4.0 ALTERNATIVES TO THE PROPOSED PROJECT

4.1 ALTERNATIVES OVERVIEW

4.1.1 CEQA REQUIREMENTS

Pursuant to §15126.6(a) of the California Environmental Quality Act (CEQA) Guidelines, an Environmental Impact Report (EIR) shall describe a range of reasonable alternatives to the proposed project that would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the potentially significant environmental effects of the project, and evaluate the comparative merits of the alternatives. An EIR is required to include an analysis of a reasonable range of potentially feasible alternatives; it is not required to consider alternatives that are infeasible. CEQA also requires that the "No Project" alternative be evaluated and compared to the proposed project.

4.1.2 PROJECT OBJECTIVES

As stated above, pursuant to CEQA, one of the criteria for defining alternatives to the proposed project is the potential for an alternative to meet the project objectives. The objectives of the proposed Tajiguas expansion, as outlined in Section 1.4 of this EIR, are as follows:

• Provide approximately 15 years of additional reliable and cost-effective municipal solid waste disposal services for the residents of southern Santa Barbara County (County), and the Santa Ynez and Cuyama Valleys.

• Meet the minimum 15-year County disposal capacity requirements of the California Integrated Waste Management Act, Assembly Bill 939 (CIWMA [AB 939]) and the goals of the County's Integrated Waste Management Plan (CIWMP).

• Provide a well-managed municipal solid waste disposal facility to maximize the control necessary to assure the safe disposal of solid waste generated in southern Santa Barbara County and the Santa Ynez and Cuyama Valleys for an additional 15 years over currently permitted limits.

4.1.3 BACKGROUND

Currently, the Tajiguas Landfill receives for disposal an average 738 tons per day (tpd) of municipal solid waste and green waste. This waste originates in southern Santa Barbara County and the Cuyama Valley. Current operations at the landfill are described in detail in Chapter 2.0 - Project Description. The proposed project is designed to provide the County with additional disposal capacity at the Tajiguas Landfill. If approved, the project could extend the useful life of the landfill to the year 2020.
Disposal of waste at Tajiguas represents only one aspect of the County's system for managing and disposing of solid waste. Other elements of the County waste management program include:

- Source reduction
- Recycling
- Green waste recovery
- Environmentally safe transformation (e.g., waste-to-energy)

The proposed project addresses the disposal component of the County's waste management and disposal system.

To compare potential impacts of the proposed project with alternative approaches toward managing its waste stream, the County must make reasonable projections regarding the rate of population growth, the rate of waste disposal, areas where waste will be generated in the future, and other facilities (such as transfer stations) that will come on line in the future. In this respect, solid waste management facilities are unique, in that the waste stream they are designed to manage will continue to be generated, regardless of whether or not the County approves a particular proposal. As a result, the County must consider the most environmentally sound and cost-effective manner to manage that waste stream.

The purpose of the alternatives analysis is to consider a wide range of options for disposing of the solid waste stream, based on a stable set of assumptions regarding the County's solid waste management system. This set of assumptions, in turn, is based on the County's projection of what is reasonably expected to occur in the foreseeable future, based on current plans and consistent with available infrastructure and community service (see CEQA Guidelines, §15126.6(e)).

In this fashion, the EIR will provide a meaningful comparison of different approaches toward disposing of the County's solid waste. Also, the EIR will avoid the risk of misleading the public and decision-makers; it will not adopt assumptions that do not reflect what the County reasonably expects will occur in the future, or use different assumptions to evaluate different alternatives.

Therefore, to provide meaningful analysis, this alternatives discussion is based on a stable set of assumptions that reflect what the County reasonably expects will occur to its solid waste system during the life of the proposed project, without engaging in undue speculation. Accordingly, based on currently available information, the alternatives analysis is based on the following assumptions:

- County/cities meet 50 percent diversion rate required by Air Bill (AB) 939.
- County/cities continue their ongoing recycling, green waste and source reduction programs.
• Closure of Foxen Canyon Landfill, when it reaches its maximum disposal capacity.
• Continued operation of out-of-County landfills at their current permit limits and conditions.
• Continued operation of Lompoc, Santa Maria and Vandenberg Air Force Base landfills at their current permit limits and conditions.
• Continued operation of existing South Coast transfer station at its permit limit of 550 tpd.
• South Coast population growth of 0.6 percent per year; Santa Ynez Valley population growth of 0.8 percent per year, for a weighed average growth rate of 0.62 percent per year.

4.1.4 BASIS OF ALTERNATIVES ANALYSIS
Currently, the Tajiguas Landfill receives for disposal an average 738 tpd of waste that is generated in southern Santa Barbara County and the Cuyama Valley. When the Foxen Canyon Landfill closes and is replaced with a transfer station, Tajiguas also will accept an additional average 109 tpd of waste generated in the Santa Ynez Valley and previously disposed of at the Foxen Canyon Landfill. For the 15-year operational period of the proposed project, the County anticipates that, overall, the amount of waste landfilled at Tajiguas will increase at a rate of 0.62 percent per year, consistent with projected population growth.

The County anticipates that the existing South Coast Transfer Station will continue to operate within its present permitted capacity. The County has not proposed to site a new transfer station. Whether a new transfer station might come on line to replace or augment the existing transfer station is a matter of speculation. Regardless of whether the County constructs a new transfer station, waste will continue to be generated, and the County will need to secure landfill capacity to dispose of that waste. This alternatives analysis assumes that the County continues to transport waste using the existing transfer station system. Thus, the analysis focuses on impacts of taking this waste stream to other new or existing landfills (either in-County or out-of-County), and on different configurations of an expanded Tajiguas Landfill.

The County Board of Supervisors has made a policy decision regarding the potential expansion of the existing South Coast Transfer Station. The Board determined that an expansion would be a "... disfavored land use for the site and could not be constructed without inordinate delays and expense" (Santa Barbara County, 1998d). Therefore, to transfer all 1,500 tpd of waste that is permitted to be disposed of at the Tajiguas Landfill, a new in-County transfer station would be required, either to augment or replace the 550 tpd capacity at the existing South Coast Transfer Station.
With the existing waste transport system for southern Santa Barbara County and the City of Santa Barbara, this analysis assumes that up to 550 tpd of municipal solid waste and green waste can be transported to Tajiguas from the South Coast Transfer Station, with up to 950 tpd direct-hauled to Tajiguas from residential and commercial collection routes (point of origin). This compares to the current average 302 tpd received at the South Coast Transfer Station and the total average 738 tpd received at the Tajiguas Landfill. However, because the County must design for and address potential peaks, this alternatives analysis is based on the peak permitted capacities of both the South Coast Transfer Station and Tajiguas Landfill. The distance from the existing South Coast Transfer Station to Tajiguas is approximately 21 miles. The distance from the center of the City of Santa Barbara to Tajiguas is defined as 26 miles.

Waste from the South Coast Transfer Station is transported the 21 miles to Tajiguas in transfer trucks that have an average capacity of 20 tons. Assuming the maximum 550 tpd the transfer station is permitted to receive is transported to Tajiguas, approximately 28 trips by transfer truck would be required. Waste that is direct-hauled to Tajiguas is transported an average 26 miles in packer trucks and roll-off trucks (hereafter referred to as collection trucks) with an average capacity of 8 tons. Assuming 950 tpd of the total 1,500-tpd capacity of the landfill is transported to the landfill by packer truck and roll-off truck, approximately 119 trips would be required.

4.1.5 SELECTION OF ALTERNATIVES TO BE EVALUATED
Pursuant to §15126.6 of the CEQA Guidelines, the following project alternatives were defined and are evaluated in the following sections based on their relative ability to meet the objectives of the proposed project, and to eliminate or reduce potentially significant environmental impacts:

- Use of another, existing, in-County landfill.
- Development of a new in-County landfill.
- Use of one or more existing out-of-County landfills.
  - Development of a new Transfer Station.
  - Use of rail haul.
- Alternative solid waste management technologies.
- Larger Project alternative.
- Reduced Project alternative.
- No Project alternative.

(1) The Transfer Station was evaluated under Negative Declaration 95-ND-05.
These alternatives are addressed in detail in the sections that follow. An overview of potential impacts to selected resource areas is provided in Table 4-1. The table compares potential impacts on individual resource areas for the various alternatives with the impacts of the proposed project.

4.2 IN-COUNTY WASTE DISPOSAL ALTERNATIVES

Evaluation of in-County waste disposal alternatives included assessment of: (1) the potential to divert the disposal of waste from Tajiguas to one or more other existing in-County landfills; (2) potential locations for siting a new landfill within the County; (3) potential for a 25-year expansion of the Tajiguas Landfill in lieu of the proposed 15-year expansion (Larger Project alternative); and (4) potential for a 10-year expansion of Tajiguas in lieu of the 15-year proposed project (Reduced Project alternative). These evaluations are described in the following sections.

Independent of preparation of this EIR, the County Department of Public Works has begun the process of conducting its own Countywide Landfill Siting Study. The study is seeking to identify a site of at least 250 acres that could accommodate a 30- to 50-year municipal solid waste landfill that could be utilized by all jurisdictions in the County.

4.2.1 EXISTING LANDFILL SITES

Existing Class III landfills and transfer stations in the County and the larger Southern California region are shown in Figure 4-1; Details of facility operations are shown in Table 4-2, which includes facility owner/operator, permitted and daily throughput, permitted total capacity and reported remaining capacity. The table also provides approximate driving distance from the South Coast Transfer Station to each of the other landfills and transfer stations in the region. These distances range from 21 miles (to the Tajiguas Landfill) to 166 miles (to the Taft Landfill).

As shown in Table 4-2, there are four permitted public landfills in the County: the Tajiguas and Foxen Canyon Landfills (operated by the County), the City of Lompoc Landfill (operated by the City of Lompoc) and the City of Santa Maria Landfill (operated by the City of Santa Maria). In addition, there is a federally operated landfill at Vandenberg Air Force Base (AFB). Each of these landfills was considered to determine if a reasonable alternative would be to use one or more of them for disposal of waste in lieu of the proposed expansion of Tajiguas. It was determined that there is not currently sufficient capacity in the County to accept waste that would go to Tajiguas during the 15-year life of the proposed project.
## TABLE 4-1
PROPOSED PROJECT AND ALTERNATIVES MATRIX

<table>
<thead>
<tr>
<th>ALTERNATIVE</th>
<th>RESOURCE AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Air Quality (Health)</td>
</tr>
<tr>
<td>PROPOSED PROJECT</td>
<td>★</td>
</tr>
<tr>
<td>NO PROJECT</td>
<td>+</td>
</tr>
<tr>
<td>NEW IN-COUNTRY LANDFILLS</td>
<td></td>
</tr>
<tr>
<td>Puente East</td>
<td>+</td>
</tr>
<tr>
<td>Lompoc</td>
<td>+</td>
</tr>
<tr>
<td>Cat Canyon West</td>
<td>+</td>
</tr>
<tr>
<td>Graciosa North</td>
<td>+</td>
</tr>
<tr>
<td>Shuman</td>
<td>+</td>
</tr>
<tr>
<td>Site 3-6</td>
<td>+</td>
</tr>
<tr>
<td>Site 6-8</td>
<td>+</td>
</tr>
<tr>
<td>Site 6-9</td>
<td>+</td>
</tr>
<tr>
<td>Site 13-1</td>
<td>+</td>
</tr>
</tbody>
</table>

**EXISTING LANDFILL SITES**

| Foxen Canyon(1)           | N/A                            | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Lompoc(2)                 | N/A                            | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Santa Maria               | +                              | U   | U   | U   | U   | U   | U   | U   | U   | U   | U   | U   |
| Vandenberg AFB(3)         | N/A                            | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

**LARGER PROJECT(4)**

| +                          | +                              | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   |

**REDUCED PROJECT(4)**

| -                          | -                              | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   |

**EXISTING OUT-OF-COUNTY DISPOSAL SITES**

| Toland Road(5)            | N/A                            | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Calabasas(6)              | N/A                            | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Chiquita Canyon           | +                              | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   |

**NEW COUNTY TRANSFER STATION**

| South Coast               | +                              | +   | +   | =   | +   | =   | +   | =   | +   | -   | +   | -   |
| Goleta/Santa Barbara      | +                              | +   | +   | +   | +   | =   | +   | =   | +   | -   | +   | -   |
| RAIL HAUL(7)              | N/A                            | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

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(1) This alternative is not feasible. The Foxen Canyon Landfill is expected to close before the proposed project begins.
(2) This alternative is not feasible. It is policy to dispose of waste generated only within the Lompoc watershed.
(3) This alternative is not feasible; the Vandenberg AFB Landfill is limited to use by the U.S. Air Force.
(4) Operational impacts would be comparable to the proposed project. However, because the larger project would disturb more land and occur over a longer period of time, impacts are considered to be greater than with the proposed project. Because the reduced project would disturb less land and occur over a shorter period of time, impacts are considered to be less than with the proposed project.
(5) This alternative is not feasible. The Toland Road Landfill is permitted to accept municipal solid waste only from Ventura County and from the City of Carpenteria in Santa Barbara County.
(6) This alternative is not feasible. The Calabasas Landfill is permitted to accept waste only from Los Angeles County and from Thousand Oaks and Westlake Village in Ventura County.
(7) This alternative is not feasible. There are no operating rail-haul landfills in Southern California.

- Alternative impacts similar to the proposed project.
- Alternative impacts less than the proposed project.
- Alternative impacts greater than the proposed project.
- Unknown, as detailed studies are not warranted at this time.
- Class I impact - Unavoidable significant impact
- Class II impact - Significant mitigable impact
- Class III impact - Potentially adverse, not significant
- Not applicable
## TABLE 4-2

**EXISTING MUNICIPAL SOLID WASTE LANDFILLS AND TRANSFER STATIONS IN THE REGION**

<table>
<thead>
<tr>
<th>NAME</th>
<th>OPERATOR/OWNER</th>
<th>SPECIFICATIONS</th>
<th>APPROXIMATE DRIVING DISTANCE FROM SANTA BARBARA COUNTY TRANSFER STATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Waste Receipt (tons/day)</td>
<td>Site Capacity (cubic yards)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Permitted</td>
<td>Actual</td>
</tr>
<tr>
<td><strong>MUNICIPAL SOLID WASTE LANDFILLS</strong></td>
<td></td>
<td><strong>(2)</strong></td>
<td><strong>(3)</strong></td>
</tr>
<tr>
<td>Santa Barbara County</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tajiguas Landfill</td>
<td>County of Santa Barbara Public Works Department</td>
<td>1,500</td>
<td>738</td>
</tr>
<tr>
<td>City of Lompoc Landfill</td>
<td>City of Lompoc Public Works Department</td>
<td>500</td>
<td>150</td>
</tr>
<tr>
<td>City of Santa Maria Landfill</td>
<td>City of Santa Maria</td>
<td>740</td>
<td>375</td>
</tr>
<tr>
<td>Foxen Canyon Landfill</td>
<td>County of Santa Barbara Public Works Department</td>
<td>212</td>
<td>80</td>
</tr>
<tr>
<td>Vandenberg AFB Landfill</td>
<td>U.S. Department of the Air Force</td>
<td>400</td>
<td>50</td>
</tr>
<tr>
<td><strong>San Luis Obispo County</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Paso Robles Landfill</td>
<td>City of Paso Robles</td>
<td>250</td>
<td>90</td>
</tr>
<tr>
<td>Cold Canyon Landfill</td>
<td>Cold Canyon Landfill, Inc.</td>
<td>750</td>
<td>399</td>
</tr>
<tr>
<td>Chicago Grade Landfill</td>
<td>Chicago Grade Landfill, Inc.</td>
<td>500</td>
<td>100</td>
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<tr>
<td><strong>Los Angeles County</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Calabasas Sanitary Landfill</td>
<td>County of Los Angeles Sanitation Department</td>
<td>3,500</td>
<td>1,650</td>
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<tr>
<td>Sunshine Canyon/North Valley Landfill(5)</td>
<td>Allied Waste</td>
<td>4,400</td>
<td>0</td>
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<tr>
<td>Sunshine Canyon SLF County Extension</td>
<td>Allied Waste</td>
<td>6,600</td>
<td>4,212</td>
</tr>
<tr>
<td>Scholl Canyon Landfill</td>
<td>County of Los Angeles Sanitation District</td>
<td>3,400</td>
<td>1,510</td>
</tr>
<tr>
<td>Chiquita Canyon Landfill</td>
<td>Republic Services of California I, LLC</td>
<td>6,000</td>
<td>3,293</td>
</tr>
<tr>
<td>Bradley Landfill West and West Extension</td>
<td>Waste Management, Inc. - Bradley LF &amp; Miss</td>
<td>10,000</td>
<td>4,961</td>
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<tr>
<td><strong>Ventura County</strong></td>
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<tr>
<td>Simi Valley Landfill(6) &amp; Recycling Center</td>
<td>Waste Management of California</td>
<td>3,000</td>
<td>2,276</td>
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<tr>
<td>Toland Road Landfill</td>
<td>Ventura Regional Sanitation District</td>
<td>1,500</td>
<td>1,500</td>
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<td><strong>Kern County</strong></td>
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<tr>
<td>Taft Landfill</td>
<td>County of Kern Waste Management Department</td>
<td>419</td>
<td>74</td>
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<td><strong>TRANSFER STATIONS</strong></td>
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<tr>
<td>Santa Barbara County</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Santa Barbara County Transfer Station</td>
<td>County of Santa Barbara Transfer Station</td>
<td>550 tpd(7)</td>
<td>302 tpd</td>
</tr>
<tr>
<td>Ventiucopa Transfer Station</td>
<td>County of Santa Barbara Public Works Department</td>
<td>40 cy</td>
<td>40 cy</td>
</tr>
<tr>
<td>New Cuyama Transfer Station</td>
<td>County of Santa Barbara Public Works Department</td>
<td>99 cy(7)</td>
<td>99 cy(7)</td>
</tr>
<tr>
<td>Health Sanitation Services</td>
<td>Health Sanitation Services</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td><strong>Ventura County</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold Coast Recycling Facility</td>
<td>Gold Coast Recycling, Inc.</td>
<td>440 tpd</td>
<td>300</td>
</tr>
<tr>
<td>Del Norte Regional Recycling &amp; Transfer</td>
<td>BLT Enterprises of Oxnard, Inc.</td>
<td>2,779 tpd</td>
<td>965</td>
</tr>
</tbody>
</table>

(1) The remaining capacity of the landfill as reported by the operator, per CIWMB (2001), unless otherwise noted.
(2) Reported by SWUD, as of June 11, 2001.
(3) Per SWUD, as of September 26, 2001.
(4) Based on revised site capacity.
(6) Simi Valley Landfill scheduled to close in 2004.
(7) tpd = tons/day; cy = cubic yards.
(8) N/A = not applicable.
4.2.1.1 Foxen Canyon Landfill
On July 8, 1997, the Santa Barbara County Board of Supervisors (Board) authorized the County Public Works Department to implement the Santa Ynez Valley Waste Management Plan to:
(1) modify the Foxen Canyon Landfill within the existing footprint to obtain additional capacity, and (2) build a transfer station within the landfill site. The landfill is estimated to close within 2 years. At that time, waste from the Foxen Canyon wasteshed (primarily the Santa Ynez Valley) will be disposed of at the Tajiguas Landfill.

Based on Board's approval of the Foxen Canyon Transfer Station, there are no plans for future expansion of the Foxen Canyon Landfill. However, further expansion of the Foxen Canyon Landfill would be expected to have similar impacts compared to the Tajiguas expansion project in all areas except traffic. The environmental documents prepared for the Santa Ynez Valley Waste Management Plan (90-EIR-14, 97-SD-02) identified main improvements to Foxen Canyon Road that would be necessary if transfer trucks in a volume comparable to that going to Tajiguas were required. In this respect, impacts would be greater for traffic and other resource areas that would be affected by the road improvements.

4.2.1.2 Lompoc Landfill
The City of Lompoc Landfill is a permitted, active landfill. As shown in Table 4-2, its permitted daily limit is 500 tpd, and its daily average disposal rate is 150 tpd.

Based on personal communication with Claudia Stein, Solid Waste Superintendent for the City of Lompoc, the Lompoc Landfill has the capacity to accept waste for another 47 years. Further, the City does not have plans to either increase the daily disposal rate or expand the disposal capacity of the landfill. The City Council wishes to protect the value of the landfill air space for the City and the Lompoc wasteshed (Stein, 2000).

Further, according to Marlene Demery, Lompoc Community Services Director, the City previously has made it known that it would not accept waste from the Tajiguas Landfill wasteshed (Demery, 2000). As a result, transport of any portion of Tajiguas waste to the Lompoc Landfill is not feasible.
4.2.1.3 Santa Maria Landfill

The City of Santa Maria Landfill is a permitted, active landfill. As shown in Table 4-2, its permitted daily capacity is 740 tpd, and it receives an average 375 tpd. At that rate, the landfill has capacity to 2017. A process to permit an expansion of the landfill within the existing landfill property is in process. At the current waste disposal rate of 375 tpd, the expansion provides capacity to 2017 (Schmaeling, 2001). To provide additional capacity, a subsequent expansion would be necessary. There would not be adequate capacity within the existing landfill property to accept Tajiguas waste; it would be necessary to purchase adjacent farmland (Zhao, 2000).

The Santa Maria Landfill currently accepts municipal solid waste from the unincorporated northern Santa Barbara County area, as well as the City of Santa Maria. It could take waste from other areas, as well (Zhao, 2000). However, as noted above, under its current permit, the landfill has the daily capacity to accept an additional approximately 365 tpd over its current average disposal rate.

Therefore, this facility alone does not have the daily capacity to handle waste diverted from Tajiguas. For the County to dispose of all Tajiguas waste at this landfill, the County would need to reach an agreement with the City of Santa Maria. The agreement would need to address: (1) revising the landfill’s permit to increase the daily capacity of the landfill; and (2) committing air space for the County’s long-term disposal needs.

Based on the total capacity of the existing landfill, and assuming a permitted increase in its daily capacity, diversion of all Tajiguas waste could be accommodated for a period of approximately 9 years. At that time, the Santa Maria Landfill would reach capacity, and another disposal site would be required. This disposal site would need to accommodate waste from both the Tajiguas and Santa Maria watersheds. This potentially could be accomplished by expanding the Santa Maria landfill onto adjoining property and the City of Santa Maria has developed specific plans for such expansion. The California Integrated Waste Management Board (CIWMB) recently concurred on permitting the expansion (Schmaeling, 2001). When the permit is issued, the Santa Maria Landfill will have a design capacity of 13,998, 400 cubic yards and a permitted area of approximately 290 acres.

The City has not updated site-specific analysis of the biological, cultural or other resources that would be affected by expanding the Santa Maria Landfill outside the current limits of the site. For this reason, it is not known if expanding the landfill may have significant effects to biological, cultural or other resources, based on the Santa Barbara County Thresholds and Guidelines.
Manual. Based on the recently prepared addendum to the Santa Maria Regional Landfill Site Facility Permit EIR (March 2001), no significant impacts other than those previously identified in the EIR would occur under City of Santa Maria Significance Criteria.

The Santa Maria Landfill is approximately 49 miles from the Tajiguas landfill and 70 miles from the South Coast Transfer Station. Therefore, a significant increase in vehicle miles traveled would be required to dispose of municipal solid waste generated in southern Santa Barbara County at the Santa Maria Landfill rather than at the Tajiguas Landfill. This increase in vehicle miles would have the potential to result in increased waste disposal costs and other transportation-related impacts, primarily air quality. Based on the increased distance that waste would be transported prior to disposal, transportation-related emissions would be approximately three times greater if waste generated in the South County were hauled to the Santa Maria Landfill rather than to the Tajiguas Landfill.

The Santa Maria Landfill is approximately 34 miles from the designated waste generation area of the Santa Ynez Valley and approximately 30 miles from the Foxen Canyon Transfer Station, which will be located on the site of the closed Foxen Canyon Landfill. This compares to the Tajiguas Landfill, which is approximately 23 miles from the designated waste generation area of the Santa Ynez Valley and approximately 27 miles from the Foxen Canyon Transfer Station. Therefore, a moderate increase in vehicle miles traveled would be required to dispose of waste generated in the Santa Ynez Valley at the Santa Maria Landfill rather than at the Tajiguas Landfill. This increase in vehicle miles would have the potential to result in increased waste disposal costs, vehicular emissions and other transportation-related impacts.

4.2.1.4 Vandenberg Air Force Base Landfill

The Vandenberg AFB Landfill has a permitted peak operating throughput limit of 400 tpd (50 tpd average), less than the 1,500 tpd capacity that would be required to replace Tajiguas Landfill capacity (see Table 4-2). Therefore, this landfill alone does not have the daily capacity to handle waste diverted from Tajiguas. For the County to dispose of waste at the Vandenberg AFB Landfill, the County would need to reach an agreement with the United States Air Force. The agreement would need to address both: (1) revising the landfill's permit to increase the daily capacity of the landfill; and (2) committing air space capacity for the County's long-term disposal needs.

The Vandenberg AFB Landfill is approximately 37 miles from the Tajiguas Landfill and 58 miles from the South Coast Transfer Station. Therefore, a significant increase in vehicle miles traveled
would be required to dispose of waste generated in the South County at the Vandenberg AFB Landfill rather than at the Tajiguas Landfill. This increase in vehicle miles would have the potential to result in increased waste disposal costs, vehicular emissions and other transportation-related impacts. Other impacts associated with expanding this landfill would be similar to the proposed Tajiguas expansion project.

Based on personal communication with personnel at Vandenberg AFB, at its current disposal rate, the Vandenberg AFB Landfill has the capacity to accept waste until 2084. There are no plans to expand the facility. The Vandenberg AFB Landfill is limited to use by the United States Air Force, and it does not accept waste from other jurisdictions. Any decision for the County or other entity to use the Vandenberg AFB Landfill would not be made at the base level; it would be made at the Air Force level, in Washington, D.C. (Kamei, 2000). As a result of the above, disposal of all or part of Tajiguas waste at the Vandenberg AFB Landfill is not a feasible alternative.

4.2.2 POTENTIAL NEW LANDFILL SITES
The CEQA Guidelines require evaluation of a reasonable range of alternatives to a proposed project to determine if significant impacts of the proposed project can be avoided or substantially reduced. Only alternatives that would avoid or reduce any of the significant impacts of the proposed project need to be considered in the EIR.

4.2.2.1 Landfill Siting Considerations
4.2.2.1.1 California Code of Regulations Title 27
The California Code of Regulations (CCR) Title 27 provides siting requirements for new and expanded Class III landfills, including:

- Landfill footprint must be a distance of at least 200 feet from any known Holocene fault.
- Landfill site must be a distance of at least 10,000 feet from runways used for turbojet aircraft and at least 5,000 feet from runways used solely by piston aircraft.
- Landfill site must not be within a 100-year floodplain (as defined on National Flood Insurance Program Flood Insurance Rate Maps).
- Landfill footprint must be outside known areas of shallow groundwater. Before a new landfill can be constructed, geotechnical studies are required to confirm that waste would not be disposed of within 5 feet of the highest anticipated groundwater level.
• Landfill footprint must be outside areas known to have moderate or high potential for liquefaction. (Lands with moderate or high potential for liquefaction generally correspond with lands that have shallow groundwater.)

4.2.2.1.2 County Siting Criteria
In addition to CCR Title 27 requirements for landfill siting, the County Solid Waste Utilities Division (SWUD) has used the following criteria to locate potential sites for the Tajiguas Landfill expansion:

• Be located on land that is not susceptible to liquefaction.
• Be consistent with applicable General Plan and current and proposed land uses.

The existing Tajiguas Landfill and the proposed project conform to the above and to other requirements of CCR Title 27 and to County siting criteria. The Tajiguas Landfill is about 4 miles from any known Holocene fault, and the onsite bedrock soils have very low potential for liquefaction. At its closest point, Tajiguas is more than 16 miles west of the Santa Barbara Airport and more than 10 miles south of the Santa Ynez Airport. Tajiguas is not located within a 100-year flood plain. The existing Tajiguas Landfill has not and the proposed project would not cause impairment to beneficial uses of waters of the state and are consistent with the County General Plan and current and proposed land uses. For further information regarding water resources and the consistency of the Tajiguas Landfill with County land use policies, see Section 3.3 - Water Resources and Section 3.7 - Land Use.

4.2.2.2 North County Siting Study
As part of the County's effort to site a new Class III sanitary landfill in 1992, a siting study was sponsored by the County Public Works Department, SWUD. This North County Landfill Siting Study was conducted to evaluate potential sites for a new Class III sanitary landfill for the County of Santa Barbara and City of Santa Maria. The study was conducted as a collaborative effort by the County and the City of Santa Maria, and involved a Public Advisory and Steering Committee, and a Technical Advisory Committee. This study, the Preliminary Assessment of Alternative Landfill Sites: North County Landfill Facility Siting Process was completed June 3, 1993.

Twenty-two preliminary sites were evaluated, through review of United States Geological Survey (USGS) topographic maps, geologic maps, archaeological maps, independent research, County planning documents and aerial reconnaissance. Each site was compared to the following regulatory and nonregulatory siting criteria to disclose potential flaws and environmental issue areas in need of further analysis:

• Regulatory Criteria
- Flooding potential
- Bio/botanical resources
- Depth of groundwater
- Slope stability and seismicity
- Proximity to water supply
- Underlying soil permeability
- Proximity to airport runway

- Nonregulatory Criteria
  - Site visibility
  - Long-term capacity
  - Cost of transport
  - Access and traffic impacts
  - Prime agricultural soils

As a result of the preliminary selection process, eight sites met the criteria, five sites potentially met the criteria, and nine sites showed regulatory fatal flaws and were eliminated from further consideration. Based on the criteria employed for this analysis, Table 4-3 provides a summary of selected site characteristics for the five sites that met the preliminary screening criteria of the study. The sites are shown in Figure 4-2. As shown, they are generally located in the northern portion of the County, between Los Alamos and Casmalia.

The five potential alternative landfill sites identified as part of a 1993 North County Landfill Siting Study are described in this section. These sites were assessed through review of published maps, analysis of aerial photographs, aerial reconnaissance and site visits by an interdisciplinary group of scientists that included a geologist, biologist, archaeologist and engineer. The sites were evaluated in terms of the issue areas generally addressed during environmental review under CEQA, as well as other regulatory criteria. None of the sites is within the Coastal Zone. For this alternatives analysis, aerial photos (1997) of the five sites were reviewed to confirm previous findings and to report on any changes in site conditions subsequent to the 1993 study.

Table 4-1 compares the level of potential impacts of the alternative sites with the proposed Tajiguas Landfill expansion area. Table 4-3 summarizes the following discussion.

4.2.2.2.1 Puente East Site

Site Description

The Puente East site is located on Assessor's Parcel Number (APN) 099-040-025, approximately 1.5 miles south of U.S. Highway 101, southeast of the community of Los Alamos (Figure 4-2).
The site is rural, zoned for agriculture (AG-II) as are surrounding parcels, and is in agricultural preserve status. The site covers approximately 80 acres and is estimated to have the capacity to hold approximately 8 million cubic yards of municipal solid waste and cover soil.

Impact Analysis

Air Quality
As with any landfill, the three major sources of air pollutants include:

- Onsite dust generation and heavy equipment emissions from waste disposal operations.
- Offsite emissions from vehicles that transport the waste to the site.
- Landfill gas emitted from the accumulated waste.

Location of the proposed landfill relative to residential land uses and the source of the waste stream are the key factors in determining the severity of potential onsite air quality impacts.

The nearest residences are approximately 1.9 miles north and 1.9 miles south of the Puente East site. Although these distances are greater than the distance from the Tajiguas Landfill to the nearest residence, impacts from fugitive dust emissions and onsite heavy equipment emissions would be increased with this alternative. This is because the existing setting at the Tajiguas site includes dust generation of the historic landfill operation. The Puente East site has no history of dust generation due to ongoing grading activities.

In terms of transportation emissions, the Puente East site is located approximately 51 miles from the centroid of the wasteshed (i.e., from the City of Santa Barbara) that would be served by this facility. This is approximately two times the current 26 miles that waste travels from Santa Barbara to the Tajiguas Landfill. Air pollutant emissions due to waste hauling would be substantially greater with the Puente East alternative.

Biological Resources
The site's diatomaceous soils support non-native grasses on the canyon bottom, with chaparral on the upper slopes. A drainage is located in the canyon bottom. However, a riparian corridor is not present. Although no records of rare, threatened or endangered species are recorded for the site, the black-flowered figwort (Scrophularia atrata), a federally listed species of concern, is present in the area and may be present at the site. The California red-legged frog (Rana aurora draytonii) also could be associated with aquatic habitat along the drainage.
<table>
<thead>
<tr>
<th>SITE NO.</th>
<th>DISTANCE TO CITY OF SANTA BARBARA(1)</th>
<th>SITE LOCATION</th>
<th>ACCESS</th>
<th>SITE SIZE</th>
<th>ENGINEERING CONSIDERATIONS(3)</th>
<th>VISIBILITY</th>
<th>SITE VEGETATION</th>
<th>PROXIMITY TO GROUND WATER(4)</th>
<th>LAND USE/ZONING COMPATIBILITY</th>
<th>PROXIMITY TO AIRPORT</th>
<th>DISTANCE TO NEAREST RESIDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>51 miles</td>
<td>Puente East</td>
<td>U.S. Highway 101 to a local ranch road.</td>
<td>80 acres. Capacity is ± 8 million cubic yards.</td>
<td>Erosion potential is moderate to high. Little potential for landslide or slope stability problems.</td>
<td>Not visible from public roadways.</td>
<td>Nonnative grasses, with chaparral on upper slopes. Drainage may provide habitat for California red-legged frog. Black-flowered fritillary may be present.</td>
<td>Depth to ground water not known. Site is 1.5 miles from nearest ground water basin.</td>
<td>Zoned Ag-II. Zoning and land use do not preclude use of site as landfill. Site is in agricultural preserve. No prime agricultural soils on the site.</td>
<td>Not within 5 miles of a public airport</td>
<td>Not within 5 miles of a public airport</td>
</tr>
<tr>
<td>2</td>
<td>58 miles</td>
<td>Laguna Seca</td>
<td>U.S. Highway 101 to State Route 135.</td>
<td>110 acres. Capacity is ± 10 million cubic yards.</td>
<td>Erosion potential is high to very high. Landslide potential is high. Soil permeability is moderate to slow.</td>
<td>Not visible from any public viewing area.</td>
<td>Nonnative grasses, chaparral, scattered oak trees.</td>
<td>Depth to ground water not known. Site is 1.0 mile from nearest ground water basin.</td>
<td>Zoned Ag-II. Zoning and land use do not preclude use of site as landfill. Site is in agricultural preserve. No prime agricultural soils on the site.</td>
<td>Not within 5 miles of a public airport</td>
<td>Not within 5 miles of a public airport</td>
</tr>
<tr>
<td>3</td>
<td>57 miles</td>
<td>Cat Canyon West</td>
<td>U.S. Highway 101 to Cat Canyon Road.</td>
<td>170 acres. Capacity is ± 20 million cubic yards.</td>
<td>Erosion potential is high to very high. Soil permeability is moderate to slow.</td>
<td>Not visible from any public viewing area.</td>
<td>Nonnative grasses, chaparral, scattered oak trees.</td>
<td>Depth to ground water not known. Site is 3,000 feet from nearest ground water basin.</td>
<td>Zoned Ag-II. Open space and grazing uses in all directions. Site is in agricultural preserve. Zoning and land use do not preclude use of site as landfill. No prime agricultural soils on the site.</td>
<td>Not within 5 miles of a public airport</td>
<td>Not within 5 miles of a public airport</td>
</tr>
<tr>
<td>4</td>
<td>77 miles</td>
<td>Gaviota North</td>
<td>U.S. Highway 101 to State Route 135 to Highway 1 to access road.</td>
<td>225 acres. Capacity is ± 20 million cubic yards.</td>
<td>Erosion potential is slight to high. Soil permeability is moderate to slow. Site is underlain by Sespe Formation.</td>
<td>Not visible from any public viewing area.</td>
<td>Sparse grasses with ± 12 acres of coast live oak and coastal sage scrub on upper slopes. Stock pond could provide habitat for California red-legged frog and California tiger salamander.</td>
<td>Depth to ground water not known. Site is 1.5 miles from nearest ground water basin.</td>
<td>Zoned Ag-II. Site is in agricultural preserve. Zoning and land use do not preclude use of site as landfill. No prime agricultural soils on the site.</td>
<td>Site is within 5 miles of Santa Maria Airport approach zone.</td>
<td>Site is within 5 miles of Santa Maria Airport approach zone.</td>
</tr>
<tr>
<td>5</td>
<td>82 miles</td>
<td>Shuman North</td>
<td>U.S. Highway 101 to State Route 135 to Highway 1 to Black Road.</td>
<td>160 acres. Capacity is ± 15 million cubic yards.</td>
<td>Erosion potential is moderate to high. Soil permeability is moderate to slow. Landslide potential is high. A landslide exists on the site.</td>
<td>Not visible from any public viewing area.</td>
<td>Sparse vegetation. Chaparral, scattered oak trees, eucalyptus grove. Drainage may provide habitat for California red-legged frog, black-flowered fritillary.</td>
<td>Depth to ground water not known. Site is 1.5 miles from the nearest ground water basin.</td>
<td>Zoned Ag-II. Site is in agricultural preserve.</td>
<td>Site is within 5 miles of Santa Maria Airport approach zone.</td>
<td>Site is within 5 miles of Santa Maria Airport approach zone.</td>
</tr>
</tbody>
</table>

(1) Site locations are shown in Figure 4-2. Information provided by P&D (per North County Siting Study, 1993).
(2) Distances to the centroid of City of Santa Barbara, used in Air Quality analyses.
(3) Per Soil Conservation Service maps.
(4) None of the sites is within a 100-year floodplain.
Site-specific impacts on biological resources with development of the Puente East site would be similar to those anticipated at the Tajiguas site. Chaparral habitat would be removed at the Tajiguas site and the Puente East site.

Development of a new landfill at the Puente East site would introduce substantial disturbance to a remote and relatively undisturbed area compared with the previously disturbed and currently occupied Tajiguas Landfill site. Short-term impacts from development of a new landfill would include vegetation clearing, excavation and development of infrastructure. Long-term impacts from operation of the landfill would include the introduction of human presence, light and noise. In this respect, impacts would be greater to biological resources at this alternative than at the existing Tajiguas Landfill site.

Cultural Resources
Archaeological resources were not identified on the Puente East site. However, there are sites in the project area. Although effects on cultural resources may be feasibly mitigated, given the absence of known artifacts on the Puente East site, impacts on cultural resources with this alternative would be considered less than anticipated at the Tajiguas site.

Traffic/Circulation
Waste-hauling vehicles that travel from the South Coast and Santa Ynez Valley to the Puente East site would utilize Highway 101. Access to the site would be from Highway 101 to a ranch road west of Highway 101. Use of this route, however, would require northbound trucks to make an at-grade left turn across the southbound lanes of Highway 101. Under the current road configuration, return trips would require merging of trucks into southbound traffic from a stop, with limited acceleration distance. Traffic safety and circulation issues involving the truck turning movements on Highway 101 would be similar for the Puente East site and the Tajiguas site.

Geologic Processes
The Puente East site is a steep-sided canyon; slopes range from 30 percent to 60 percent. Soils are of Crow Hill loam and Gazos clay. These soils are rated moderately slow for permeability, and erosion hazard is moderate to high. Depth to bedrock is generally 20 to 40 inches. There is little potential for landslides or slope stability problems (Baca, 2000). No prime agricultural soils are located on the site.
Based on the topography, bedding angles and nature of the underlying bedrock materials, the potential for substantial geologic hazards (such as landslides or substantial erosion) to affect development of a landfill at this site is considered low (Baca, 2000). Geologic impacts of this alternative would be less than at the Tajiguas site.

**Water Resources**
This alternative site occupies the head of a sparsely vegetated canyon in which the drainage course lacks substantial riparian vegetation. The site is not located in a 100-year floodplain. Run-off from the site flows northward and eventually reaches San Antonio Creek, approximately 2.0 miles to the north.

Given the distance from the nearest groundwater basin and the absence of a substantial creek at the site, potential impacts on water resources with this alternative would be less than those at the Tajiguas site.

**Land Use**
The Puente East site is located in a remote rural area about 1.9 miles from the nearest residence. Landfill operations at this remote site would be unlikely to result in substantial land use conflicts. In contrast, the proposed Tajiguas Landfill expansion is located about 2,000 feet from the Arroyo Quemada residential community. This community has reported litter, dust and other nuisance effects from the existing landfill operation. Thus, land use impacts with the Puente East alternative would be less than at the Tajiguas site.

**Noise**
The Puente East site is located in a remote rural area about 1.9 miles from the nearest residence. Landfill operations at this remote site would not be expected to result in substantial noise impacts to any sensitive receptor. Given the greater distance to residential land uses, noise impacts with the Puente East alternative would be less than at the Tajiguas site.

**Visual Resources**
The Puente East site is located in a remote rural area that is not visible from any public viewing area. In contrast, the proposed Tajiguas Landfill expansion area would be visible from a few points along Highway 101. Thus, visual resource impacts with the Puente East alternative would be less than at the Tajiguas site.
4.2.2.2.2 Laguna Seca Site

Site Description
The Laguna Seca site is located on APNS 99-030-011, 99-030-015 and 099-030-016. The site is approximately 2.5 miles south of State Route 135, west of the community of Los Alamos (see Figure 4-2). The site is rural, zoned for agriculture (AG-II) as are surrounding parcels, and is in agricultural preserve status. The site size covers approximately 110 acres and is estimated to have the capacity to hold approximately 10-million-cubic yards of municipal solid waste and cover soil.

Impact Analysis

Air Quality
The two nearest residences are approximately 2.0 miles north and 2.0 miles south of the Laguna Seca site. Although these distances are greater than the distance from the Tajiguas Landfill to the nearest residence, impacts from fugitive dust emissions and onsite heavy equipment emissions would be increased with this alternative. This is because the existing setting by at the Laguna Seca site has no history of dust generation due to ongoing grading activities. The Tajiguas site includes the dust generation as part of the historic landfill operation.

In terms of transportation emissions, the Laguna Seca site is located approximately 58 miles from the centroid of the wasteshed (i.e., from the City of Santa Barbara) that would be served by this facility. This is approximately two times the current 26 miles that waste travels from Santa Barbara to the Tajiguas Landfill. Air pollutant emissions due to waste hauling would be substantially greater with the Laguna Seca alternative.

Biological Resources
Approximately 50 percent of the vegetation at the Laguna Seca site is non-native grasses on the canyon bottom, with the remaining 50 percent being chaparral, with a few scattered oak trees. There is no defined drainage course in the canyon bottom, and a riparian corridor is not present. There are no records of rare, threatened or endangered species on the site.

Site-specific impacts on biological resources with development of the Laguna Seca alternative site would be less than those anticipated at the Tajiguas site. Chaparral habitat would be removed at the Tajiguas site, while grassland, chaparral, and scattered oak trees would potentially be disturbed at the Laguna Seca site.
Development of a new landfill at the Laguna Seca site would, however, introduce substantial disturbance to an area that is remote and relatively undisturbed compared to the previously disturbed and currently occupied Tajiguas Landfill site. Short-term impacts from development of a new landfill would include vegetation clearing, excavation and infrastructure development. Long-term impacts from operation of the landfill would include the introduction of human presence, light and noise. In this respect, impacts would be greater to biological resources at this alternative than at the existing Tajiguas Landfill site.

Cultural Resources
Archeological resources were not identified on the Laguna Seca site. However, there are archeological sites in the project area. Although effects on cultural resources may be feasibly mitigated, given the absence of known artifacts on the Laguna Seca site, impacts on cultural resources with this alternative would be considered less than anticipated at the Tajiguas site.

Traffic/Circulation
The Laguna Seca alternative site would be reached off of State Route 135. Waste-hauling vehicles travelling from the South Coast and the Santa Ynez Valley would utilize Highway 101 and connect to State Route 135 at one of two points:

- The main offramp at the community of Los Alamos.
- A cut-off road north of the community of Los Alamos.

Use of the Los Alamos offramp as part of a haul route would involve waste-hauling trucks travelling through the center of the Los Alamos community. Although the Highway 101 underpass at this site would allow for safe exiting by waste trucks, the introduction of a regular flow of these large vehicles onto the main street of this small community could result in substantial circulation and safety impacts.

The cut-off road located north of Los Alamos (across from Cat Canyon Road) would provide access to State Route 135 without the necessity of waste-hauling vehicles travelling through the Los Alamos community. Use of this route, however, would require northbound trucks to make an at-grade left turn across the southbound lanes of Highway 101. Under the current road configuration, return trips would require merging of trucks into southbound traffic from a stop, with limited acceleration distance.

For comparison purposes, it is assumed that the cut-off road would be selected for this alternative site in order to avoid impacts on the Los Alamos community. Traffic safety and circulation
issues involving the truck turning movements on Highway 101 would be similar for the Laguna Seca site and the Tajiguas site. However, this alternative would involve large waste-hauling vehicles travelling approximately 1.5 miles on a narrow, two-lane section of State Route 135 between Los Alamos and the site access road which is south of State Route 135. Based on the potential safety issues involving the long-term use of this narrow road, traffic safety impacts for this alternative are considered greater than for the Tajiguas site.

Geologic Processes
The Laguna Seca site is a canyon with gently sloping sides ranging up to 65 percent. Soils are of Lopez shaly clay loam, Shedd silty clay loam, Botella-Diablo complex and sedimentary rock land. These soils are rated moderate to slow for permeability, and erosion hazard is high to very high. Depth to bedrock is generally less than 10 to 30 inches. There is potential for landslides or slope stability problems on the north slope of the canyon due to daylighting dipping beds (Baca, 2000). No prime agricultural soils are located on the site.

Based on the topography, bedding angles and the nature of the underlying bedrock materials, the potential for substantial geologic hazards (such as landslides or substantial erosion) to affect development of a landfill at this site is considered high (Baca, 2000). Geologic impacts of this alternative would be greater than for the Tajiguas site.

Water Resources
This alternative site occupies the head of a sparsely vegetated canyon in which the drainage course lacks substantial riparian vegetation. The site is not located in a 100-year floodplain. Run-off from the site flows southward and eventually reaches San Antonio Creek, approximately 1.5 miles to the north.

Given the distance from the nearest groundwater basin and the absence of a substantial creek at the site, potential impacts on water resources with this alternative site would be less than those at the Tajiguas site.

Land Use
The Laguna Seca site is located in a remote rural area about 2.0 miles from the nearest residence. Landfill operations at this remote site would be unlikely to result in substantial land use conflicts. In contrast, the proposed Tajiguas Landfill expansion is located about 2,000 feet from the Arroyo Quemada residential community. This community has reported litter, dust, and other nuisance
effects from the existing landfill operation. Thus, land use impacts with the Laguna Seca alternative would be less than at the Tajiguas site.

**Noise**
The Laguna Seca site is located in a remote rural area about 2.0 miles from the nearest residence. Landfill operations at this remote site would not be expected to result in substantial noise impacts to any sensitive receptor. Given the greater distance to residential land uses, noise impacts with the Laguna Seca alternative would be less than at the Tajiguas site.

**Visual Resources**
The Laguna Seca site is located in a remote rural area that is not visible from any public viewing area. In contrast, the proposed Tajiguas Landfill expansion area would be visible from a few points along Highway 101. Thus, visual resource impacts with the Laguna Seca alternative would be less than with the Tajiguas site.

4.2.2.2.3 Cat Canyon West Site

**Site Description**
The Cat Canyon West site is located on APNS 113-100-055 and 113-100-056, approximately 1.7 miles east of Cat Canyon Road, east of the community of Los Alamos (Figure 4-2). The site is rural, zoned for agriculture (AG-II) as are surrounding parcels, and is in agricultural preserve status. The site size covers approximately 170 acres and is estimated to have the capacity to hold approximately 20-million-cubic yards of municipal solid waste and cover soil.

**Impact Analysis**

**Air Quality**
The nearest residences are approximately 2.0 miles to the north and 2.0 miles to the south of the Cat Canyon West site. Although these distances are greater than the distance from the Tajiguas Landfill to the nearest residence, impacts from fugitive dust emissions and onsite heavy equipment emissions would be increased with this alternative. This is because the Cat Canyon West site has no history of dust generation due to ongoing grading activities. The existing setting at the Tajiguas site includes the dust generation of the historic landfill operation.

In terms of transportation emissions, the Cat Canyon West site is located approximately 57 miles from the centroid of the wasteshed (i.e., from the City of Santa Barbara) that would be served by this facility. This is more than twice the current 26 miles that waste travels from Santa Barbara.
to the Tajiguas Landfill. Air pollutant emissions due to waste hauling would be substantially greater with the Cat Canyon West alternative.

**Biological Resources**
The site supports mostly non-native grasses, along with chaparral and scattered oak trees. There is no defined drainage course in the canyon bottom, and a riparian corridor is not present. There are no records of rare, threatened or endangered species recorded on the site, although the black-flowered figwort, a federal species of concern, may be present. Site-specific impacts on biological resources with development of the Cat Canyon West alternative site would be similar to those anticipated at the Tajiguas site. Chaparral habitat would be removed at the Tajiguas site, and chaparral habitat and oak trees would be removed at the Cat Canyon West site.

Development of a new landfill at the Cat Canyon West site would introduce substantial disturbance to a remote and relatively undisturbed area compared to the previously disturbed and currently occupied Tajiguas Landfill site. Short-term impacts from development of a new landfill would include vegetation clearing, excavation and infrastructure development. Long-term impacts from operation of the landfill would include the introduction of human presence, light and noise. In this respect, impacts would be greater to biological resources at this alternative site than at the existing Tajiguas Landfill site.

**Cultural Resources**
Archaeological resources were not identified on the Cat Canyon West site. However, there are sites in the project area. Although effects on cultural resources may be feasibly mitigated, given the absence of known artifacts on the Cat Canyon West site, impacts on cultural resources with this alternative would be considered less than anticipated at the Tajiguas site.

**Traffic/Circulation**
This alternative site would be reached from Highway 101. Waste-hauling vehicles that travel from the South Coast and the Santa Ynez Valley would utilize Highway 101. Access to the site would be from Highway 101 to Cat Canyon Road east of Highway 101.

Use of this route would require northbound trucks to make a right turn onto Cat Canyon Road. Out-bound trucks would be required to make a left turn across the north-bound lanes of Highway 101 and merge into the passing lane of southbound Highway 101, similar to the current condition at the Tajiguas Landfill. Traffic safety and circulation issues involving the truck
turning movements on Highway 101 would be similar for the Cat Canyon West site and the Tajiguas site.

Geologic Processes
The site is a canyon with slopes ranging from 25 percent to 60 percent. Soils are of Gazos clay and Lopez clay. These soils are rated moderate to slow for permeability, and erosion hazard is high to very high. Depth to bedrock is generally 10 to 28 inches. There are no apparent slope stability hazards on the site (Baca, 2000). No prime agricultural soils are located on the site.

Based on the topography, bedding angles and the nature of the underlying bedrock materials, the potential for geologic hazards (such as substantial erosion) to affect development of a landfill at this site is similar to the Tajiguas site (Baca, 2000).

Water Resources
This alternative site occupies the head of a sparsely vegetated canyon in which the drainage course lacks substantial riparian vegetation. The site is not located in a 100-year floodplain. Run-off from the site flows northward and eventually reaches San Antonio Creek, approximately 3.0 miles to the north. Approximately 3,000 feet to the southeast are the water-bearing formations of the San Antonio groundwater basin.

Given the distance from the nearest groundwater basin and the absence of a substantial creek at the site, potential impacts on water resources with this alternative would be less than those at the Tajiguas site.

Land Use
The Cat Canyon West site is located in a remote rural area about 2.0 miles from the nearest residences. Landfill operations at this remote site would be unlikely to result in substantial land use conflicts. In contrast, the proposed Tajiguas Landfill expansion is located about 2,000 feet from the Arroyo Quemada residential community. This community has reported litter, dust, and other nuisance effects from the existing landfill operation. Thus, land use impacts with the Cat Canyon West alternative would be less than at the Tajiguas site.

Noise
The Cat Canyon West site is located in a remote rural area about 2.0 miles from the nearest residence. Landfill operations at this remote site would not be expected to result in substantial
noise impacts to any sensitive receptor. Given the greater distance to residential land uses, noise impacts associated with the Cat Canyon West alternative would be less than at the Tajiguas site.

Visual Resources
The Cat Canyon West site is located in a remote rural area that is not visible from any public viewing area. In contrast, the proposed Tajiguas Landfill expansion area would be visible from a few points along Highway 101. Thus, visual resource impacts with the Cat Canyon West alternative would be less than at the Tajiguas site.

4.2.2.2.4 Graciosa North Site

Site Description
The Graciosa North site is located on APNs 113-280-05 and 113-280-09. It is approximately 1.3 miles west of State Route 135 and east of the community of Casmalia (Figure 4-2). The site is rural, zoned for agriculture (AG-II) as are surrounding parcels, and is in agricultural preserve status. The site size covers approximately 225 acres and is estimated to have the capacity to hold approximately 20-million-cubic yards of municipal solid waste cover and soil.

Impact Analysis

Air Quality
The Graciosa North site is located about 1 mile from the nearest residence (a ranch house) and about 1.3 miles from the developed area of the community of Orcutt. Although these distances are greater than the distance from the Tajiguas Landfill to the nearest residence, impacts from fugitive dust emissions and onsite heavy equipment emissions would be increased with this alternative. This dust generation is produced at the Tajiguas site as part of the historic landfill operation. The Graciosa North site has no history of dust generation due to ongoing grading activities.

In terms of transportation emissions, the Graciosa North site is located approximately 77 miles from the centroid of the wasteshed (i.e., from the City of Santa Barbara) that would be served by this facility. This is three times the current 26 miles that waste travels from Santa Barbara to the Tajiguas Landfill. Air pollutant emissions due to waste hauling would be substantially greater with the Graciosa North alternative.
Biological Resources
Because of the thin, shallow soils, the Graciosa North site supports only sparse grasses, with approximately 12 acres of coast live oak (*Quercus agrifolia*) and coastal sage scrub on the uppermost western slopes. A stock pond is located in the canyon. Although no records of rare, threatened or endangered species are recorded on the site, the California red-legged frog (*Rana aurora draytonii*) and California tiger salamander (*Ambystoma californiense*) could be associated with the aquatic habitat potentially associated with the stock tank. Both these species were federally listed as threatened and endangered, respectively, after the 1993 site visit for the North County Landfill Siting Study. However, the upland habitat at this site may lack the refuge necessary (ground squirrel burrows, etc.) for a portion of the life cycles of these species. The onsite soils are extremely shallow and consolidated, and vegetative cover is minimal.

Site-specific impacts on biological resources with development of the Graciosa North alternative site would be similar to those anticipated at the Tajiguas site. Both would have potential impacts on threatened aquatic species. Chaparral habitat would be removed at the Tajiguas site, while grassland and chaparral habitat would potentially be disturbed at the Graciosa North site.

Development of a new landfill at the Graciosa North site would introduce substantial disturbance to a remote and relatively undisturbed area compared with the previously disturbed and currently occupied Tajiguas Landfill site. Short-term impacts from development of a new landfill would include vegetation clearing, excavation and infrastructure development. Long-term impacts from the operation of the landfill would include the introduction of human presence, light and noise. In this respect, impacts would be greater to biological resources with this alternative than with the existing Tajiguas Landfill site.

Cultural Resources
An archaeological site has been identified on and in proximity to the Graciosa North site. The identified cultural remains, however, are located on or very near the surface and are not present in the bedrock that underlies (and is exposed on) the site. The description and recovery of these materials would be feasible as part of landfill development.

Potential effects on cultural resources may be feasibly mitigated. However, given the known presence of artifacts on the Graciosa North site, impacts on cultural resources with this alternative would be considered similar to those anticipated at the Tajiguas site.
Traffic/Circulation
This alternative site would be reached from State Route 135. Waste-hauling vehicles travelling from the South Coast and the Santa Ynez Valley would travel on Highway 101 to State Route 135 to Highway 1 to an access road. Vehicles would make the Highway 101/State Route 135 connection at one of three points:

- The main offramp at the community of Los Alamos.
- A cut-off road located north of the community of Los Alamos.
- The Clark Avenue offramp in the community of Orcutt.

Use of the Los Alamos offramp as part of a haul route would involve waste-hauling trucks travelling through the center of the Los Alamos community. Although the Highway 101 underpass at this site would allow for safe exiting by waste trucks, the introduction of a regular flow of these large vehicles onto the main street of this small community could result in substantial circulation and safety impacts.

Use of the Clark Avenue offramp would involve waste-hauling trucks travelling along the main east-west route through the Orcutt community. Substantial existing commercial and residential traffic uses Clark Avenue. The introduction of large waste-hauling vehicles onto this street could result in substantial circulation and safety impacts.

The cut-off road located north of Los Alamos (across from Cat Canyon Road) would provide access to State Route 135 without the necessity of waste-hauling vehicles travelling through either the Los Alamos or Orcutt community. Use of this route, however, would require northbound trucks to make an at-grade left turn across the southbound lanes of Highway 101. Under the current road configuration, return trips would require merging of trucks into southbound traffic from a stop, with limited acceleration distance.

For comparison purposes, it is assumed that the cut-off road would be selected for this alternative site in order to avoid impacts on the Los Alamos and Orcutt communities. Traffic safety and circulation issues involving truck-turning movements on Highway 101 would be similar for the Graciosa North site and the Tajiguas site. However, this alternative would involve large waste-hauling vehicles travelling approximately 8 miles on a narrow, two-lane section of State Route 135 between Los Alamos and Orcutt that currently has low traffic volume. Traffic on State Route 135 includes trucks, residential and commuter vehicles and farm equipment. Based on the potential safety issues involving the long-term use of this narrow road, traffic safety impacts for this alternative are considered greater than for the Tajiguas site.
Geologic Processes
The Graciosa North site is a canyon with gently sloping sides ranging from 15 percent to 25 percent in gradient. This site is underlain by diatomaceous claystone of the Sisquoc Formation. White Sisquoc bedrock is exposed over large areas of the site. No landslides or other severe geologic hazards have been identified on the site (Baca, 2000).

Soils, where present, are identified by the Soil Conservation Service as Santa Lucia shaly clay loam, Terra loam, Crow Hill loam, Botella loam and sedimentary rock land. These soils are rated poor for topsoil (nonprime) and have moderate to slow permeability. Erosion hazard is slight to high. Depth to bedrock is generally less than 10 to 28 inches.

Based on the gentle topography, bedding angles and nature of the underlying bedrock materials, the potential for substantial geologic hazards (such as landslides or substantial erosion) to affect development of a landfill at this site is considered very low (Baca, 2000). Geologic impacts of this alternative would be less than at the Tajiguas site.

Water Resources
This alternative site is located in an area of bedrock outcrops outside of any recognized groundwater basin. Generally, impermeable diatomaceous claystone of the Sisquoc Formation underlies the entire site and is exposed over large areas of the ground surface. Only a thin veneer of soil is present where bedrock does not crop out on the surface. The site occupies the head of a sparsely vegetated canyon in which the drainage course lacks substantial riparian vegetation. The site is not located in a 100-year floodplain. Run-off from the site flows southward and eventually reaches the San Antonio Groundwater Basin about 1.5 miles to the south.

Given the impermeable nature of the underlying materials (i.e., the absence of underlying aquifers), the distance from the nearest groundwater basin and the absence of a substantial creek at the site, potential impacts on water resources with this alternative would be less than those at the Tajiguas site.

Land Use
The Graciosa North site is located in a remote rural area about 1 mile from the nearest residence. Landfill operations at this remote site would be unlikely to result in substantial land use conflicts. In contrast, the proposed Tajiguas Landfill expansion is located about 2,000 feet from the Arroyo Quemada residential community. This community has reported litter, dust and other nuisance
effects from the existing landfill operation. Thus, land use impacts with the Graciosa North alternative would be less than at the Tajiguas site.

**Noise**
The Graciosa North site is located in a remote rural area about 1 mile from the nearest residence. Landfill operations at this remote site would not be expected to result in substantial noise impacts to any sensitive receptor. Given the greater distance to residential land uses, noise impacts with the Graciosa North alternative would be less than at the Tajiguas site.

**Visual Resources**
The Graciosa North site is located in a remote rural area that is not visible from any public viewing area. In contrast, the proposed Tajiguas Landfill expansion area would be visible from a few points along Highway 101. Thus, visual resource impacts with the Graciosa North alternative would be less than at the Tajiguas site.

4.2.2.2.5 Shuman Site

**Site Description**
The Shuman site is located on APNs 113-230-007, 113-220-009, 113-220-010, and 133-22-011. It is approximately 1.4 miles west of Black Road, 2.5 miles northwest of the community of Casmalia and immediately north of the Casmalia Resources Hazardous Waste Disposal site (see Figure 4-2). The site is rural, zoned for agriculture (AG-II) as are surrounding parcels, and is in agricultural preserve status. The site size covers approximately 160 acres and is estimated to have the capacity to hold approximately 15 million cubic yards of municipal solid waste and cover soil although only approximately 8-million-cubic yards of capacity would be required.

**Impact Analysis**

**Air Quality**
The Shuman site is located approximately 1.7 miles from the nearest residence (a ranch house), which is southeast of the site. Although this distance is greater than the distance from the Tajiguas Landfill to the nearest residence, impacts from fugitive dust emissions and onsite heavy equipment emissions would be increased with this alternative. This is because the existing setting at the Shuman site has no history of dust generation due to ongoing grading activities. The Tajiguas site includes the dust generation of the historic landfill operation.
In terms of transportation emissions, the Shuman site is located approximately 82 miles from the centroid of the wasteshed (i.e., from the City of Santa Barbara) that would be served by this facility. This is three times the current 26 miles that waste travels from Santa Barbara to the Tajiguas Landfill. Air pollutant emissions due to the extended waste hauling distance would be substantially greater with the Shuman alternative.

**Biological Resources**

The Shuman site supports only sparse vegetation on the canyon bottom, with chaparral and scattered oak trees on the southern portion of the site and a eucalyptus grove on the south slope of the canyon. The eucalyptus trees provide nesting and roosting habitat for raptors and a variety of songbirds. A drainage course is located in the canyon bottom and may provide habitat for the California red-legged frog and black-flowered figwort. The onsite soils are extremely shallow and consolidated, and vegetative cover is minimal.

Site-specific impacts on biological resources with development of the Shuman Alternative site would be similar to those anticipated at the Tajiguas site. Both could have potential impacts on threatened aquatic species (e.g., red-legged frog). Chaparral habitat would be removed at the Tajiguas site, while grassland and oak trees would potentially be disturbed at the Shuman site.

Development of a new landfill at the Shuman site, however, would introduce substantial disturbance to a remote and relatively undisturbed area compared with the previously disturbed and currently occupied Tajiguas Landfill site. Short-term impacts from development of a new landfill would include vegetation clearing, excavation and infrastructure development. Long-term impacts from operation of the landfill would include the introduction of human presence, light and noise. In this respect, impacts would be greater to biological resources at this alternative than at the existing Tajiguas Landfill site.

**Cultural Resources**

Archaeological resources were not identified on the Shuman site, although there are sites in the project area. Effects on cultural resources may be feasibly mitigated. However, given that there are no known artifacts on the Shuman site, impacts on cultural resources with this alternative would be considered less than those anticipated at the Tajiguas site.
Traffic/Circulation
This alternative site would be reached from State Highway 1. Waste-hauling vehicles that travel from the South Coast and the Santa Ynez Valley would travel on Highway 101 to State Route 135 to Highway 1 to Black Road. Vehicles would make the Highway 101/State Route 135 connection at one of three points:

- The main offramp at the community of Los Alamos.
- The Clark Avenue offramp in the community of Orcutt.
- A cut-off road located north of the community of Los Alamos.

Use of the Los Alamos offramp as part of a haul route would involve waste-hauling trucks travelling through the center of the Los Alamos community. Although the Highway 101 underpass at this site would allow for safe exiting by waste trucks, the introduction of a regular flow of these large vehicles onto the main street of this small community could result in substantial circulation and safety impacts.

Use of the Clark Avenue offramp would involve waste-hauling trucks travelling along the main east-west route through the Orcutt community. Substantial existing commercial and residential traffic uses Clark Avenue. The introduction of large waste-hauling vehicles onto this street could result in substantial circulation and safety impacts.

The cut-off road located north of Los Alamos (across from Cat Canyon Road) would provide access to State Route 135 without the necessity of waste-hauling vehicles travelling through either the Los Alamos or Orcutt community. Use of this route, however, would require northbound trucks to make an at-grade left turn across the southbound lanes of Highway 101. Under the current road configuration, return trips would require merging of trucks into southbound traffic from a stop, with limited acceleration distance.

For comparison purposes, it is assumed that the cut-off road would be selected for this alternative site in order to avoid impacts on the Los Alamos and Orcutt communities. Traffic safety and circulation issues involving truck-turning movements on Highway 101 would be similar for the Shuman site and the Tajiguas site. However, this alternative would involve large waste-hauling vehicles travelling approximately 8 miles on a narrow two-lane section of State Route 135 between Los Alamos and Orcutt. Based on the potential safety issues involving the long-term use of this narrow road, traffic safety impacts for this alternative are considered greater than for the Tajiguas site.
Geologic Processes
Soils are of Gazos clay, Botella-Diablo complex and gullied land. These soils are rated moderate to slow for permeability, and erosion hazard is moderate to high. Depth to bedrock is generally 18 to 30 inches. There is a landslide on the site, and there is the potential for slope stability issues due to daylighting dipping beds in the western portion of the canyon (Baca, 2000). No prime agricultural soils are located on the site.

Based on the topography, bedding angles and the nature of the underlying bedrock materials, the potential for substantial geologic hazards (such as landslides or substantial erosion) to affect development of a landfill at this site is considered high (Baca, 2000). Geologic impacts of this alternative would be similar to the Tajiguas site.

Water Resources
This alternative site is located in an area of bedrock outcrops outside of any recognized groundwater basin. The site is not located in a 100-year floodplain. Run-off from the site flows southward, eventually reaching Casmalia and Shuman Creeks and the Pacific Ocean.

Given the impermeable nature of the underlying materials (i.e., the absence of underlying aquifers), the distance from the nearest groundwater basin and the absence of a substantial creek at the site, potential impacts on water resources with this alternative would be less than those at the Tajiguas site.

Land Use
The Shuman site is located in a remote rural area about 1.7 miles from the nearest residence. Landfill operations at this remote site would be unlikely to result in substantial land use conflicts. In contrast, the proposed Tajiguas Landfill expansion is located about 2,000 feet from the Arroyo Quemada residential community. This community has reported litter, dust and other nuisance effects from the existing landfill operation. Thus, land use impacts with the Shuman alternative would be less than at the Tajiguas site.

Noise
The Shuman site is located in a remote rural area about 1.7 miles from the nearest residence. Landfill operations at this remote site would not be expected to result in substantial noise impacts to any sensitive receptor. Given the greater distance to residential land uses, noise impacts with the Shuman alternative would be less than at the Tajiguas site.
Visual Resources
The Shuman site is located in a remote rural area that is not visible from any public viewing area. In contrast, the proposed Tajiguas Landfill expansion area would be visible from a few points along Highway 101. Thus, visual resource impacts with the Shuman alternative would be less than at the Tajiguas site.

4.2.2.2.6 Comparison of Impacts
Table 4-1 provides a generalized comparison of impacts of each of the five alternative sites. The table compares selected resource areas of each site to the proposed project. The No Project Alternative also is included.

Air Quality
As discussed in Section 3.11 - Air Quality, the proposed expansion of the Tajiguas Landfill will have significant air quality impacts due to onsite and mobile emissions. Compared to the proposed project, there is no alternative site that could reduce these significant emissions. An alternative site would result in moving these onsite impacts to another location. Because the levels of operational emissions would be similar for any site, an alternative site would not avoid or substantially lessen operational emissions compared to the proposed expansion of Tajiguas.

Construction of a new landfill at an alternative site could reduce mobile emissions associated with waste transport if an alternative site were available closer than the existing Tajiguas Landfill to the centroid of Santa Barbara and the South Coast Transfer Station. The existing haul distance to Tajiguas from the centroid of Santa Barbara is approximately 26 miles, and to Tajiguas from the South Coast Transfer Station is 21 miles. Considering that waste would continue to be both direct-hauled from the centroid of Santa Barbara and transferred from the South Coast Transfer Station, the mobile air emissions associated with waste transport could not be substantially lessened unless the waste were transported to an alternative site that was less than 26 miles from the centroid of Santa Barbara and less than 21 miles from the South Coast Transfer Station. As shown in Table 4-2, none of the existing in-County landfills is within this distance of the South Coast Transfer Station. Of the potential alternative sites described above, Tajiguas is the closest to the source of the majority of the waste and, therefore, would result in the least air emissions related to vehicular transport of the municipal solid waste. In this respect, the proposed project is environmentally superior to alternative sites.
If a new 1,500 tpd transfer station were constructed in Goleta or the City of Santa Barbara, transfer trucks could replace the packer trucks and roll-off trucks that currently haul approximately two-thirds of the waste to Tajiguas. This could reduce mobile emissions to the Tajiguas Landfill or to a different in-County landfill. As described in Section 3.11 - Air Quality, a haul distance of approximately 47 miles using 100 percent transfer trucks would have the same emissions as hauling waste 21 miles with two-thirds of the waste hauled by packer truck and one-third hauled by transfer truck. Therefore, a new transfer station capable of processing 1,500 tpd for transport by 20-ton capacity transfer trucks could lessen mobile air emissions to the existing landfill or to an alternative site if the haul distance to the alternative site were less than 47 miles. Without a new transfer station, none of the identified in-County alternative landfill sites would lessen transportation-related impacts, including increased waste disposal costs, air emissions, noise, traffic safety and roadway wear. Construction of a new transfer station would be subject to a separate CEQA process and environmental analysis.

Other Resources
In addition to being unable to reduce mobile emissions compared to the proposed project, none of the alternative sites offers apparent substantive advantages that would offset the larger amount of new land disturbance that would occur compared to the proposed project. As described in Chapter 2.0 - Project Description, the Front Canyon configuration would result in an estimated 58 acres of new land disturbance, and the Back Canyon configuration would result in 69 acres of new land disturbance. Issues related to sensitive wildlife species that occur at the Tajiguas site can be mitigated to a level that is less than significant, although some areas of rock outcroppings and seeps that provide habitat for sensitive plants would be removed, along with an estimated 18 acres of chaparral for the Front Canyon configuration and 28 acres of chaparral for the Back Canyon configuration. These are considered unavoidable adverse impacts (Class I).

Although the sensitivity of the potential new landfill sites has not been evaluated in detail at this time, considerably more new land disturbance would be required for construction of a new landfill with the same capacity as the proposed project. Specifically, the land area required for a new 15-year, 8.2-million-cubic-yard landfill could range from 100 to 200 acres. This amount of land would be necessary to accommodate the footprint of the new landfill, plus access roads and support facilities, and to provide appropriate buffer areas around the new development. At Tajiguas, considerably less ground disturbance would be required to provide disposal for an additional 8.2-million-cubic yards of waste (57 acres for the Front Canyon configuration and 70 acres for the Back Canyon configuration).
The proposed project does not require a new access road or support facilities. Also, the footprint for either the Front Canyon configuration or Back Canyon configuration overlaps the existing landfill, as well as adjacent areas that have been utilized as soil borrow for existing operations. These areas have already been disturbed and graded. Therefore, compared to the proposed project, construction of a new landfill at an in-County alternative site would result in greater land disturbance. Other factors being equal, disturbing more ground would result in greater related impacts, notably to biological and cultural resources.

As described in Section 4.1.2, a basic objective of the proposed project is to provide 15 years of additional reliable and cost-effective, in-County solid waste disposal capacity for southern Santa Barbara County, and the Santa Ynez and Cuyama Valleys. The designated period of 15 years is intended to provide a sufficient period of time to allow the County to perform detailed site investigations, design work, permitting and construction of a new in-County landfill. Based on consultation with the CIWMB and other agencies, County staff has determined that it is prudent to consider that up to 15 years could be required for development of a new in-County landfill site, from detailed investigations through construction. As a result, an alternative site would require a lead-time of perhaps as long as 15 years before the disposal capacity would become available to the County. For this reason, alternative in-County sites for a new landfill may not feasibly obtain the County's objectives for the project.

4.2.2.3 Countywide Landfill Siting Study

The County Board of Supervisors considered recommendations regarding refuse disposal strategies for the South Coast. On August 3, 1999, the Board directed staff to develop another County landfill site as a long-term disposal solution. The Countywide Landfill Siting Study is the result of this direction. The purpose of the study is to site a 30- to 50-year landfill to accommodate waste from the South Coast and the Santa Ynez and Cuyama valleys in Santa Barbara County. The siting study involves site selection, site acquisition, planning, design, environmental review, permitting and construction of a new landfill site. The new landfill is anticipated to go online at the time the proposed expansion of Tajiguas has been completed and is ready for closure (estimated 2020), and to provide the County with an additional 30 to 50 years of solid waste disposal capacity.

Approximately 73 sites were assessed through review of published maps and analysis of aerial photographs. These sites then were evaluated in terms of the issue areas generally addressed during environmental review under CEQA, as well as other regulatory criteria. Of the 73 alternative sites analyzed during this siting study screening, the following four potential
alternative landfill sites have been selected as the most suitable and are described in this section. Table 4-4 provides a summary of selected site characteristics for the four sites that are described herein. No field surveys have been conducted at Sites 3-6, 6-9 and 13-1. The analysis that follows was prepared by the Santa Barbara County SWUD.

4.2.2.3.1 Site 3-6

Site Description
Site 3-6 is located on APNs 133-050-011, 133-050-015, 133-080-004 and 133-080-005, approximately 5.0 miles northeast of the intersection of Alisos Canyon and Foxen Canyon roads and northeast of the community of Los Alamos (Figure 4-2). The site is rural and zoned for agriculture (U-20, unlimited agriculture) as are surrounding parcels. The site covers approximately 600 acres.

Impact Analysis

Air Quality
As with any landfill, the three major sources of air pollutants include:

- Onsite dust generation and heavy equipment emissions from waste disposal operations.
- Offsite emissions from vehicles that transport the waste to the site.
- Landfill gas emitted from the accumulated waste.

Location of the proposed landfill relative to residential land uses and the source of the waste stream are the key factors in determining the severity of potential onsite air quality impacts. Site 3-6 is located approximately 2.0 miles north of the nearest residence (a ranch house) and about 10 miles northeast of the community of Los Alamos. Although these distances are greater than the distance from Tajiguas Landfill to the nearest residence, impacts from fugitive dust emissions, onsite heavy equipment emissions and the potential for landfill gas emissions would be increased with this alternative. Emissions are produced at the Tajiguas site as part of the historic landfill operation. Site 3-6 has no history of air emissions due to ongoing grading activities.

In terms of transportation emissions, Site 3-6 is located approximately 56 miles from the centroid of the wasteshed (i.e., from the City of Santa Barbara) that would be served by this facility. The distance is approximately two times the current 26 miles that waste travels from Santa Barbara to the Tajiguas Landfill. Air pollutant emissions due to waste hauling would be substantially greater with the Site 3-6 alternative.
### TABLE 4-4

**SUMMARY OF SELECTED CHARACTERISTICS**
**COUNTRYWIDE SITING STUDY PREFERRED SITES**

<table>
<thead>
<tr>
<th>SITE NO.</th>
<th>DISTANCE TO CITY OF SANTA BARBARA</th>
<th>SITE LOCATION</th>
<th>ACCESS</th>
<th>SITE SIZE</th>
<th>ENGINEERING CONSIDERATIONS</th>
<th>VISIBILITY</th>
<th>SITE VEGETATION</th>
<th>PROXIMITY TO GROUND WATER</th>
<th>LAND USE/ZONING COMPATIBILITY</th>
<th>PROXIMITY TO AIRPORT</th>
<th>DISTANCE TO NEAREST RESIDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-6</td>
<td>56 miles east of intersection of Airola Canyon and Foxen Canyon roads, northeast of Los Alamos.</td>
<td>Highway 101 to Airola Canyon Road to Foxen Canyon Road to unimproved ranch road.</td>
<td>600 acres</td>
<td>Erosion potential is slight to severe. Potential for landslides or substantial erosion is high. Soil permeability is moderate to slow.</td>
<td>Not visible from any public viewing area.</td>
<td>Coast live oak woodland, valley oak savannah, coastal sage scrub, grassland, possibly some riparian. Drainages may provide habitat for California red-legged frog.</td>
<td>Depth to ground water is not known. Site is 10 miles from nearest ground water basin.</td>
<td>Zoned U-20. Zoning and land use do not preclude use of site as landfill. No prime agricultural soils on the site.</td>
<td>Not within 5 miles of a public airport.</td>
<td>2.0 miles</td>
<td></td>
</tr>
<tr>
<td>6-8</td>
<td>51 miles south of Highway 101, southeast of Los Alamos.</td>
<td>Highway 101 to a local ranch road.</td>
<td>350 acres</td>
<td>Erosion potential is moderate to high. Potential for landslides or slope stability problems is low to moderate. Soil permeability is moderately slow.</td>
<td>Not visible from any public viewing area.</td>
<td>Not-native grasses, chaparral, coastal sage scrub, coastal live-oak, woodland. Black-flowered figwort may be present. Drainage may provide habitat for California red-legged frog.</td>
<td>Depth to ground water is not known. Site does not overlie a ground water basin.</td>
<td>Zoned AG-B. Site is in agricultural preserve. No prime agricultural soils are on the site.</td>
<td>Not within 5 miles of a public airport.</td>
<td>1.9 miles</td>
<td></td>
</tr>
<tr>
<td>6-9</td>
<td>52 miles south of Highway 101, southeast of Los Alamos.</td>
<td>Highway 101 to a local ranch road.</td>
<td>250 acres</td>
<td>Erosion potential is moderate to high. Potential for landslides or slope stability problems is low. Soil permeability is moderately slow.</td>
<td>Not visible from any public viewing area.</td>
<td>Oak woodland, grassland, potential wetlands. Drainage may provide habitat for California red-legged frog. Black-flowered Figwort may be present.</td>
<td>Depth to ground water is not known. Site does not overlie a ground water basin.</td>
<td>Zoned AG-B. Site is in agricultural preserve. No prime agricultural soils are on the site.</td>
<td>Not within 5 miles of a public airport.</td>
<td>0.9 miles</td>
<td></td>
</tr>
<tr>
<td>13-1</td>
<td>19 miles from Pismo Beach, west of City of Santa Barbara.</td>
<td>Highway 101 to El Capitan Ranch exit, to Calle Real to paved access roads to unimproved ranch road. OR: Highway 101 to El Capitan State Park exit to unimproved access road to unimproved ranch road.</td>
<td>400 acres</td>
<td>Similar to Tujiguras Landfill site.</td>
<td>Highly visible from Highway 101 and the surrounding El Capitan Ranch neighborhood.</td>
<td>Coast live oak woodland, grassland, coastal sage scrub, chaparral, potential riparian habitat. Drainages may provide habitat for California red-legged frog.</td>
<td>Depth to ground water is not known. Site does not overlie a ground water basin.</td>
<td>Zoned U-20.</td>
<td>Not within 5 miles of a public airport.</td>
<td>0.5 miles</td>
<td></td>
</tr>
</tbody>
</table>

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(1) Site locations are shown in Figure 4-2. Information provided by SWUD (per Countywide Landfill Siting Study, 2000).
(2) Distances to the center of City of Santa Barbara, used in Air Quality analyses.
(3) Per Soil Conservation Service maps.
(4) None of the sites is within a 100-year floodplain.
Biological Resources

Site 3-6 supports extensive coast live oak woodland and valley oak savannah, with intermittent coastal sage scrub, grassland and possibly some riparian habitat associated with three drainages on the site. No special status species are shown on the California Natural Diversity Data Base (CNDDB). However, because of the site's rural location and the lack of any recent development proposals on the site, the lack of information may indicate that the site has not been surveyed for biological resources.

Coast live oak woodland and valley oak savannah provide a full range of ecological benefits, including maintenance of species diversity, soil and watershed protection, wildlife, recreational and aesthetic values. For most native oak species, basic ecological information is incomplete (CNPS, 2001). In the period from 1996 through 1999, vineyard acreage has nearly doubled in Santa Barbara, from approximately 10,000 to approximately 18,000 acres. At the same time, oak woodlands and valley oak savanna, where many of the new vineyards are being planted, are in a state of decline. Close examination of aerial photographs from July 1997 revealed that approximately 2,000 mature oak trees had been removed in just 18 months in the Los Alamos Valley area alone.

Site 3-6 supports dense coast live and valley oak savannah habitat, mostly on the north-facing slopes and valley floors of the canyons. Developing this site as a landfill would result in significant permanent loss of oak woodland and oak savannah habitat that could not be feasibly mitigated. As a result, compared to the landfill expansion at the Tajiguas site, impacts from the loss of oak woodland and oak savannah habitats at this site would be considered significant in both the project specific and cumulative scenarios.

In addition, the potential riparian areas associated with the drainages and potential wetlands of this site, shown on the Northern Santa Barbara County Soils Survey maps, may support aquatic species. Although no records of rare, threatened or endangered species are recorded for the site, California red-legged frog could be associated with aquatic habitat along the site's drainages and potential wetlands. Compared to habitat disturbance that would occur at Site 3-6, there would be less disturbance at the Tajiguas site. Impacts on riparian habitat and aquatic species would likely be greater than those anticipated at the Tajiguas site.
Development of a new landfill at Site 3-6 also would introduce substantial disturbance to a remote and relatively undisturbed area compared to the previously disturbed and currently occupied Tajiguas Landfill site. Short-term impacts would result from vegetation clearing, excavation, and infrastructure development, including road improvements, that would disturb oak and riparian habitats. Long-term impacts from operation of the landfill would include the introduction of human presence, light, noise and habitat alteration. In this respect, impacts would be greater to biological resources at this alternative site than at the existing Tajiguas Landfill.

Cultural Resources
Archaeological sites have not been identified on or in proximity to Site 3-6. However, as with biological resources, the lack of identified archaeological resources may be due to the lack of surveys accomplished on the site or surrounding areas for archaeological resources. However, known sites are located to the northwest and southeast of the site, and there is high probability of locating cultural resources on Site 3-6. If cultural resources are discovered at the site, the description and recovery of these materials would be feasible as part of landfill development.

Although effects on cultural resources may be feasibly mitigated, no surveys have been accomplished for archaeological resources on Site 3-6, and the probability is high that cultural resources would be identified. Impacts on cultural resources with this alternative site would be considered similar to those anticipated at the Tajiguas site.

Traffic/Circulation
Waste-hauling vehicles that would travel to the site from the South Coast and the Santa Ynez Valley would utilize Highway 101. Access to the site would be from Highway 101 to Alisos Canyon Road to Foxen Canyon Road, then via an unimproved ranch road. Alisos Canyon and Foxen Canyon roads are narrow, two-lane collector roads. Trucks would haul on these collector roads for approximately 9.0 miles to the site. Traffic at the Tajiguas site travels from Highway 101 on an improved road dedicated to landfill traffic. Traffic safety impacts resulting from trucks hauling waste on the two-lane collector roads, therefore, would be greater than at the Tajiguas Landfill.

Under the current road configuration, southbound trucks returning to the South Coast would be required to make an at-grade left turn across the southbound lanes of Highway 101, similar to the
existing configuration at the Tajiguas Landfill. Traffic safety and circulation issues involving the truck turning movements on Highway 101 would be similar for both Site 3-6 and the Tajiguas Landfill site.

Geologic Processes
Site 3-6 is comprised of two canyons with gently sloping sides ranging from 15 to 30 percent in gradient. No Holocene faults are mapped on the site.

Soils are identified by the Soil Conservation Service as Santa Lucia shaly clay loam, Terra loam, Arnold sand, rough broken land and sedimentary rock land. These soils are rated poor for topsoil (nonprime) and have moderate to slow permeability. Erosion hazard is slight to severe. Depth to bedrock is generally less than 10 to 60 inches.

Based on the topography and nature of the underlying bedrock materials, the potential for substantial geologic hazards (such as landslides or substantial erosion) to affect development of a landfill at this site is considered very high. Geologic impacts of this alternative would be greater than at the Tajiguas site.

Water Resources
This alternative site is located outside of any recognized groundwater basin. The site is not located in a 100-year floodplain. Run-off from the site flows southwest and eventually reaches the San Antonio Groundwater Basin about 10 miles to the southwest. Two drainages are located onsite with similar oak woodland habitat as at Tajiguas. Given the distance from the nearest groundwater basin, potential impacts on water resources with this alternative would be similar to those at the Tajiguas site.

Land Use
Site 3-6 is located in a remote rural area about 2.0 miles from the nearest residence. Landfill operations at this remote site would be unlikely to result in substantial land use conflicts. In contrast, the proposed Tajiguas Landfill expansion is located about 2,000 feet from the Arroyo Quemada residential community. This community has reported litter, dust and other nuisance effects from the existing landfill operation. Thus, land use impacts with Site 3-6 would be less than at the Tajiguas Landfill.
Noise
Site 3-6 is located in a remote, rural area about 2.0 miles from the nearest residence. Landfill operations at this remote site would not be expected to result in substantial noise impacts to any sensitive noise receptors. Given the greater distance to residential land uses at this site compared to the Tajiguas site, noise impacts with the Site 3-6 alternative would be less than at Tajiguas.

Visual Resources
The site is located in a remote, rural area that is not visible from any public viewing area. In contrast, the proposed Tajiguas Landfill expansion site would be visible from a few points along Highway 101. Thus, visual resource impacts with the Site 3-6 alternative would be less than at the Tajiguas site.

4.2.2.3.2 Site 6-8
Site Description
Site 6-8 consists of the Puente East and Puente West sites identified in the North County Landfill Siting Study completed in 1993. These two sites have had preliminary site surveys conducted as part of the North County study. The site is located on APNs 090-050-011, 099-040-025 and 099-640-004 and is located approximately 1.5 miles south of Highway 101, southeast of the community of Los Alamos (Figure 4-2). The site is rural, zoned for agriculture (AG-II) as are surrounding parcels, and is in agricultural preserve status. The site covers approximately 350 acres.

Impact Analysis
Air Quality
The nearest residences are approximately 1.9 miles north of Site 6-8. Although these distances are greater than the distance from the Tajiguas Landfill to the nearest residence, impacts from fugitive dust emissions, onsite heavy equipment emissions, and the potential for landfill gas emissions would be increased with this alternative. Emissions are produced at the Tajiguas site as part of the historic landfill operation. Site 6-8 has no history of air emissions due to ongoing grading activities.

In terms of transportation emissions, Site 6-8 is located approximately 51 miles from the centroid of the watershed (i.e., from the City of Santa Barbara) that would be served by this facility. This is approximately two times the current 26 miles that waste travels from Santa Barbara to the Tajiguas Landfill. Air pollutant emissions due to waste hauling would be substantially greater with the Site 6-8 alternative.
Biological Resources

Diatomaceous soils support non-native grasses on the canyon bottom, with chaparral and coastal sage scrub on the upper slopes. Incised drainages are located in each canyon bottom. A riparian corridor is not present in the eastern canyon, but there is well-developed coast live oak woodland and associated riparian vegetation along the drainage in the western canyon. A pair of barn owls (Tyto alba) was observed in the oak woodland, and roosting, breeding and nesting for owls and other bird species is present. Although no rare, threatened or endangered species are recorded on the site, the black-flowered figwort (Scrophularia atrata), a federally listed species of concern, is present in the general area. The black-flowered figwort or California figwort was observed, but was not positively identified, in the western canyon. The California red-legged frog could be associated with aquatic habitat along the drainages, particularly in the western canyon, although frogs were not observed during the preliminary field surveys.

Site-specific impacts on biological resources with development of Site 6-8 would be similar to those anticipated at the Tajiguas site. Oak woodland, coastal sage scrub and grassland habitat would be removed at the Tajiguas site and Site 6-8.

Development of a new landfill at Site 6-8 site would, however, introduce substantial disturbance to a remote and relatively undisturbed area compared with the previously disturbed and currently occupied Tajiguas Landfill site. Short-term impacts would result from vegetation clearing, excavation and infrastructure development. Long-term impacts from operation of the landfill would include the introduction of human presence, light, noise and habitat alteration. In this respect, impacts would be greater to biological resources at this alternative site than at the existing Tajiguas Landfill site.

Cultural Resources

Archaeological resources were not identified, but Site 6-8 would require further investigation. Given the absence of known artifacts on Site 6-8, impacts on cultural resources with this alternative would be considered less than anticipated at the Tajiguas site.

Traffic/Circulation

Waste-hauling vehicles that would travel to the site from the South Coast and the Santa Ynez Valley would utilize Highway 101. Access to the site would be via Highway 101 to a ranch road west of Highway 101. Use of this route, however, would require northbound trucks to make an at-grade left turn across the southbound lanes of Highway 101 to enter the landfill. Under the current road configuration, trucks returning to the South Coast would be required to merge into
the southbound slow-lane from a complete stop, with limited acceleration distance. Traffic safety and circulation issues involving the truck turning movements on Highway 101 would be similar for Site 6-8 and the Tajiguas site.

**Geologic Processes**
Site 6-8 consists of two steep-sided canyons with slopes ranging from 30 to 60 percent. Soils are of Crow Hill loam, Lopez shaly clay loam and Gazos clay. These soils are rated moderately slow for permeability, and erosion hazard is moderate to high. Depth to bedrock is generally 20 to 40 inches. There is little potential for landslides or slope stability problems (Baca, 2000). No prime agricultural soils are located on the site.

Based on the topography, bedding angles and the nature of the underlying bedrock materials, the potential for substantial geologic hazards (such as landslides or substantial erosion) to affect development of a landfill at this site is considered low in the eastern canyon (Baca, 2000). The southern ridge of the western canyon has the potential for landslides. Geologic impacts of this alternative would be similar for the Tajiguas site.

**Water Resources**
The eastern canyon of this alternative site occupies the head of a sparsely vegetated canyon in which the drainage course lacks substantial riparian vegetation. The western canyon supports dense coast live oak woodland along an ephemeral drainage course, although the site is not located in a 100-year floodplain. Run-off from the entire site flows northward and eventually reaches San Antonio Creek, approximately 2.0 miles to the north.

Although the site does not overlie a groundwater basin, the western canyon does support a substantial creek and associated riparian and oak woodland habitat. Therefore, potential impacts on water resources with this alternative would be similar to those at the Tajiguas site.

**Land Use**
Site 6-8 is located in a remote rural area about 1.9 miles from the nearest residence. Landfill operations at this remote site would be unlikely to result in substantial land use conflicts. In contrast, the proposed Tajiguas Landfill expansion is located about 2,000 feet from the Arroyo Quemada residential community. This community has reported litter, dust and other nuisance effects from the existing landfill operation. Thus, land use impacts with the Site 6-8 alternative would be less than at the Tajiguas site.
Noise
This site is located in a remote rural area about 1.9 miles from the nearest residence. Landfill operations at this remote site would not be expected to result in substantial noise impacts to any sensitive receptor. Given the greater distance to residential land uses than at the Tajiguas site, noise impacts would be less at Site 6-8 than at the Tajiguas site.

Visual Resources
Site 6-8 is located in a remote rural area that is not visible from any public viewing area. In contrast, the proposed Tajiguas Landfill expansion area would be visible from a few points along Highway 101. Thus, visual resource impacts at Site 6-8 would be less than at the Tajiguas site.

4.2.2.3.3 Site 6-9
Site Description
Site 6-9 is located on APNs 099-040-025 and 099-640-004, approximately 2.5 miles south of Highway 101, southeast of the community of Los Alamos (Figure 4-2). The site is rural, zoned for agriculture (AG-II) as are surrounding parcels, and is in agricultural preserve status. The site covers approximately 250 acres.

Impact Analysis
Air Quality
The nearest residences are approximately 2.9 miles to the north and 0.9 mile south of Site 6-9. Although these distances are greater than the distance from the Tajiguas Landfill to the nearest residence, impacts from fugitive dust emissions, onsite heavy equipment emissions, and the potential for landfill gas emissions would be increased with this alternative. Emissions are produced at the Tajiguas site as part of the historic landfill operation. Site 6-9 has no history of air emissions due to ongoing grading activities.

In terms of transportation emissions, Site 6-9 is located approximately 52 miles from the centroid of the watershed (i.e., from the City of Santa Barbara) that would be served by this facility. This is approximately two times the current 26 miles that waste travels from Santa Barbara to the Tajiguas Landfill. Air pollutant emissions due to waste hauling would be substantially greater with the Site 6-9 alternative.
Biological Resources
Oak woodland is located along the north-facing slopes of Site 6-9. Grassland is on the canyon bottom and south-facing slopes. A stock pond is located in the canyon bottom, with potential wetlands upstream of the pond. However, a riparian corridor is not present. No rare, threatened, or endangered species are recorded on the site. Since there was no site survey, the presence of biological resources at the site are unknown. The California red-legged frog could be associated with the aquatic habitat and potentially associated with the stock tank. Habitat for the black-flowered figwort, a federally listed species of concern, is present in the area and also may be present at the site.

Oak woodland and grassland would be removed at both the Tajiguas site and Site 6-9. Wetlands also would potentially be removed from Site 6-9. Site-specific impacts on biological resources with development of Site 6-9 would be greater than those anticipated at Tajiguas.

Development of a new landfill at Site 6-9 would introduce substantial disturbance to a remote and relatively undisturbed area compared with the previously disturbed and currently occupied Tajiguas Landfill site. Short-term impacts would result from vegetation clearing, excavation and infrastructure development. Long-term impacts from operation of the landfill would include the introduction of human presence, light, noise, and extensive alteration of terrain and habitats. In this respect, impacts would be greater to biological resources at this alternative site than at the existing Tajiguas Landfill.

Cultural Resources
Archaeological resources were not identified on Site 6-9. However, there are sites in the general area. The lack of documented cultural resources at the site may be due to the site's rural location and lack of recent development proposals. As a result, the site has not been surveyed for cultural resources in recent years, if ever. Known sites are located in the area surrounding the site, and there is high probability of locating cultural resources on Site 6-9. If cultural resources are discovered, the description and recovery of these materials would be feasible as part of landfill development.

Effects on cultural resources may be feasibly mitigated. However, because impacts on cultural resources with this alternative cannot be determined in the absence of cultural resource surveys, impacts would be considered similar to those anticipated at the Tajiguas site.
Traffic/Circulation
Waste-hauling vehicles that would travel to the site from the South Coast and the Santa Ynez Valley would use Highway 101. Access to the site would be via Highway 101 to a ranch road west of Highway 101. Use of this route, however, would require northbound trucks to make an at-grade left turn across the southbound lanes of Highway 101 to enter the landfill. Under the current road configuration, trucks returning to the South Coast would be required to merge into the southbound slow-lane from a compete stop, with limited acceleration distance. Traffic safety and circulation issues involving the truck turning movements on Highway 101 would be similar for Site 6-9 and the Tajiguas site.

Geologic Processes
Site 6-9 is a broad-bottomed canyon with gentle slopes. Soils are of Gazos clay. These soils are rated moderately slow for permeability, and erosion hazard is moderate to high. Depth to bedrock is generally 20 to 40 inches. No prime agricultural soils are located on the site.

Based on the topography, bedding angles and nature of the underlying bedrock materials, the potential for substantial geologic hazards (such as landslides or substantial erosion) to affect development of a landfill at this site is considered low. Geologic impacts of this alternative would be less than at the Tajiguas site.

Water Resources
Site 6-9 is located in a canyon that lacks substantial riparian vegetation, but supports possible wetlands. The site is not located in a 100-year floodplain. Run-off from the site flows southeast toward the Santa Ynez River watershed. The site does not overlie a groundwater basin.

Given the distance from the nearest groundwater basin and the absence of a substantial, developed creek at the site, potential impacts on water resources with this alternative would be less than those at the Tajiguas site.

Land Use
This site is located in a remote rural area about 0.9-mile from the nearest residence. Landfill operations at this remote site would be unlikely to result in substantial land use conflicts. In contrast, the proposed Tajiguas Landfill expansion is located about 2,000 feet from the Arroyo Quemada residential community. This community has reported litter, dust and other nuisance effects from the existing landfill operation. Thus, land use impacts with the Site 6-9 alternative would be less than at Tajiguas.
Noise
Site 6-9 is located in a remote rural area about 0.9-mile from the nearest residence. Landfill operations at this remote site would not be expected to result in substantial noise impacts to any sensitive receptor. Given the greater distance to residential land uses, noise impacts with this alternative site would be less than at the Tajiguas site.

Visual Resources
Site 6-9 is located in a remote rural area that is not visible from any public viewing area. In contrast, the proposed Tajiguas Landfill expansion area would be visible from a few points along Highway 101. Thus, visual resource impacts with the Site 6-9 alternative would be less than at the Tajiguas site.

4.2.2.3.4 Site 13-1
Site Description
Site 13-1 is located on APNs 081-020-002, 081-020-029, 081-020-033, 081-020-035 and 081-020-039. The site is approximately 19.0 miles west of the City of Santa Barbara and northeast of the El Capitan Ranch exit off Highway 101 (Figure 4-2). The site is rural, zoned for agriculture (U-20, unlimited agriculture), and covers approximately 400 acres. Parcels in the vicinity are zoned AG II and Rural Ranchette (RR).

Impact Analysis
Air Quality
Site 13-1 is located approximately 0.5-mile north of the nearest residence and about 0.75-mile west of the El Capitan Ranch neighborhood. Although these distances are greater than the distance from the Tajiguas Landfill to the nearest residence, impacts from fugitive dust emissions, onsite heavy equipment emissions, and the potential for landfill gas emissions would be increased with this alternative. Emissions are produced at the Tajiguas site as part of the historic landfill operation. Site 13-1 has no history of air emissions due to ongoing grading activities.

In terms of transportation emissions, Site 13-1 is located approximately 15 miles from the centroid of the watershed (i.e., from the City of Santa Barbara) that would be served by this facility. This is approximately one-half of the current 26 miles that waste travels from Santa Barbara to the Tajiguas Landfill. As a result, air pollutant emissions due to waste hauling would be less with the Site 13-1 alternative.
Biological Resources

Site 13-1 supports vegetation communities similar to the Tajiguas Landfill site. These include coast live oak woodland, grassland, coastal sage scrub, chaparral, and ruderal areas, such as along the ranch roads on the site. Some riparian habitat may be associated with the oak woodland along the ephemeral drainage course that runs the entire length of the site from north to south. No special status species are shown on the CNDDDB. However, because of lack of any recent development proposals on the site, the absence of information may indicate that the site has not been surveyed for biological resources in recent years, if ever.

Developing this site as a landfill would result in significant permanent loss of all vegetation communities onsite; this loss could not be feasibly mitigated. Impacts due to the loss of oak habitats at this site would be considered significant in both the project-specific and cumulative scenarios when compared to the existing disturbed Tajiguas Landfill site.

In addition, the potential riparian areas associated with the drainages may support aquatic species. Although no rare, threatened or endangered species are recorded on the site, California red-legged frog could be associated with aquatic habitat along the drainages. Impacts on riparian habitat and aquatic species would be greater than those anticipated at Tajiguas. Development of a drainage system to route runoff around the landfill, similar to the system at Tajiguas, would permanently remove aquatic habitat along the drainage and would result in significantly greater impacts to aquatic species compared to the proposed Tajiguas Landfill expansion.

Development of a new landfill at Site 13-1 also would introduce substantial disturbance to a remote and relatively undisturbed area compared with the previously disturbed and currently occupied Tajiguas Landfill site. Short-term impacts would result from vegetation clearing, excavation, and infrastructure development, including road improvements that would potentially fragment and permanently remove wildlife habitat. Long-term impacts from operation of the landfill would include the introduction of human presence, light, noise and habitat disturbance. Biological resource impacts with this alternative site would be greater than with the Tajiguas Landfill expansion project.

Cultural Resources

One cultural resource site has been identified near Site 13-1. However, a site-specific survey has not been accomplished for cultural resources. If cultural resources could not be avoided, the description and recovery of these materials would be feasible as part of landfill development.
Although effects on cultural resources may be feasibly mitigated, no surveys have been accomplished for cultural resources on Site 13-1, and the probability is high that surveys would identify cultural resources. Impacts on cultural resources with this alternative site would be considered similar to those anticipated with the Tajiguas Landfill expansion project.

Traffic/Circulation
Waste-hauling vehicles that travel to the site from the South Coast and the Santa Ynez Valley would utilize Highway 101. Access to the site would be via two possible routes. One is from Highway 101 to the El Capitan Ranch exit, then generally northwest via Calle Real to existing paved, but unstriped access roads, to unimproved ranch roads, to the site. Alternatively, access could come from Highway 101 to the El Capitan State Park exit, then north on an existing improved and unimproved access road, to unimproved ranch roads, to the site. Access roads would require improvement to accommodate waste trucks. Trucks hauling waste would travel approximately 1.0 to 1.5 miles on these improved roads, to the site. Traffic safety impacts resulting from trucks hauling waste on these dedicated, improved access roads to the landfill would be similar to the Tajiguas Landfill expansion.

Under the current road configuration, trucks entering the site would use the existing exit from the northbound lanes of Highway 101 to access the site. Trucks exiting the site would use existing onramps to return to the southbound lanes of Highway 101. Traffic safety impacts and circulation issues involving truck turning movements on Highway 101 would be less at Site 13-1 than are expected with the landfill expansion at the Tajiguas site.

Geologic Processes
Geology at site 13-1 is similar to the Tajiguas Landfill site. The two sites are located on the coastal plain of the Santa Ynez Mountains and are underlain by similar geologic formations. Site 13-1 is comprised of a north-south trending coastal canyon similar to the Tajiguas Landfill site. Geologic impacts would be similar at both sites.

Water Resources
This alternative site is located outside of any recognized groundwater basin and is not located in a 100-year floodplain. Runoff from the site flows south and eventually reaches the Pacific Ocean. Potential impacts on water resources with this alternative would be similar to the landfill expansion at the Tajiguas site.
Land Use
Site 13-1 is located in a semirural area about 0.5-mile from the nearest residence. Landfill operations at this site would likely result in greater land use conflicts than the Tajiguas Landfill site. In contrast, the proposed Tajiguas Landfill expansion is located about 2,000 feet from the Arroyo Quemada residential community. This community has reported litter, dust and other nuisance effects from the existing landfill operation. Topography, Highway 101 and the Southern Pacific Railroad also separate the Tajiguas Landfill and the Arroyo Quemada community. Introducing a landfill an area of agricultural land would have greater impacts at Site 13-1 than expanding the landfill at the Tajiguas site.

Noise
Site 13-1 is located in a semirural area about 0.5-mile from the nearest residence. Landfill operations at this remote site would potentially result in substantial noise impacts to sensitive receptors due to the rural nature of the area. Given that Site 13-1 is located in a semirural area, is currently in agricultural uses and currently produces little noise, noise impacts associated with developing a landfill at this site would be potentially greater than with the landfill expansion at the Tajiguas site.

Visual Resources
Site 13-1 is located on the Gaviota Coast and is highly visible from Highway 101 and the surrounding El Capitan Ranch neighborhood. Developing a landfill at Site 13-1 would be a significant change in existing conditions. In contrast, the proposed Tajiguas Landfill expansion area would be visible from a few points along Highway 101 and would not be visible from the Arroyo Quemada community. The Tajiguas expansion also would occur primarily north of the existing landfill and would be screened by the existing landfill. Thus, visual resource impacts with developing Site 13-1 as a landfill would be significantly greater than the landfill expansion at the Tajiguas site.

4.2.3 LARGER PROJECT ALTERNATIVE
A larger project alternative at the Tajiguas Landfill, compared to the currently proposed 15-year expansion, would add another 10 years of capacity to either the Front Canyon configuration or the Back Canyon configuration. This larger project would:

- Provide approximately 25 years of municipal solid waste disposal capacity for the residents of southern Santa Barbara County and the
Santa Ynez and Cuyama Valleys under the current waste generation estimate based on 0.62 percent population growth.

- Meet the minimum 15-year County disposal capacity requirements of the CIWMA (AB 939) and the goals of the CIWMP.
- Maintain the daily disposal rate of the proposed project.

This alternative would increase the air space capacity of Tajiguas by a total 11.5-million cubic yards, which would provide for the disposal of approximately 5.8-million tons of solid waste. To accommodate the additional 10 years of capacity beyond the 15 years for the proposed project, this alternative would involve lateral and vertical expansion of the existing landfill and relocation of the existing shop facility to the back canyon area of the project site. This larger project alternative also would include removal and relocation of the existing drainage system to convey stormwater from the site, plus installation of additional landfill gas collection system components. It also could require construction of a new scalehouse.

The large project would provide for lateral expansion of the existing landfill to the north and east, with much of the expansion occurring in the Back Canyon area of the site. In addition, a portion of the back canyon area of the project site would be utilized for the excavation and stockpiling of soil material to be used for operations needs. Vertical expansion would raise the elevation limits of the landfill to a minimum of 700 feet north of the Coastal Zone.

The lateral expansion would result in greater surface disturbance than the proposed project and could result in indirect impacts to Pila Creek and/or red-legged frogs resident in the southern in-channel sedimentation basin. The vertical expansion required for the larger project would result in greater visual impact than the proposed project.

The larger project would provide an operational landfill at Tajiguas for a period of 25 years, compared to the 15 years of the proposed project. With the larger project, existing operational impacts would continue at the site for a period of 25 years, rather than 15 years. Therefore, the larger project alternative would not result in the reduction or elimination of potentially significant impacts compared to the proposed project.

This larger (25-year) project alternative was originally proposed by the County in a Notice of Preparation (NOP) dated April 1, 1998. Subsequent to distribution of the NOP, the Board appointed a Community Advisory Committee (CAC) to identify possible alternatives to the
proposed 25-year project. After consideration of CAC and public input, the Board directed County staff to modify the proposed project to consist of a 15-year capacity expansion of Tajiguas, with a smaller footprint and reduced vertical expansion (the proposed project for this EIR).

4.2.4 REDUCED PROJECT ALTERNATIVE
A reduced project alternative at Tajiguas, compared to the proposed 15-year expansion, would provide approximately 10 years of waste disposal at the existing daily disposal rate for residents of Santa Barbara County. This reduced project would not meet either the minimum 15-year County disposal capacity requirements of AB 939 or the goals of the CIWMP.

This reduced project alternative would utilize a smaller version of either the Front Canyon configuration or the Back Canyon configuration, with a smaller waste footprint and/or less vertical expansion than the proposed project. The capacity of the expansion would be reduced to approximately 10 years of disposal capacity, from 8.2-million cubic yards to 5.0-million-cubic yards. This alternative would include removal and relocation of the existing drainage system to convey stormwater from the site, and installation of additional landfill gas collection system components. The existing operational impacts of ongoing landfill activities would continue at the site for the 10-year period of this reduced project.

Because the reduced project alternative would have a smaller waste prism than the proposed project, depending on the configuration chosen, it could result in less visual impact than the proposed project. As addressed in Section 3.8.3, the visual impact of the proposed project is considered to be an unavoidable adverse impact (Class I) from Viewpoints 4 and 5, primarily due to the height of the final elevation of the landfill. With the reduced project alternative, the final elevation could be less, resulting in less visibility from Viewpoints 4 and 5 but not to a less than significant level.

The reduced project alternative also would result in less impact to biological resources. It would result in less surface disturbance to onsite habitat and fewer years of human interference with wildlife use of the northern portion of the project site. Depending on the configuration chosen, the reduced project alternative could eliminate removal of the onsite microhabitats of rock outcrops and seeps.
The reduced project alternative would result in fewer years of air quality impacts from onsite emissions and mobile emissions associated with waste transport to Tajiguas. Subsequent air quality impacts from transport of the waste to one or more other landfills would depend on distance to the disposal site and sizes and types of trucks utilized to haul the waste.

Based on these considerations, the reduced project could result in the reduction or elimination of potentially significant impacts of the proposed project. However, at the end of the 10-year life of the reduced project alternative, the County would be required to haul its municipal solid waste to another location. This redirection of waste would generate its own impacts during what would have been years 10 to 15 of the proposed project. Also, as noted above, the reduced project alternative would fail to meet either the minimum 15-year County disposal capacity requirements of AB 939 or the goals of the CIWMP.

4.3 OUT-OF-COUNTY WASTE DISPOSAL ALTERNATIVES
This section evaluates the potential for disposing of the Tajiguas Landfill's permit limit of 1,500 tpd of municipal solid waste at an out-of-County location. Although Tajiguas currently receives an average of approximately 738 tons of waste daily, on some days the landfill approaches the maximum permitted 1,500 tpd. Over the 15-year life of the proposed project, the average daily tonnage (MSW and green waste) is expected to increase to approximately 1,074 tpd. The frequency of days when the landfill approaches its maximum permitted 1,500 tpd also is expected to increase.

For the purpose of complying with requirements of CEQA, the factors analyzed for the alternatives analysis focus on those that "... are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." The purpose of the proposed project is to provide the County with 15 years of environmentally sound, cost-effective disposal capacity. The County anticipates the rate of disposal over this 15-year period will be up to 1,500 tpd. The onsite impacts of landfill disposal are to some extent generic and do not vary significantly from one location to another. Onsite management of a specified volume of solid waste will generate more or less equivalent amounts of dust and noise, regardless of the landfill location. Similarly, potential impacts from wind-blown litter, odors, vectors and the like will not vary significantly from one location to another.
The significance of other impacts does depend in part on the setting. For example, although landfill operations will generate equivalent noise regardless of location, the noise may be significant in one location and not significant in another, depending on the proximity of sensitive receptors. The same holds true for visual impacts, as disposal operations may be relatively more visible in one location than in another. Similarly, although disposal operations will generate the same level of truck traffic regardless of the location of the landfill, the impact of such traffic may or may not be significant, depending on whether access to the landfill is adequate.

All of the out-of-County landfill alternatives share one key characteristic with the proposed project: they are existing, operating landfills. As such, they have been designed and permitted in accordance with requirements of CEQA, including completion of the EIR process and provision of necessary mitigation measures. Acceptance of waste from southern Santa Barbara County by an existing out-of-County landfill would be in accordance with existing permits and conditions for that landfill. Thus, disposing of waste at one or more out-of-County landfills would not result in impacts associated with disturbance of new ground. Rather, impacts would occur at sites that already have the access, established infrastructure and systems necessary to manage solid waste.

In one key respect, out-of-County landfills differ markedly from one another and from the proposed project: haul distances. For the waste generated in southern Santa Barbara County, the haul distance for the waste would vary significantly, depending on the landfill to which the waste would be transported.

As explained in Section 3.11 - Air Quality, air pollutant emissions from mobile sources are considered a significant and unavoidable adverse impact of the proposed project. Thus, the analysis of out-of-County landfills focuses on the relative merits of various landfill sites with respect to mobile source emissions. These emissions are largely a function of haul distances. In particular, these emissions could differ markedly, depending on haul distance from the point of origin to the ultimate disposal destination for the waste, and on the type and capacity of vehicles utilized. The offsite mobile emissions of concern are nitrogen oxides (NO\textsubscript{x}) and particulate matter with an aerodynamic diameter equal to or less than 10 microns (PM\textsubscript{10}). Within Santa Barbara County, these are classified as nonattainment criteria pollutants.

The proposed project at Tajiguas will result in increased offsite mobile emissions of criteria pollutants NO\textsubscript{x} and PM\textsubscript{10} and, therefore, represents an unavoidable adverse impact (Class I). Also, because the County is nonattainment for these two criteria pollutants, additional
contributions to existing levels that would occur as a result of an alternative to the proposed project would be additive to this unavoidable adverse impact (Class I). Therefore, the number of miles traveled by waste transport vehicles and the types and capacities of vehicles utilized are important in affecting emissions per ton of waste.

The out-of-County landfills analyzed below are the nearest facilities that could accept waste from southern Santa Barbara County and the Santa Ynez and Cuyama Valleys. The following analysis also considers whether the nearest out-of-County landfills provide feasible alternatives, in light of permit restrictions that may prevent the landfills from accepting all or a portion of the maximum 1,500 tpd of waste to be disposed of at Tajiguas.

4.3.1 POTENTIAL OUT-OF-COUNTY ALTERNATIVE DISPOSAL SITES
For the out-of-County disposal alternative, waste that would be disposed of at Tajiguas would be disposed of at a landfill outside Santa Barbara County. For purposes of this evaluation, the mix of waste transported to a permitted landfill is assumed to be 550 tpd (the transfer station permit limit) from the South Coast Transfer Station via transfer truck and 950 tpd from the point of origin (center of the City of Santa Barbara) via collection truck to an out-of-County Transfer Station. An estimated 109 tpd of waste generated in the Santa Ynez and Cuyama Valleys may be transported to the Foxen Canyon Transfer Station, then north to a San Luis Obispo County landfill (Cold Canyon Landfill, Chicago Grade Landfill, Paso Robles Landfill) or south to the Chiquita Canyon Landfill in Los Angeles County. Given the relatively small waste streams from the Santa Ynez and Cuyama Valleys, it is likely that this waste would be transported to disposal sites closer than those in San Luis Obispo, Ventura and Los Angeles counties. These assumptions are consistent with Santa Barbara County's existing solid waste system and with the assumptions used in the analysis of the proposed project.

For offsite mobile emissions from waste transport vehicles to be no more than for the proposed project, assuming the use of the same waste transport system (i.e, 550 tpd by transfer truck and 950 tpd by collection truck), the alternative landfill destination would need to be no further than 21 miles from the South Coast Transfer Station and 26 miles from the center of the City of Santa Barbara (as the point of origin). For offsite mobile emissions and other transportation-related impacts to be less than the proposed project, these distances must be less.

Based on the air quality analysis provided in Section 3.11-Air Quality, if all 1,500 tpd of waste were first transported to a new in-County Transfer Station, and then to a landfill via 20-ton

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transfer trucks, the equivalent transport distance for the same mobile source air emissions would be 47 miles. As shown in Table 4-2 and Figure 4-1, this distance effectively eliminates most of the landfills in the Southern California region. Regardless of their capacity for accepting Tajiguas waste, compared to the proposed project, transport to an out-of-county disposal site would result in increased offsite mobile emissions.

An essential component of an out-of-County disposal site would be the ability to utilize a transfer station for the 950 tpd that is currently direct-hauled to Tajiguas. Otherwise, the increase in emissions from direct hauling more than 26 miles would, of itself, result in greater mobile emissions and other transportation-related impacts than the proposed project.

For this analysis, it is assumed that 550 tpd of waste would be to be processed at the South Coast Transfer Station and then transported via transfer truck to an alternative landfill. The remaining 950 tpd of waste would be either direct-hauled by collection trucks to an alternative landfill or to an out-of-County Transfer Station via collection trucks. This waste then could be transferred to transfer trucks for disposal at an out-of-County landfill. There are two existing out-of-County transfer stations that are sufficiently close to make this approach potentially feasible -- the Gold Coast and Del Norte transfer stations in Ventura County (see Figure 4-1).

The Gold Coast Transfer Station is located in the City of Ventura, approximately 38 miles southeast of the South Coast Transfer Station. This facility has a permitted peak throughput capacity of 440 tpd. It currently receives approximately 300 tpd. As a result, it has excess capacity of approximately 140 tpd. Accordingly, this transfer station could process a small portion of the 950 tpd of direct-haul waste from southern Santa Barbara County.

The Del Norte Transfer Station is located in the City of Oxnard, approximately 44 miles southeast of the South Coast Transfer Station. This facility has a permitted peak throughput capacity of 2,779 tpd. It currently receives approximately 965 tpd. As a result, it has sufficient capacity to transfer all of the 950 tpd of direct-haul waste.

There are three out-of-County landfills that are sufficiently close, where the mileage for waste transport would be within a reasonable range compared to the mileage for waste transport to Tajiguas. These are the Toland Road Landfill in Ventura County, and the Calabasas and Chiquita Canyon Landfills in Los Angeles County. The Simi Valley Landfill in Ventura County is scheduled to close in 2004. The proposed expansion is projected to begin in 2005. As a result,
the Simi Valley Landfill is not considered further in this analysis. The three potential landfills are discussed in the following sections.

4.3.1.1 Toland Road Landfill
As shown in Figure 4-1, the nearest existing out-of-County disposal site is the Toland Road Landfill in south-central Ventura County, located approximately 52 miles southeast of the South Coast Transfer Station. This public landfill is owned and operated by the Ventura Regional Sanitation District. The landfill is permitted to accept municipal solid waste only from jurisdictions in Ventura County and the City of Carpinteria in Santa Barbara County. Other waste from Santa Barbara County or other areas outside Ventura County cannot be disposed of at the Toland Road Landfill. In addition, this landfill is currently at its daily disposal capacity (see Table 4-2). As a result, this out-of-County facility does not represent a feasible alternative to the proposed project and is not considered further in this alternatives analysis.

4.3.1.2 Calabasas Landfill
Calabasas Landfill is located in Los Angeles County near Highway 101 and the Ventura/Los Angeles County line, approximately 70 miles southeast of the South Coast Transfer Station. This public landfill is owned and operated by the Los Angeles County Sanitation District. The landfill is permitted to accept municipal solid waste from Los Angeles County, plus waste from the Ventura County cities of Thousand Oaks and Westlake Village. Other waste from Ventura County or other areas outside Los Angeles County cannot be disposed of at the Calabasas Landfill. As a result, this out-of-County facility cannot accept waste from Santa Barbara County and, therefore, does not represent a feasible alternative to the proposed project. It is not considered further in this alternatives analysis.

4.3.1.3 Chiquita Canyon Landfill
The Chiquita Canyon Landfill is located in western Los Angeles County off Route 126, about 76 miles from the South Coast Transfer Station. This is a private landfill, operated by Republic Services of California. Under its permit, this landfill may accept out-of-county waste from any jurisdiction up to its capacity of 6,000 tpd. The Chiquita Canyon Landfill currently receives approximately 3,300 tpd of waste, so it has the daily capacity to accept both the current average daily disposal and the maximum permitted disposal of waste that now goes to the Tajiguas
Landfill. Therefore, considering capacity alone, it may be feasible to utilize the excess capacity of the Chiquita Canyon Landfill for Tajiguas waste.

If waste were transported to the Chiquita Canyon Landfill using the existing waste transport system in southern Santa Barbara County, a maximum 550 tpd would be transported from the South Coast Transfer Station to Chiquita Canyon. The remaining 950 tpd could be transported via collection truck to the Gold Coast Transfer Station in Ventura and the Del Norte Transfer Station in Oxnard, then to the Chiquita Canyon Landfill.

With this alternative, waste transferred at the South Coast Transfer Station would be transported 76 miles to the Chiquita Canyon Landfill. The direct-haul waste would be transported an average 36 miles from the point of origin (center of the City of Santa Barbara) to the Gold Coast Transfer Station and Del Norte Transfer Station, then via transfer truck another 38 miles to the landfill, a total distance of 74 miles. Compared to the proposed project, transferred waste would travel an additional 55 miles, and direct-haul waste would travel an additional 48 miles. This increase in haul distances would result in greater offsite mobile-source emissions.

Under this alternative, emissions would occur in Santa Barbara, Ventura and Los Angeles counties. These three counties are nonattainment for PM$_{10}$ and ozone. Therefore, vehicular emissions that are in excess of County or State thresholds would constitute a significant impact. Because vehicular emissions from this alternative would be additive to existing nonattainment conditions in Ventura and Los Angeles counties, they would constitute a significant air quality impact. Therefore, this alternative would not result in the reduction or elimination of a significant impact, but would result in an increase in offsite mobile air emissions. Operational impacts would be consistent with those of the proposed expansion.

4.3.2 NEW SOUTH COAST TRANSFER STATION/MATERIALS RECOVERY FACILITY
Under the out-of-County disposal alternative, the County could construct a new transfer station materials recovery facility (MRF) in southern Santa Barbara County. Under this approach, waste received at the new transfer station would be transferred to an out-of-County disposal site.

The Santa Barbara County Board of Supervisors has made a policy decision that expansion of the existing South Coast Transfer Station would be "... a disfavored land use for the site and could not be constructed without inordinate delays and expense" (Santa Barbara County, 1998d). Therefore, to transfer all 1,500 tpd of waste that is permitted for Tajiguas, a new transfer station
at a new location would be required, either to augment or replace the 550 tpd capacity at
the existing South Coast Transfer Station.

In 1999, the CAC subcommittee appointed by the Board completed a siting study for a combined
transfer station/materials recovery facility/compost facility (TRC, 1999). The following basic
siting criteria were established for the facility:
  • Located on the South Coast.
  • Located in rural area.
  • Appropriately zoned.
  • Suitable buffer area available.
  • Awareness of public reaction/support.
  • Suitable for composting facility.
  • Single campus, if possible.
  • Proximity to waste generation.
  • Potential avoidance of areas within Coastal Zone.
  • For a single campus, a site of approximately 15 acres in size. Otherwise,
an area of approximately 5 to 7 acres is required for a materials recovery
facility/transfer station, with a separate area of approximately 5 to 7 acres
for a composting facility.
  • Avoidance of areas with slopes greater than 10 percent.
  • Avoidance of areas under jurisdiction of the state or federal government
(i.e., National Forest, State Parks, County Parks, recreational areas).
  • Avoidance of urban areas that are not zoned Industrial.

Based on these criteria, the CAC subcommittee looked at southern Santa Barbara County to
identify locations of suitable size and zoning that could potentially be used for the combined
transfer station/materials recovery facility/compost facility. The CAC subcommittee initially
identified 17 potentially suitable locations, 12 in the urbanized areas of Goleta and the City of
Santa Barbara, and 5 in the rural area of the South Coast. A subsequent screening process
eliminated all but three of the sites, primarily because of potential impacts associated with the
proposed composting operation. These three sites are: Baron Ranch, the back canyon area of the
Tajiguas Landfill site, and the old Shell Hercules site at Cañada de la Huerta. The following
discussion is based upon the CAC siting study, which is incorporated by reference.
4.3.2.1 South Coast Locations

4.3.2.1.1 Baron Ranch
The Baron Ranch is adjacent to the east of the Tajiguas Landfill site. The County purchased the ranch in 1991, specifically as a buffer between landfill operations and private holdings to the east. The property is a 1,092-acre working ranch with orchards, a small reservoir and an abandoned gravel mine. Structures include a house, small cabin, barn/shed and bunkhouse. Topography ranges from a flat and rolling valley to steep, mountainous terrain.

Various areas of this property provide sufficient space for a transfer station/MRF/compost facility. To accommodate such a facility, the access road and intersection with Highway 101 would require upgrading. Environmental issues include potential future recreational use of the property. Also, based on the rural location of this site, there is the potential for impacts to biological and cultural resources. Visibility and nuisance issues, such as litter, also would be considerations in this area of the South Coast.

4.3.2.1.2 Back Canyon - Tajiguas Landfill Site
This site is within the existing County-owned Tajiguas Landfill site. The site is a flat area of more than 30 acres that would be suitable for building a transfer station/MRF/compost facility. Development of such facility would potentially occur in the existing borrow area and green waste pad for current landfill operation. Potential environmental concerns would include biological and cultural resources. Potential visibility, as well as nuisance issues such as litter, also would be considerations. Nuisance birds would potentially be reduced if the facility were covered.

4.3.2.1.3 Cañada de la Huerta
This site is adjacent to the west of the County-owned Tajiguas Landfill site. It is the location of a former Shell Oil Company processing facility. Portions of the site are known to have soils that are contaminated with polychlorinated biphenyls (PCBs). The site has limited flat areas (2 to 3 acres). As a result, extensive grading would be required to provide sufficient space for a transfer station/MRF/compost facility. Access to the site is provided via the existing Tajiguas Landfill access road. Removal of contaminated soils would be required. Also, some upgrading of the road and intersection with Highway 101 could be necessary. Potential environmental issues include geology, hydrology, hazards (related to the contaminated soils), and biological and cultural resources. Visibility and nuisance issues, such as litter, also would be considerations.
4.3.2.1.4 Waste Transport
The three South Coast locations are either within or adjacent to the existing Tajiguas Landfill site. As a result of this proximity, issues related to hauling the waste from the point of generation to the new transfer station would be the same as with the proposed project. Also, the transport of waste from the new transfer station to the Chiquita Canyon Landfill would be the same for the three locations, as addressed in the following paragraph.

With these three alternatives 1,500 tpd of waste would be transported 97 miles from the new transfer station to the Chiquita Canyon Landfill, an additional 97 miles compared to the proposed project. The increase in vehicular emissions from the new transfer station to the Chiquita Canyon Landfill would be additive to existing nonattainment conditions in both Ventura and Los Angeles counties and, as a result, would constitute a greater air quality impact than the proposed project. Therefore, this alternative is not in compliance with the requirement of CEQA to "...feasibly attain most of the basis objectives of the project but ... avoid o substantially lessen any of the significant effects of the project" (CEQA Guidelines, §15126.6).

In addition, there would be environmental concerns associated with a new transfer station along the South Coast at or near the existing landfill. These include land use compatibility, visibility, traffic, noise, odors, dust, biological and cultural resources, and/or other issues. Should the County want to consider a new transfer station, it would become a separate project that would undergo its own CEQA process, including environmental analysis and public participation.

4.3.2.2 Goleta/Santa Barbara Locations
The CAC subcommittee determined there were additional locations in Goleta and the City of Santa Barbara that could be suitable for a new transfer station. Such a facility would consist solely of a transfer station; it would not include a MRF or composting facility. No specific site for a potential new transfer station has been identified. The direct impacts of constructing such a transfer station cannot be determined unless a specific site has been identified. Should the County want to consider a new transfer station, it would become a separate project that would undergo its own CEQA process.

For the purpose of this alternatives analysis, it is assumed that a new, 1,500 tpd transfer station would be sited in the Goleta/Santa Barbara area, at the same approximate distance from the Chiquita Canyon Landfill as the existing South Coast Transfer Station. Based on the analysis presented in Section 3.11-Air Quality, vehicular emissions from transporting 1,500 tpd of waste
in 20-ton transfer trucks over a distance of 47 miles are equivalent to emissions for both the existing and proposed project, whereby 550 tons of waste are transported 21 miles in transfer trucks and 950 tons of waste are transported 26 miles in packer/roll-off trucks.

With this alternative, 1,500 tpd of waste would be transported 76 miles from the new transfer station in Goleta/City of Santa Barbara to the Chiquita Canyon Landfill. Compared to the proposed project, the waste would be transported an additional 55 miles to the Chiquita Canyon Landfill. The increase in vehicular emissions to Chiquita Canyon Landfill from a potential new in-South Coast Transfer Station would be additive to existing nonattainment conditions in both Ventura and Los Angeles counties and, as a result, would constitute a greater air quality impact. Therefore, this alternative is not in compliance with the requirement of CEQA to "... feasibly attain most of the basic objectives of the project but ... avoid or substantially lessen any of the significant effects of the project" (CEQA Guidelines, §15126.6).

In addition, there would be environmental concerns associated with a new transfer station, including land use compatibility, visibility, traffic, noise, odors and dust. Depending on the site's existing status, there also could be concerns for biological and cultural resources and/or other issues. Because no site has been identified, it is not possible to analyze these potential impacts. As stated above, should the County want to consider a new transfer station, it would become a separate project that would undergo its own CEQA process, including environmental analysis and public participation.

4.3.3 RAIL HAUL OF MUNICIPAL SOLID WASTE
Another out-of-County disposal alternative is rail transport of waste now disposed at the Tajiguas Landfill to an out-of-County disposal site. There are several large regional landfills both within and outside California that are designed to accept large quantities of waste via rail. These are mega-landfills designed to accept up to 20,000 tons of waste per day and anticipated to be operational for upward of 100 years. There are two rail haul landfills in the eastern deserts of Southern California: the Mesquite Regional Landfill in Imperial County, and the Eagle Mountain Landfill in Riverside County. Eagle Mountain is approximately 345 rail miles from Santa Barbara, and the Mesquite Regional Landfill is approximately 355 rail miles from Santa Barbara. Both of these facilities are permitted, but are not yet operational.

In addition, there are other mega-landfills located outside of California, in the Southwest. There are two in western Arizona (La Paz and Butterfield), two in Nevada (Lockwood and Silver State) and
one in Utah (East Carbon). Currently, only the Butterfield Landfill in southwest Arizona accepts out-of-state municipal solid waste by rail, including waste from California. At present, the East Carbon Landfill in Utah accepts out-of-state waste, such as contaminated soil, by rail; however, the only municipal solid waste being received by rail at the East Carbon Landfill is in-state (i.e., Utah) waste.

This alternative requires waste to be transported from the point of generation to a transfer station and from there to a rail loading facility. In some cases, waste can be loaded at the transfer station if there is an adjacent rail loading facility. In other cases, the waste must be transported from the transfer station to a remote loading facility and then loaded onto rail cars.

There is no rail spur adjacent to the existing South Coast Transfer Station or the Gold Coast Transfer Station in Ventura. However, the Union Pacific rail line runs through Santa Barbara and Ventura Counties and, particularly, through Goleta and the City of Santa Barbara. Also, the Del Norte Transfer Station in Oxnard is on property adjacent to a rail spur. Therefore, development of a rail haul capability for municipal solid waste would be possible. For this analysis, however, it is assumed that the spur adjacent to the Del Norte Transfer Station would be utilized.

Compared to the proposed project, use of the Del Norte Transfer Station to transfer Tajiguas waste for transport to a regional rail haul landfill would result in greater mobile emissions. With this scenario, 550 tpd would be transported 44 miles from the existing South Coast Transfer Station to the Del Norte Transfer Station, and 950 tpd would be transported 39 miles from the center of the City of Santa Barbara to the Del Norte Transfer Station. This compares to the 21- and 26-mile distances for transport of the same waste to Tajiguas. The transport of 1,500 tpd to the out-of-County Del Norte Transfer Station would result in mobile emissions within an area that is nonattainment for criteria pollutants. Thus, use of the Del Norte Transfer Station would result in greater air quality impacts than would the proposed project.

To decrease in-County mobile emissions impacts would require development of a new in-County Transfer Station with rail haul capability. Compared to the proposed project, there would be reduced in-County mobile emissions. However, such a facility is not yet available, and no potential site has been identified. For this reason, the direct impacts of constructing such a facility cannot be determined. The establishment of an appropriate loading facility, plus the required contracting and permitting, would be separate projects subject to environmental analysis in compliance with CEQA.
It is recognized that hauling waste by rail requires less energy than hauling by truck. The rule of thumb is that rail haul emissions are one-third of truck haul emissions per unit distance per unit of waste hauled (EPA, 1997). Based on this ratio, the mobile emissions would be approximately the same for the proposed project as transporting the same amount of waste 78 miles by rail. Therefore, in general, if a disposal site that could be reached by rail were within 78 miles of the center of the City of Santa Barbara, the mobile emissions would be about the same. If a rail haul disposal destination required more than 78 miles of transport by train, then emissions would be greater than those associated with waste transport by truck for disposal at Tajiguas.

There would be additional emissions from rail transport to either Eagle Mountain (a distance of 345 miles) or Mesquite (a distance of 355 miles). Based on these distances, with rail haul to Eagle Mountain, emissions would be approximately 14 times those associated with the proposed project. Rail haul to Mesquite also would result in emissions approximately 14 times those associated with the proposed project. These emissions would occur in nonattainment air basins. Therefore, this alternative does not reduce or eliminate significant mobile emissions impacts compared to the proposed project.

4.4 ALTERNATIVE DISPOSAL TECHNOLOGIES

This section discusses potential waste management strategies to reduce the amount of municipal solid waste requiring disposal at the Tajiguas Landfill. Waste diversion and resource recovery technologies present an opportunity to reduce the waste stream, thereby reducing the volume of waste for landfiling. Implementation of such strategies and technologies, however, does not present an actual project alternative. Waste stream diversion is required under AB 939, California's comprehensive waste management statute. However, even with effective waste diversion and resource recovery, there still would be residual wastes that require disposal.

Waste stream reduction is a key element of AB 939, which requires local jurisdictions to divert up to 50 percent of municipal solid waste from disposal in landfills by the end of 2000 and encourages local jurisdictions to meet this diversion requirement through source reduction, recycling and composting programs. At the same time, AB 939 recognizes that environmentally safe transformation or land disposal remains an appropriate solution for that portion of the waste stream that cannot otherwise be diverted, recycled or composted.
To emphasize the importance of waste diversion versus land disposal, AB 939 established a hierarchy of waste management practices in the following order of priority:

- Source reduction (reduction of waste at the source, before waste is created).
- Recycling and composting.
- Environmentally safe transformation.
- Environmentally safe land disposal.

To be in compliance with the AB 939 minimum 50 percent diversion requirement, Santa Barbara County also is required to provide for environmentally safe land disposal of 50 percent of the Countywide waste stream for 15 years. This EIR is part of that process.

This section presents waste management practices in addition to landfills that are either in use in Santa Barbara County or may be considered for future implementation. Therefore, this discussion does not present these waste management strategies as actual project alternatives. Rather, it provides an overview of waste management strategies that offer the potential to further reduce the County waste stream beyond the requirements of AB 939 and, in turn, to minimize the tonnage of municipal solid waste that requires disposal in a landfill.

4.4.1 SOURCE REDUCTION

Source reduction refers to actions by waste generators that result in a net reduction in the generation of solid waste. Source Reduction and Recycling Elements (SRREs) of each CIWMP are required for each county and city in the state to identify how the jurisdictions will meet state-mandated waste diversion goals. Source reduction strategies and objectives include:

- Reducing the use of nonrecyclable materials.
- Replacing disposable materials and products with reusable materials and products.
- Reducing packaging.
- Reducing the amount of yard wastes generated.
- Purchasing repairable products.
- Increasing the efficiency of the use of paper, cardboard, glass, metal and other materials by reducing wastes from production operations, processes and equipment, and considering durability, reusability and recyclability as product selection criteria.
The Santa Barbara County SRRE provides the following alternatives to be implemented in the unincorporated areas of the County:

- Promote backyard composting to increase onsite management of food and yard waste.
- Assess and strengthen County procurement policy to encourage increased purchase of products with source reduction attributes.
- Develop and disseminate source reduction education.
- Establish an awards campaign to recognize significant local reduction achievements.
- Provide commercial assistance to County and commercial/industrial facilities, helping them establish reduction and recycling programs.
- Study the feasibility of establishing variable can rates for residential generators, which would be implemented once recycling and composting alternatives have been made available and promoted.
- Establish a pilot drop-off area for recoverable (reusable/repairable) items.
- Study the feasibility of reducing or waiving business license fees for "source reduction" businesses.

The cities in the County also have adopted their own SRREs, with measures to reduce the tonnage of waste that requires disposal at a landfill.

4.4.2 RECYCLING AND COMPOSTING
4.4.2.1 Recycling
Recycling is the beneficial reuse of products that would otherwise be disposed of (landfilled). As of February 2000, the County was diverting 40 percent of its waste stream (Santa Barbara County, 2000d). Much of this diversion is the result of successful recycling programs, which include a three-stream residential collection program, collection of commercial co-mingled recyclables, recycling of construction and demolition debris, processing of self-haul green waste, and collection of co-mingled recyclables in schools. The County is actively involved in ongoing activities that will result in expansion of these programs to further improve existing recycling and diversion results. In addition to these recycling programs, the County has implemented a public information campaign that includes a user-friendly website, newspaper and radio advertisements in both English and Spanish and, in the future, television ads. This public information effort highlights recycling programs for residential and commercial waste, household hazardous waste, and construction and demolition debris.
The 1,500 tpd maximum permitted disposal rate for Tajiguas under the proposed project is based on the waste generation and source reduction and diversion projections for the County and its cities and assumes compliance with AB 939. Waste transported to Tajiguas for disposal consists of postrecycled residual waste, reflecting the AB 939 diversion programs implemented by the communities from which the waste originates.

4.4.2.2 Composting
Composting is the biological decomposition of the organic portion of municipal solid waste under controlled conditions. The decomposition is carried out long enough so that the end-product is a stable, nuisance-free material that can be stored and used for land applications, such as fertilizer or soil amendment. Materials that are capable of being composted include yard trimmings, leaves, food products, biosolids and certain paper products.

The County is conducting an ongoing evaluation of composting concepts that may be economically and technologically viable in the near future. Composting remains a feasible option for the diversion of waste. However, neither composting alone, nor together with other alternative waste technologies that may be economically and technologically feasible in the future, would completely eliminate the need for landfill capacity for the residual waste that will require disposal.

4.4.3 WASTE-TO-ENERGY
Conversion technologies for municipal solid waste residuals may at some point in the future provide a way for local jurisdictions to attain the 50 percent state-mandated diversion level. The process of converting waste to energy utilizes waste as fuel to produce power or other usable energy by-products. The process used to generate power from waste is similar to the process used for energy generation from other, more typical, fuels (oil, natural gas). The fuel is burned to provide heat that is used to generate steam, which then is used to turn a turbine and power a generator. Other applications include using the steam for direct uses, such as space heating.

According to some researchers, the process of converting waste to energy is potentially capable of reducing waste stream volumes by 80 to 90 percent (Brown, Vence & Associates, 1989). However, only four waste-to-energy facilities presently exist in California, and only 110 exist
nationwide. This is due largely to the high capital investment required for these facilities. Also, due to the potential for environmental impacts, these facilities are not particularly popular among community leaders.

The most developed and widely practiced waste-to-energy process is mass burn technology. With this process, mass (waste) is placed directly into the incinerator and mechanically processed through a furnace. Heat generated by the combustion process is recovered and converted into the desired by-product (e.g., steam).

Although this process is currently in use, several issues still exist. First, supplemental fuel must be provided to "keep the fires burning." This increases costs. Also, to be cost-effective, the facility must be designed to burn many different types of waste. This requires specialty equipment, which increases capital costs. The facility also requires specially trained technicians to operate the system, further increasing costs. Finally, it is necessary to dispose of ash and leachate as waste by-products, and the ash itself can be a special waste with expensive disposal requirements, again increasing overall costs.

The primary environmental impact from these waste-to-energy facilities is air emissions, which require sophisticated control technology. Further, there are ongoing concerns regarding the composition, concentrations and effects of potential pollutants from these facilities. Other environmental issues include those typically associated with landfills, such as odor, visibility (the buildings are typically large), traffic, noise and dust.

Other technology is being developed to produce synthetic gas consisting primarily of hydrogen, methane, carbon monoxide and carbon dioxide. This process consists of three operations. An autoclave receives municipal solid waste and thermally and mechanically breaks down the organic matter and sterilizes all the waste, including the recyclable materials. The sterilized and treated waste is then sorted in an automated process that includes screening, magnetic separators, eddy current separators, and other devices to produce segregated streams of organic waste and recyclable materials. The organic pulp is pelletized, and the recyclable materials are returned to industry. The pellets are then converted to synthetic gas (syngas). The syngas is cleaned of particulate and any residual organic compounds and is then suitable for use as a fuel for power generation equipment.
Other processes utilize municipal solid waste and sewage sludge as a feedstock. These processes claim to convert 90 percent of the incoming waste stream to useable commercial products including fuel grade ethanol, carbon dioxide (CO₂) and recyclables.

With these technologies, a MRF separates recyclables from the incoming waste stream. The remaining organic material (paper products and other cellulose-based materials) are sent to the second part of the facility where the process converts over 90 percent of the residual waste into fuel grade ethanol.

Still other processes prepare a refuse-derived fuel from the mixed solid waste through a process that utilizes the following steps:

- Biothermal drying in a semicomposting process.
- Separation of recyclables by mechanical separation (described above).
- Marketing the recyclables and the fuel.

In these plants the waste is divided into:

- A fuel fraction, for use in cement kilns or for energy production.
- A mineral fraction for use in road construction.
- Glass and metals for recycling.

While these types of technologies may offer relief to disposal in the future, there are no such facilities operating in the United States at the present time. Some of the more significant issues facing the development of these technologies are:

- The cost of facilities is high relative to current processing (biorefineries may cost more than $100 million).
- Permitting these types of facilities may be an extremely difficult and exceedingly lengthy process.
- There is uncertainty regarding the exact specifications for processing waste into usable feedstock.
- Diversion credit should be increased beyond the current 10 percent.
- Markets are still untapped for this type of energy in California.

4.4.4 OTHER DEVELOPMENTAL TECHNOLOGIES
Santa Barbara County is monitoring development of other waste management technologies that may become available in the future and be applicable to County needs. For example, testing of biodegradation using biologically active microorganisms is currently underway in other parts of the United States. This technology is considered promising because it accomplishes two
objectives. First, it reduces the waste mass through degradation. Second, it produces a by-product (usually landfill gas) that can be collected, cleaned and used as a fuel source.

Although the current developing technologies hold promise for the future, the current project objective is to provide waste disposal capacity at the Tajiguas Landfill for 15 years. Many of the obstacles to developing and marketing waste-to-energy technology will likely be overcome in the future, enabling waste-to-energy technology to be considered part of long-term planning to meet the waste disposal needs for Santa Barbara County.

4.4.5 SUMMARY
One of the primary objectives of the proposed project is to provide up to 15 years of waste disposal capacity for the County. This objective is consistent with AB 939, which requires counties to demonstrate a minimum permitted disposal capacity of 15 years for waste that is not diverted.

Santa Barbara County and its cities are continuing with efforts to achieve ongoing increases in source reduction, recycling and composting to meet and, if possible, exceed the 50 percent source reduction and diversion requirement of AB 939. However, even if achieved, success beyond the 50 percent diversion requirement would still require significant waste disposal capability. As noted above, the proposed project is the means by which the County will meet its requirements for environmentally safe land disposal for residual waste for up to 15 years.

4.5 NO PROJECT ALTERNATIVE
The requirement to address a "No Project" alternative is set forth in the CEQA Guidelines, §15126.6(e). The Guidelines state: "The specific alternative of 'no project' shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decisionmakers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project."

The Guidelines (§15126.6[e][3][C]) go on to state: "After defining the no project alternative ... the lead agency should proceed to analyze the impacts of the no project alternative by projecting what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services."
Under the No Project alternative, the expansion of Tajiguas would not occur, and the landfill would be closed upon expiration of its current permit, expected to be in 2005. Santa Barbara County would continue to generate waste, and this waste would continue to require disposal. Waste that is disposed of at Tajiguas, including waste from the City of Santa Barbara, Cuyama Valley and Santa Ynez Valley (via Foxen Canyon Transfer Station), would need to be transported to another location for disposal. Under the No Project alternative, the waste would be diverted to an out-of-County landfill, either by truck or by rail.

The County could evaluate the feasibility of rail transport for disposal once a feasible waste disposal site (likely the Mesquite Regional Landfill and/or Eagle Mountain Landfill) was in a position to contract for the receipt of waste from Santa Barbara County. Because the infrastructure necessary to implement this approach does not currently exist, rail haul is not considered a potential outcome under the No Project alternative. Therefore, waste transport would continue to occur by truck.

As previously discussed above, and in greater detail in Sections 4.2 and 4.3, compared to the proposed project, the potential impacts associated with diverting Tajiguas waste to an out-of-County disposal site would result in greater offsite mobile air emissions, primarily in jurisdictions that currently are nonattainment for criteria pollutants. Further, the operational impacts of waste disposal are similar and would occur at the out-of-County landfill rather than at Tajiguas. Therefore, diverting waste to another landfill does not reduce or eliminate operational impacts of landfill disposal of municipal solid waste, although it would eliminate those impacts from occurring at the Tajiguas Landfill site.

The nearest feasible out-of-County landfill is the Chiquita Canyon Landfill in Los Angeles County. The Chiquita Canyon Landfill could accommodate the maximum 1,500 tpd disposal needs currently served by Tajiguas (see Table 4-2).

Under this scenario, ongoing disposal impacts would occur at the Chiquita Canyon Landfill. The landfill would have adequate infrastructure and the necessary permits to take some or all of the diverted waste, including a rural location and conditions designed to assure that disposal would not have adverse impacts with respect to noise, odor, water resources and other environmental considerations. As a result, impacts would not be expected with regard to these resources.
Moreover, this landfill site is disturbed and no expansion is necessary to receive the Tajiguas waste. Thus, no onsite impacts are anticipated for site-specific resources such as biological and cultural resources.

However, the travel distance from Santa Barbara County to the Chiquita Canyon Landfill would result in greater mobile emissions and other transportation-related and operational impacts, including transport costs, than with the proposed project. Also, these emissions would occur primarily within Ventura and Los Angeles counties which, like Santa Barbara County, are nonattainment for criteria pollutants. Therefore, this scenario would result in an adverse and significant air quality impact in Ventura and Los Angeles Counties.

Other potential impacts include increasing the rate at which the out-of-County landfill reaches its permitted capacity.

4.5.1 POTENTIAL "NO PROJECT" SCENARIO
With the No Project alternative, waste that is now disposed of at Tajiguas would be transported to one landfill that may be within or outside Santa Barbara County. The ultimate destination of waste diverted from Tajiguas would be dictated by market factors and decisions of individual jurisdictions. The County and each city would be able to contract with haulers to dispose of waste at different landfills.

In light of available infrastructure and existing information regarding the feasibility of obtaining access to existing disposal capacity, the County concludes that the following scenario represents a likely No Project alternative. This scenario would result in minimizing haul distances, while operating within the constraints of existing infrastructure:

- Self-haul waste from the Foxen Canyon Transfer Station (52 tpd) would be transported via transfer/roll-off trucks to the Santa Maria Landfill for disposal.
- Franchise waste from the Santa Ynez Valley (57 tpd) would be direct-hauled via collection truck to the Santa Maria Landfill for disposal.
- Waste from the South Coast Transfer Station (550 tpd) would be transported via transfer truck to the Chiquita Canyon Landfill in Los Angeles County.
- Waste that is currently direct-hauled to Tajiguas in collection trucks (up to 950 tpd) would be direct-hauled to the Gold Coast and Del Norte Transfer Stations in Ventura County. All of the 950 tpd would go to the Del Norte Transfer Station. Although the Gold Coast Transfer Station is located closer to Santa Barbara, it already accepts 300 tpd of its permitted capacity of 440 tpd.
• After processing at these transfer stations, the waste would be hauled via transfer truck to the Chiquita Canyon Landfill in Los Angeles County.

4.5.1.1 Assumptions

Under the No Project alternative, waste that now is disposed of at Tajiguas would continue to be generated and would continue to require a facility for proper disposal and would be disposed of at existing landfills that have been permitted to accept such waste. Because these would be operating landfills, potential impacts would be related primarily to the transport of waste for disposal and impacts associated with increased disposal at the out-of-County landfill.

Compared to the existing scenario, transportation impacts would consist of additional waste haul trucks utilizing the roadways to the chosen disposal sites, with associated emissions. These impacts are discussed below, based on the assumptions shown. These assumptions reflect the capacities of the transfer stations and landfills shown in Table 4-2.

FROM FOXEN CANYON TRANSFER STATION/SANTA YNEZ VALLEY:

• 51 tpd via transfer truck from Foxen Canyon Transfer Station to Santa Maria Landfill (three transfer trucks/30 miles).
• 58 tpd via collection truck from Santa Ynez Valley wasteshed to Santa Maria Landfill (eight packer/rolloff trucks/34 miles).

FROM SANTA BARBARA TRANSFER STATION:

• 550 tpd via transfer truck from South Coast Transfer Station to Chiquita Canyon Landfill (28 transfer trucks/76 miles).

FROM CITY OF SANTA BARBARA:

• 890 tpd via collection truck from center of the City of Santa Barbara to Del Norte Transfer Station (112 collection trucks/39 miles).
  THEN TO
  - Chiquita Canyon Landfill (45 transfer trucks/35 miles).

• 60 tpd via collection truck from center of the City of Santa Barbara.
  - To Gold Coast Transfer Station (eight collection trucks/33 miles).
  THEN TO
  - Chiquita Canyon Landfill (three transfer trucks/41 miles).
Under the No Project alternative, there also is the underlying assumption that Santa Barbara County and its affected cities can make appropriate arrangements with Los Angeles County to utilize each of the above transfer stations and landfills.

With the No Project alternative, waste that is now located 400 feet above msl in the southeast corner of the landfill also would be transported offsite. Impacts would be substantially greater in all identified areas since the waste would be transported offsite along public highway systems potentially exposing the general public to the decomposing waste.

4.5.1.2 Impact Analysis
Based on the above, this analysis assumes that the 52 tpd of self-haul waste received at the Foxen Canyon Transfer Station would be transported to the Santa Maria Landfill for disposal. As a result, three transfer trucks would go to the receiving landfill. The 57 tpd of franchise waste collected in the Santa Ynez Valley wasteshed also would be transported to the Santa Maria Landfill for disposal. As a result, eight collection trucks (packer and roll-off trucks) would go to the receiving landfill.

The maximum permitted waste from the South Coast Transfer Station (550 tpd) would be transported in 28 transfer trucks to the Chiquita Canyon Landfill. Emissions generated by waste transport from the South Coast Transfer Station to the Chiquita Canyon Landfill would be based on distance, considering that the Chiquita Canyon Landfill is 76 miles from the South Coast Transfer Station.

This analysis assumes that 950 tpd of waste is collected in the City of Santa Barbara. As shown above, 890 tpd of this waste would be direct-hauled in 112 collection trucks a distance of 39 miles to the Del Norte Transfer Station. This 890 tpd then would be loaded into 45 transfer trucks and transported 35 miles to the Chiquita Canyon Landfill.

The other 60 tpd of waste collected in the City of Santa Barbara would be direct-hauled in eight collection trucks a distance of 33 miles to the Gold Coast Transfer Station. This 60 tpd then would be loaded into three transfer trucks and transported 41 miles to the Chiquita Canyon Landfill.

Utilization of the above-mentioned transfer stations and landfills would be within the limits of their respective permits. Although the transport of Tajiguas waste would result in an increase in
the amount of waste received at each facility, this increase would be within daily permit limits. The transport of Tajiguas waste also would result in an increase in the number of trucks accessing each site; this also would be within permit limits. The primary impact of receiving waste originally destined for Tajiguas would be an increase in the daily waste tonnage at the transfer stations and landfills utilized for that waste and the reduction of the projected life of the receiving landfills.

Under the No Project alternative, use of in-County disposal would decrease the useful life of the Santa Maria Landfill. The out-of-County disposal aspect of the No Project alternative primarily would affect Chiquita Canyon Landfill. Based on the above assumptions, an additional 1,500 tpd of waste from Santa Barbara County could be disposed of at the Chiquita Canyon Landfill. The Chiquita Canyon Landfill has a permitted daily capacity of 6,000 tpd and an average daily throughput of 3,293 tpd (see Table 4-2). Under the No Project alternative, the daily disposal rate of the Chiquita Canyon Landfill could increase to 4,793 tpd with the addition of waste from Santa Barbara County. This additional disposal would contribute to shortening the useful life of Chiquita Canyon Landfill.

4.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

In accordance with the CEQA Guidelines, §15126.6: "If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." Compared to the proposed Tajiguas expansion, the No Project alternative would eliminate potentially significant impacts of developing the proposed project at Tajiguas as related to biological and visual resources, but would not eliminate significant air quality impacts from mobile emissions. The No Project alternative would require waste to be transported greater distances for disposal than to the proposed project at Tajiguas. These increased transport distances would result in offsite mobile emissions greater than would occur with the proposed project. Therefore, the No Project alternative necessarily involves environmental trade-offs among different resources and is not necessarily environmentally superior to the proposed project.

As discussed in Sections 4.1 through 4.5, other alternatives could eliminate or reduce onsite environmental impacts of the proposed project at Tajiguas. However, these operational impacts would essentially be transferred to the landfill(s) that accept the waste from Tajiguas. Also, the alternatives evaluated would result in an increase in already significant air quality impacts from
mobile emissions associated with waste transport. As a result, the alternatives discussed in this section are not necessarily environmentally superior to the proposed project.

4.7 SOUTHEAST CORNER MODIFICATION
One element of the proposed project is modification of the southeast corner of the existing Tajiguas Landfill. This activity would involve excavation of existing in-place waste (including in-place cover soil) in that portion of the landfill that is 400 feet above msl within and adjacent to the Coastal Zone (approximately 720,000 cubic yards of waste and cover soil). This excavated material would be relocated for onsite disposal in another area of the landfill in the proposed landfill expansion area. Alternatives to this activity are to dispose of the excavated waste offsite at another in-County or out-of-County landfill or leave the waste in place at Tajiguas.

An alternative to onsite disposal of this excavated waste is offsite disposal, at either an existing in-County landfill, a new in-County landfill or an existing out-of-County landfill. With this alternative, the approximately 720,000 cubic yards of waste and cover soil currently landfilled in the southeast corner of Tajiguas would be excavated and transported offsite for disposal at one or more landfills. Up to 1,200 tons per day of this material would be excavated and transported offsite for disposal. Potential locations for in-County and out-of-County waste disposal would be the same as for the proposed project.

Impacts of this alternative would include, but not be limited to, noise from excavation equipment and haul trucks, dust from excavation activities, litter from blowing waste, air quality impacts from onsite equipment emissions, and truck traffic, vehicular emissions and nuisance odors associated with waste transport to an offsite disposal location.

4.7.1 IN-COUNTY DISPOSAL
To dispose of the excavated waste within the County, both existing landfills and potential new landfills are evaluated as potential disposal sites.

4.7.1.1 Existing In-County Landfills
Consideration of an existing in-County landfill includes the Foxen Canyon, Lompoc, Vandenberg AFB and Santa Maria landfills. The Foxen Canyon Landfill is anticipated to close
in the next 2 years. Transfer of waste above the current level would deplete the remaining capacity sooner than anticipated. This would adversely impact the Tajiguas Landfill, as the Foxen Canyon waste then would be transported to Tajiguas. Potential expansion of the Foxen Canyon Landfill is not feasible, since the Board of Supervisors has approved a Transfer Station at this site. Therefore, transport of the excavated waste to Foxen Canyon is not a feasible alternative.

The City of Lompoc has made it known that the Lompoc Landfill will not accept waste from the Tajiguas Landfill wasteshed. As a result, transport of excavated waste from Tajiguas to the Lompoc Landfill is not a feasible alternative.

The Vandenberg AFB Landfill is limited to use by the United States Air Force, and it does not accept waste from other jurisdictions. Any decision for the County or other entity to use the Vandenberg AFB Landfill would not be made at the base level; it would be made at the Air Force Level, in Washington, D.C. (Kamei, 2000). Impacts associated with expanding this landfill would be similar to the Tajiguas expansion. As a result, transport of excavated waste from Tajiguas to the Vandenberg AFB Landfill is not a feasible alternative.

As discussed previously, the Santa Maria Landfill currently accepts waste from the City of Santa Maria and unincorporated northern Santa Barbara County area, and it could take waste from other areas, as well (Zhao, 2000). However, because of the distance the waste would be transported, this alternative would result in an increase in offsite mobile air emissions. These emissions would occur in Santa Barbara County, which is nonattainment for PM$_{10}$ and ozone. Compared to onsite disposal there would be a substantial increase in the number of vehicle miles the waste would travel between its excavation and disposal sites. This would result in increased disposal costs, vehicular emissions and other transportation-related impacts.

4.7.1.2 New In-County Landfill
The County has identified nine potential sites for construction of a new landfill. Five of the sites were identified in the 1993 North County Landfill Siting Process, and four were identified in the ongoing Countywide Landfill Siting Study. Preparation of a new landfill that could accept the excavated waste from Tajiguas involves final site selection, site acquisition, planning, design, environmental review, permitting and construction. Such a process is expected to take up to 15 years. Based on the locations of the identified potential sites, offsite disposal would require the excavated waste to be transported up to 56 miles from Tajiguas to the new site (see
This would result in approximately 60 truck trips per day to transport up to 1,200 tpd of excavated waste from Tajiguas to the new landfill site, with associated impacts related to vehicular emissions and traffic. Based on the time required to establish a new in-County landfill site, the Southeast Corner Modification could not begin for another approximately 15 years.

4.7.2 OUT-OF-COUNTY DISPOSAL
Three landfills are in reasonable proximity to Tajiguas when considering transport of the excavated waste for offsite disposal: Toland Road Landfill in Ventura County, and the Calabasas and Chiquita Canyon landfills in Los Angeles County. A fourth landfill, the Simi Valley Landfill in Ventura County, is scheduled to close in 2004. With the proposed expansion project to begin in 2005, the Simi Valley Landfill is not considered further. These landfills were addressed previously (see Section 4.3.1).

This alternative would result in an increase in offsite mobile air emissions. These emissions would occur in Santa Barbara, Ventura and Los Angeles counties, all of which are nonattainment for PM$_{10}$ and ozone. Compared to onsite disposal there would be a substantial increase in the number of vehicle miles the waste would travel between its excavation and disposal sites. This would result in increased disposal costs, vehicular emissions and other transportation-related impacts.