gregory Canyon site. The landfill design engineers examined the entire site to determine the most practical and least environmentally disruptive location for the landfill footprint and support facilities. The landfill is now proposed for the canyon area west of Gregory Mountain. This allows waste disposal to occur in a natural topographic “bowl” surrounded by higher elevations which block off-site views. Other locations on the site would not have the benefit of the natural topography to obscure off-site views.

If the landfill were to be located in the flat area of the site adjacent to the San Luis Rey River substantially greater visual impacts to travelers on Pala Road would be created, and, because of the alluvial geologic strata, much greater water quality impacts to the river and groundwater could result. Locations on the north side of Pala Road and in the southwest area of the site would require substantially greater grading than with the proposed location, to lower existing elevations and create the appropriate topography for landfilling. For these and other reasons, the landfill design engineers rejected other on-site locations and selected the canyon area as proposed.

### **6.8.2 RESIDENTIAL DEVELOPMENT ON THE SITE**

This alternative would permit the site to be developed with residences according to the Estate Development and Rural Residential land use designations. This alternative allows a minimum residential density of 2 to 40 acres per lot depending on slope. The 1,770-acre site would support about 44 to 885 residences at this density.

This alternative was rejected because the site is zoned and designated for Solid Waste Facilities. Residential uses may be possible as a temporary non-conforming use under the existing Solid Waste Facility designation, but the long-term intent of this site is for landfilling or recycling collection facilities. Since the land use designation and zoning were applied to the site as a result of Proposition C, a majority vote of the people would be required to change the designation to

one allowing residential uses. Not only would this be costly and time-consuming, but there is no assurance that such a vote would pass. Accordingly, this alternative was rejected as infeasible.

### 6.8.3 OTHER LOCATIONS IN NORTH SAN DIEGO COUNTY

San Diego County has a long history of trying to identify potential landfill sites in North San Diego County to increase the disposal capacity and meet the regional solid waste disposal needs. Several studies have been conducted over the years analyzing different sites to varying degrees. Numerous sites have been considered and rejected for a variety of technical, legal or land use compatibility issues.

Three separate studies, examining a total of 239 sites, were conducted between 1986 and 1992 (Edarra, 1986; SCS Engineers, 1987; Butler Roach Group, 1992). Sites were rejected for the following reasons.

- Close proximity to airports
- Located within a floodplain
- Located on an active (i.e., Holocene) fault
- Incompatible land use
- Presence of state or federally listed, threatened or endangered species which are not easily mitigated
- Located within 1,000 feet of any historic or archaeological site on the national or state register
- Located over an alluvial aquifer
- Located close to an existing or proposed major aqueduct
- Minimum capacity of 30 million cubic yards
- Natural protection (permeability of underlying soil and rock)
- Visibility of proposed operations from off-site locations
- Natural groundwater quality
- Depth to groundwater
- Evidence of faulting
- Aquifer characteristics
- Definition of hydrologic boundaries
- Sources of runoff to site
- Average annual precipitation
- Flood flow from 100-year flood
- Presence of rare, threatened, or endangered species
- Distance to structures from active fill area
- Condition of natural habitat
- Occurrence of cultural resources
- Current use of adjacent land
- Current land use on-site
- Land use along access road
- Availability to cover and liner soil
- Projected length of site life
- Amount of road-related costs
- Projected ability to acquire land
- Waste transport distance

The project site has been the subject of previous analyses for the development of a landfill. In 1990, the County of San Diego and Bureau of Land Management prepared a Draft EIR/EIS that included an evaluation of the Gregory Canyon site. Other landfill sites were also evaluated in the EIR/EIS including the Aspen Road site just west of Rainbow Valley and Interstate 15 near the Riverside County line, and the Blue Canyon site within the San Jose Del Valle region of northeastern San Diego County. The 1990 Draft EIR/EIS was never certified or acted on; however, the analysis led to a decision by the County Board of Supervisors to abandon the Blue Canyon site and add two other potential sites, Merriam Mountain and Gopher Canyon. The Gopher Canyon site was later eliminated from the County's search.

After considering environmental, political and social factors for all of the sites under consideration, the Aspen Road site, which was analyzed in the 1990 Butler Roach EIR, and the Merriam Mountain site, which was analyzed in the 1992 Butler Roach Supplemental North County Landfill Siting Study, remained. Therefore, these two sites were designated as tentatively reserved landfill sites in the County of San Diego Integrated Waste Management Plan, Countywide Siting Element (September 1996). During the preparation of the Countywide Siting Element, the Gregory Canyon site was also added by the County as a tentatively reserved landfill site, since the site was approved by public vote through the passage of Proposition C in 1994. Gregory Canyon is the subject of this EIR, and Merriam Mountain and Aspen Road are evaluated in Section 6.2.4 as potentially feasible alternatives.

#### **6.8.4 COMPOSTING**

The CIWMB defines composting as “a process of biological decomposition of solid organic debris, such as leaves, grass clippings and other organic materials commonly found in the municipal wastestream.” Bacteria and anaerobic microorganisms break down the organic portion of solid waste. Compost, the final product of the decomposition process, is the stable humus or soil-like product which can be used as a soil conditioner, mulch or fertilizer, depending on its physical properties.

According to San Diego County’s SRRE, approximately 27 percent of the County’s wastestream is composed of yard and wood wastes (County of San Diego 1995). Yard and wood wastes are a bulky portion of the solid wastestream that can be composted.

The short-term composting objective for the unincorporated County is to divert at least eight percent of the commercial and residential yard and wood wastestream to waste composting operations (County of San Diego 1992). The medium-term composting objective for the County is to divert at least 20 percent of the commercial and residential yard and wood wastestream to composting programs.

The CIWMB requires that to be classified as a composting operation the biological decomposition process must be controlled and performed at a permitted facility. The green waste is ordinarily shredded and the organic material is placed in elongate rows, called windrows, or in an enclosed vessel. The windrows must be aerated either by turning the piles regularly or through the use of an air distribution system. Humus can be produced in two to twelve month, depending on the process used. Land requirements range from 15 acres per 1,000 tons for in-vessel composting to 25 acres per 1,000 tons for windrow composting.

Methods for expanding compost markets are many and varied. Such methods can focus on increasing the use of yard waste compost through educational programs and procurement by government agencies, or by increasing the marketability of a facility’s specific compost through quality assurance testing and aggressive packaging.

Several factors influence markets for yard waste compost and the availability of local soil amendment consuming industries: public or private ownership/operation of the composting facilities, presence or lack of a profit-making incentive, the quality and quantity of available compost, and the local industries. Due to relatively high transportation costs, compost markets are usually restricted to local areas. Possible local markets include individual residents, nursery and landscaping industries, construction firms, public agencies, private institutions, soil amendment retailers and wholesalers, sod dealers, landfill operators, and farmers.

Siting an open windrow composting facility would require the avoidance of residential and other sensitive land uses due to high odor generation that is characteristic of open windrow (e.g., outdoor) composting facilities.

Due to large land requirements, market uncertainty, and inability to accommodate regional solid waste volumes or the entire solid waste stream, composting can only be regarded as a method of waste diversion that may be explored further by individual cities in small scale facilities in determining the appropriate methods for complying with AB 939, but is not considered to be a feasible alternative to the proposed project.

### **6.8.5 INCINERATION (REFUSE-TO-ENERGY)**

The refuse-to-energy transformation process uses municipal refuse as fuel for a conventional power plant. This alternative is currently used at several landfills in the Los Angeles area. There are two approaches, a mass-burn facility or a refuse-derived-fuel (RDF) facility. The mass-burn facility uses the refuse without any pre-processing. The RDF facility pre-processes the refuse before incineration to increase the combustible fraction of the refuse. The pre-processing may be accompanied by size reduction or pelletizing.

The process used to generate energy from the combustion of refuse is similar to the process of energy generation from the combustion of other fuels, in that the combusted fuel provides heat which is used to generate steam. The refuse is combusted at a temperature of approximately 2,200 degrees Fahrenheit. This heat generates steam in water-filled tubes in the walls of the combustion chamber and in other water-filled tubes over which the hot gases of combustion pass. A series of air pollution control devices are used to clean and cool the combustion gases before discharge to the atmosphere.

The thermal energy from the steam may be exported for direct uses such as space heating or converted into electricity through the use of a steam turbine and electric generator. Generated electricity is transferred from the steam turbine to the local utility grid system for distribution.

The process results in residual ash, which consists of the noncombustible items in the refuse (metal, aggregate, glass) and residues from the air pollution control equipment. As a result of reduced volume and weight of the ash as compared with raw refuse, refuse-to-energy technology prolongs landfill life. However, because of the residual waste, the waste-to-energy alternative cannot be considered a replacement to the landfilling of solid waste.

Incineration is highly controversial because of concerns about possible health effects associated with the air emissions and the ash component of the residue. Two local proposals to develop waste incineration, SANDER near Miramar Landfill and NCRRA Waste-to-Energy Plant at San Marcos Landfill, were denied due to public concern for health effects. Thus, permitting agency approval and public acceptance of this alternative is unlikely, and this alternative is not considered feasible.

### **6.8.6 WASTE TO METHANOL FACILITY**

The Pala Band of the Mission Indian Tribe reviewed a proposal for a private company to construct a waste to methanol facility on the Pala Reservation. The proposal is described in *Proposed Waste-to-Methanol Facility Regional Solid Waste Association Pala, California*, June 4, 1998, on file with the County DEH and DPLU. The Tribe declined to act on this proposal, and, at this time, there are no plans for the Tribe to construct a waste-to-methanol facility.

### **6.8.6.1 Description of the Alternative**

The proposal states that the site would be located on Tribal land in an area designated for industrial uses by the Tribe. Because a specific location is not known for this alternative, site specific impacts cannot be identified.

According to the proposal, the process involves the gasification of solids into synthesized gas, similar to natural gas, by exposing the solid material to indirect heat and steam within an oxygen-free closed loop reactor. Approximately 90 percent of the municipal waste is converted into methanol. The remainder is simultaneously converted to carbon charcoal and other inert inorganic material which is suitable for use as soil cement, landfill cover or trace element fertilizer.

Gasification is different from incineration because the waste is not exposed to direct flame. The waste is not burned because oxygen, a necessary element for combustion, is not permitted into the chamber. According to the proposal, it is baked in a zero oxygen oven, which prevents combustion and the harmful emissions associated with conventional waste incineration.

About 500 tons of pre-sorted wet solid waste per day would be processed. Waste material would be hauled to the facility by truck. The material would be ground, and metal would be magnetically removed. Material is then dried, and fed to the reactor.

A portion of the methanol created would be used to power the facility. The remainder would be sold for fuel. According to the proposal, there is an existing market for methanol for use as a fuel additive or substitute. Methanol is naturally produced from natural gas in Texas, Louisiana and Oklahoma. There is currently no production of transportation grade methanol on the west coast, which is the area of greatest demand.

Approximately 50 to 75 employees would be needed. The facility would operate 24-hour days, 333 days per year. Total development costs are estimated to be of \$36 to \$40 million.

This alternative would not have enough capacity to handle the quantity of waste generated in the North San Diego County subregion. As shown on Table 2-3, about 771,000 tpy of waste is currently landfilled from this subregion. The gasification facility could handle about 166,500 tons (500 tpd, 333 operating days per year), which is approximately 22 percent of the waste stream from the subregion. Additional disposal alternatives would still be required.

### **6.8.6.2 Environmental Impacts**

The facility would be located on Tribal land in an area designated for industrial land uses. Until a specific site for this facility is known, it is not possible to determine the significance of impacts associated with the physical location of the facility, such as geology, soils, hydrogeology or hydrology, noise, biological resources, or aesthetics.

Trucks would be used to transport the 500 tons of waste per day to the facility. Assuming eight ton truck capacity, that would result in approximately 63 truck trips per day, plus additional trips for employees and maintenance vehicles. While this is substantially less than the project, this alternative would only have capacity for 1/10 of the waste that the project would have (500 tons vs. 5,000 tons daily capacity for the project). Truck traffic would still be needed to dispose of the waste not accepted by this alternative. The net traffic counts would remain the same.

The proposal states that no air pollutants are emitted during the gasification process. Thus, air quality impacts would be associated only with the vehicular emissions.

It is assumed that whatever public utility needs are demanded could be provided by the existing service agencies, including wastewater treatment, water, electricity and fire and police protection.

## **6.9 SUMMARY AND THE ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

CEQA requires identification of an “environmentally superior alternative,” which is the one that would result in the least significant or fewest adverse environmental impacts while feasibly attaining most of the basic objectives of the proposed project. It is not uncommon for the No Project Alternative to be environmentally superior to a development project. In that case, CEQA Section 15126.6(e)(2) requires that if the No Project Alternative is identified as environmentally superior to the project the EIR shall also identify an environmentally superior alternative among the other alternatives.

This chapter provides sufficient information on the alternatives analyzed to compare the impacts from the alternative to the project impacts. The comparative merits of alternatives evaluated are shown in Table 6-6. The Waste Reduction and Recycling Alternative is not included in the table since this alternative still requires landfilling. Additional reduction may be difficult given the current recycling effort which requires jurisdictions to recover approximately 50 percent of their solid waste stream.

### No Project Alternative

The environmentally superior alternative, in comparison with the proposed Gregory Canyon Landfill project, would be the No Project Alternative, since the No Project Alternative would eliminate all significant impacts, both mitigable and unmitigable, related to the construction and use of the site as a landfill. Specifically, the No Project Alternative would eliminate the following unmitigable impacts: visual quality impacts from landform quality, impacts to Native American interests from development of a landfill in close proximity to Medicine Rock and Gregory Mountain and air quality impacts from on-site construction and operations.

Air quality impacts from waste decomposition would not occur on the site but would still occur at other sites used for waste disposal. Significant cumulative noise impacts to residences from traffic on SR 76 would still occur in the future as a result of planned development in the area. A traffic signal at the I-15/SR 76 interchange would still be warranted under future conditions without the project.

In comparison to the proposed project, the No Project Alternative would result in increased impacts to the following issues: significantly greater vehicle miles traveled (VMT) as local jurisdictions continue to transport their waste to locations outside the North County subregion, significantly greater impacts to regional air quality from the increased VMT, regional traffic and circulation issues, and significantly greater energy use from the increased VMT.

Overall, the No Project Alternative would be environmentally superior to the proposed project. However, the No Project Alternative would not attain any of the project objectives nor would it conform with the basic goals of Proposition C. In addition, this alternative will create significant and unmitigable air, traffic and energy use impacts. Because the No Project Alternative could

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**TABLE 6-6  
SUMMARY OF THE COMPARATIVE IMPACTS OF ALTERNATIVES**

	PROPOSED PROJECT (INCLUDES SDG&E EASTERN ALIGNMENT)	NO PROJECT	SDG&E WESTERN ALIGNMENT (INCLUDES PROPOSED LANDFILL)	REDUCED VISUAL	REDUCED AIR EMISSIONS	MERRIAM MOUNTAIN	ASPEN ROAD	OUT-OF COUNTY LANDFILLS (INCLUDES SOME WASTE-BY-RAIL)		PRESCRIPTIVE DESIGN ALTERNATIVES (INCLUDES SINGLE AND DOUBLE LINER)
Life Span/Capacity	30 years/ 33 million tons	None	30 years/33 million tons	11 years/10.8 million tons	30 years/7.06 million tons	40 years/40 million tons	21 years/21 million tons		Variable (estimated 30-117 years/ 28-700 million tons)	28 years/ 31 million tons
Meet Project Objectives	Yes	No	Yes	Partial	Does not satisfy most of Project objectives	Yes	Partial		No	Yes
Feasible	Yes	Yes	Yes	Yes	Yes	No	No		Yes	Yes
<b>ENVIRONMENTAL IMPACTS</b>										
Land Use	Significant but mitigable	No impact	Significant but mitigable	Significant but mitigable	Significant but mitigable	Unmitigable	Unmitigable		Significant but mitigable	Significant but mitigable
Geology and Soils	Significant but mitigable	No impact	Significant but mitigable; less impact than Project—debris flows and rockfalls	Significant but mitigable	Significant but mitigable; less impact than Project—smaller landfill footprint	Significant but mitigable; greater impact than Project—slope stability and landslides	Significant but mitigable		Significant but mitigable	Significant but mitigable
Hydrogeology	Significant but mitigable	No impact	Significant but mitigable	Significant but mitigable	Significant but mitigable; less impact than Project—smaller landfill footprint and smaller waste stream	Significant but mitigable	Significant but mitigable		Significant but mitigable	Significant but mitigable
Surface Hydrology	No impact	No impact	No impact	No impact	No impact; less impact than Project—smaller landfill footprint and smaller waste stream	No impact	No impact		No impact	No impact
Traffic and Circulation	Significant but mitigable	Greater regional impact than Project	Significant but mitigable	Significant but mitigable locally; greater regional impact than Project	Significant but mitigable locally; greater regional impact than Project	Significant but mitigable	Unmitigable		Greater regional impact than Project	Significant but mitigable
Noise and Vibration	Significant but mitigable for landfill construction and operation; unmitigable for traffic noise along SR 76 <sup>a</sup>	No impact	Significant but mitigable	Significant but mitigable	Significant but mitigable for construction and operation; unmitigable for traffic noise along SR 76	Significant but mitigable	Significant but mitigable; greater impact than Project—truck noise on access road		Significant but mitigable	Significant but mitigable for landfill construction and operation; unmitigable for traffic noise along SR 76 <sup>a</sup>
Air Quality and Health Risk	Unmitigable	Unmitigable; greater regional impact than Project	Unmitigable	Unmitigable; greater regional impact than Project	Unmitigable; greater regional impact than Project	Unmitigable; greater impact than Project—fugitive dust migration	Unmitigable		Unmitigable; greater regional impact than project	Unmitigable
Agricultural Resources	No impact	No impact	No impact	No impact	No impact	No impact	Significant but mitigable		No impact	No impact

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**TABLE 6-6 (CONTINUED)**  
**SUMMARY OF THE COMPARATIVE IMPACTS OF ALTERNATIVES**

	PROPOSED PROJECT (INCLUDES SDG&E EASTERN ALIGNMENT)	NO PROJECT	SDG&E WESTERN ALIGNMENT (INCLUDES PROPOSED LANDFILL)	REDUCED VISUAL	REDUCED AIR EMISSIONS	MERRIAM MOUNTAIN	ASPEN ROAD	OUT-OF COUNTY LANDFILLS (INCLUDES SOME WASTE-BY-RAIL)		PRESCRIPTIVE DESIGN ALTERNATIVE (INCLUDES SINGLE AND DOUBLE LINER)
Biological Resources	Significant but mitigable	No impact; no permanent dedication of open space	Significant but mitigable; greater risks to eagles than Project	Significant but mitigable	Significant but mitigable; less impact than Project—smaller area of disturbance	Significant but mitigable; impact less than Project—sensitive species	Significant but mitigable; impact less than Project—sensitive species and wildlife movement		Significant but mitigable	Significant but mitigable
Paleontological Resources	Significant but mitigable	No impact	Significant but mitigable	Significant but mitigable	Significant but mitigable	Significant but mitigable	No impact		Significant but mitigable	Significant but mitigable
Archaeological and Cultural	Significant but mitigable	No impact	Significant but mitigable	Significant but mitigable	Significant but mitigable	Significant but mitigable	Significant but mitigable		Significant but mitigable	Significant but mitigable
Ethnohistory & Native American Interests	Unmitigable	No impact	Unmitigable	Unmitigable	Unmitigable	No impact	Unmitigable; impact less than Project to Native American interests		No impact	Unmitigable
Aesthetics	Unmitigable	No impact	Unmitigable; greater impact than Project—views from SR 76	Significant but mitigable	Significant but mitigable	Unmitigable	Unmitigable		Significant but mitigable	Unmitigable
Socio-Economics	No impact	No impact	No impact	No impact	No impact	No impact	No impact		No impact	No impact
Public Services & Utilities Energy Conservation	No impact No impact	No impact Potentially significant	No impact No impact	No impact Significant but mitigable	No impact Significant but mitigable	No impact No impact	No impact No impact		No impact Potentially significant but mitigable	No impact No impact
Human Health and Safety	No impact	No impact	No impact	No impact	No impact	No impacts from household hazardous waste, vector generation and electromagnetic fields; greater impact than Project—litter generation	No impact		No Impact	No impact

<sup>a</sup> The project would result in significant and unavoidable noise impacts to residences along SR 76 from project generated traffic. Although project traffic would result in less than a 3 dBA increase, the impact is considered significant because of the existing degraded noise environment caused by existing traffic on SR 76. Please see Section 4.6 and Chapter 5 of this EIR for a detailed discussion.

Source: PCR Services Corporation, 2002

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not attain any of the project objectives and will create significant and unmitigable environmental impacts, this alternative is rejected, per the provisions of CEQA Guidelines Section 15126.6(c).

#### Reduced Air Emissions Alternative

As required by Section 15126.6(e)(2) of the State CEQA Guidelines, since the identified environmentally superior alternative is the No Project Alternative, an environmentally superior alternative among the other alternatives must be identified. This alternative is the Reduced Air Emissions Alternative, on a local but not on a regional and long-term basis. On a regional and long-term basis, the proposed Project is environmentally superior to the Reduced Air Emissions Alternative.

The Reduced Air Emissions Alternative would result in reduced environmental impacts to geological hazards due to the construction and operation of a 15-acre landfill footprint. Impacts to hydrogeology and surface hydrology would be less associated with the 15-acre landfill footprint and acceptance of a much smaller waste stream. Local traffic would be reduced by nearly 90 percent. Noise levels would be reduced at residences south of the project site. Visual quality impacts would be substantially reduced from the proposed project, although viewers on SR 76 would still have unobstructed views of the landfill working face. Mitigation (e.g., revegetation, edge plantings and roadside screening) would reduce these visual impacts below significance.

Local air quality impacts which are unmitigable associated with the proposed project would be reduced substantially (approximately 7.5 percent of the project), and would be in conformance with the state standards. Cumulative air impacts would still be significant and unmitigable, since the non-attainment status of the air basin means that any contribution must be considered significant. Unmitigable impacts to Native American interests would be slightly reduced because of the greater setback between the landfill footprint and Gregory Mountain and Medicine Rock, but would still remain unmitigable. Mitigable impacts to biological resources would be reduced. As with the proposed project, remaining impacts to biological resources would be mitigated to a less than significant level.

However, because of the smaller capacity of the Reduced Air Emissions, waste generated in northern San Diego County would need to be hauled greater distances to accommodate the 1,000,000 tons of waste projected to be generated annually in northern San Diego County between the years 2010 and 2015. Because the Reduced Air Emissions Alternative would have the ability to accept only approximately 74,000 tons of waste annually, the remaining 960,000 tons of waste generated each year in northern San Diego County would have to be disposed at other landfill sites. This alternative would create regionally significant and unmitigable air quality, traffic, and energy conservation impacts which would be greater than the proposed project.

This alternative also creates a risk that northern San Diego County will not have adequate disposal sites in the future capable of disposing of the 1,000,000 tons per year projected in Year 2014. Given the demonstrated difficulty in securing solid waste disposal sites in California, the lack of alternative North County sites with a general plan and zoning designation authorizing solid waste disposal, the increasing demand for solid waste sites caused by a growing population, and the inherent political and economic risks associated with reliance upon other counties for disposal of waste generated in northern San Diego County, there is an inherent risk that future

solid waste sites will not be available in northern San Diego County capable of disposing of its projected waste stream, if the Reduced Air Emissions Alternative is selected.

The Reduced Air Emissions Alternative would be feasible from an engineering design and construction viewpoint. However, the Reduced Air Emission Alternative would not meet the Project objectives of: (1) providing a Class III solid waste disposal facility that is locally available, cost effective, and provides a long-term solution (i.e., 25 years) for disposal of waste generated in North County jurisdictions; (2) increasing the overall capacity of the County solid waste system; or ; (3) providing an infrastructure facility necessary to support the long-term economic growth of the North County region. Since this alternative fails to achieve most of the Project objectives and would create significant and unmitigable impacts to Native American interests, traffic, air quality and energy conservation, this alternative is rejected in accordance with CEQA Guidelines Section 15126.6(c).

The proposed project's significant and unmitigable impacts include air quality, visual impacts to drivers and passengers utilizing Highway 76, impacts to Native American Interests, and impacts to residences along SR 76 from traffic noise. The proposed project's cumulatively significant air impact is caused principally by existing conditions and future growth projected in the San Diego County region. Although detailed noise, dust, air quality and visual studies did not demonstrate that the proposed project would have an impact upon Gregory Mountain or Medicine Rock, this EIR has concluded the impact on these two Native American resources is significant and unmitigable based upon the belief of the Pala Tribe that any disturbance of these resources would be significant and unmitigable. The proposed project's significant and unmitigable visual impacts are caused by the change in landform which will be viewed by vehicles utilizing Highway 76. However, as noted previously in this view impact will be relatively brief for the impacted drivers and passengers.

The Reduced Air Emissions Alternative would result in significant and unmitigable impacts to Native American interests. Although this alternative would reduce the regional and long-term air quality, traffic and energy use impacts when compared with the No Project Alternative, such impacts would be greater when compared with the proposed project. Viewed on a regional and long-term basis, the proposed project would therefore be environmentally superior to the Reduced Air Emissions Alternative.

The Prescriptive Design Alternatives with Single or with Double Liner would result in impacts similar to the project. While these alternatives would not reduce any of the impacts identified as significant and unavoidable with the implementation of the project, these alternatives would not create any new significant environmental impacts not previously analyzed in this EIR and in prior circulated drafts of this EIR. As with the project, these alternatives would meet all of the project objectives and are feasible. The Prescriptive Design with the Double Liner Alternative would potentially provide greater protection of groundwater resources in the area than the proposed project.