

## EXECUTIVE SUMMARY

This section has been prepared in accordance with the Section 15123 of the State CEQA Guidelines, and is divided into three components. The first summarizes the characteristics of the proposed project, and the second identifies environmental impacts, mitigation measures and residual impacts. The third component is a summary and comparison of the alternatives considered.

### PROJECT SYNOPSIS

#### Project Proponent and Lead Agency

The project proponent and Lead Agency is the Santa Barbara County Public Works Department, Resource Recovery & Waste Management Division (RRWMD), located at 130 E. Victoria Street, Santa Barbara, California 93101.

#### Location

The Tajiguas Landfill is located in a coastal canyon known as Cañada de la Pila, approximately 26 miles west of the City of Santa Barbara. The Tajiguas Landfill is approximately 1,600 feet north of U.S. Highway 101. The location of the Tajiguas Landfill is shown on the Regional Location Map (Figure 3-1) and on the Vicinity Map (Figure 3-2). The street address of the Tajiguas Landfill is 14470 Calle Real, Santa Barbara, California 93117.

#### Project Description

The County of Santa Barbara proposes to modify the operation of the Tajiguas Landfill Project to add a Resource Recovery Project that would process MSW from the communities currently served by the Tajiguas Landfill. Figure 3-4 identifies the locations of Resource Recovery Project facilities at the landfill site. The Resource Recovery Project would be designed and constructed to process the MSW that is currently being delivered to the Tajiguas Landfill for burial from unincorporated areas of the south coast of Santa Barbara, Santa Ynez and New Cuyama Valleys and, the cities of Santa Barbara, Goleta, Buellton and Solvang. The County of Santa Barbara, the cities of Santa Barbara, Goleta, Buellton and Solvang are collectively the "Public Participants". The facility would also be designed to process source separated organic (food and green) waste (SSOW) from the region's existing and future recycling programs<sup>1</sup>. Additionally, as an *optional project element*, the Resource Recovery Project could include the infrastructure to process currently collected commingled source separated recyclables (CSSR).

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<sup>1</sup> SSOW is currently collected as green-waste only and is processed into mulch at the Tajiguas Landfill. Future programs may include food waste collected separately or included with green-waste. Any program that would increase the amount of SSOW would decrease the amount of organics in the MSW, and in turn, reduce the amount of MSW processed by the MRF by the same amount.

1 The Resource Recovery Project would modify current waste management operations at  
2 the Tajiguas Landfill by the addition of a Materials Recovery Facility (MRF) and Dry  
3 Fermentation Anaerobic Digestion (AD) Facility. A preliminary site plan for these facilities is  
4 provided as Figure 3-5.

5 The MRF would be comprised of an approximate 60,000 square foot (sf) facility (70,000  
6 sf if CSSR processing [*optional element*] is included as described above) that would sort MSW  
7 into three streams:

- 8 • Recyclables (i.e., glass, metal, paper, plastic, wood) - recovered and processed  
9 for sale;
- 10 • Organics – recovered for processing in the AD Facility; and
- 11 • Residue – materials left over after all recyclables and organics are recovered that  
12 would be disposed of at the existing landfill.

13 The AD Facility would be housed within an approximate 63,000 sf building, along with an  
14 associated Energy Facility and percolate storage tanks that would convert all organics  
15 recovered from the MSW and SSOW into:

- 16 • Bio-gas (primarily composed of methane and CO<sub>2</sub>) – that would be used to power  
17 two (2) 1,537 horsepower onsite combined heat and power (CHP) engines  
18 driving electric power generators that would generate approximately 1+ net  
19 megawatts (MW) of renewable power. The Energy Facility would be located on  
20 the south side of the AD Facility; and
- 21 • Digestate - that can then be cured into compost and/or soil amendments. The  
22 curing would require an approximately 5 acre area (located on the landfill's  
23 permitted waste disposal footprint). The compost and/or soil amendments would  
24 be marketed for agricultural or landscape use or used for reclamation projects.

25 Construction of the MRF and AD Facility would require approximately 107,200 cubic  
26 yards of cut and 81,200 cubic yards of fill.

27 The MRF would have a design capacity of up to 800 tons/day of MSW or up to  
28 approximately 250,000 tons/per year (311 operating days per year<sup>2</sup>). Up to 90,000 tons/year  
29 (290 tons/day) of recyclable material would be recovered and sold for reuse. The AD facility  
30 would have a design capacity of up to 73,600 tons/year, made up of organics recovered from  
31 the MRF and/or brought to the project site as SSOW. Up to 100,000 tons/year (320 tons/day) of  
32 residue from the MRF and residue from the AD Facility which is not suitable for composting  
33 would be landfilled. Residue ineligible for disposal in the landfill (i.e., hazardous waste or e-  
34 waste), would be transported to an appropriate recycling or disposal facility.

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<sup>2</sup> Assumes operation up to a maximum of 6 days per week (6 \* 52 = 312) and accounting for one holiday (312-1=311 operating days).

1           As an *optional element*, the project could also process up to 130 tons/day CSSR or  
2 40,000 tons/year. With the inclusion of this *optional element*, the total processing capacity of  
3 the MRF would be approximately 290,000 tons/year (250,000 tons/year MSW + 40,000  
4 tons/year CSSR). Processing of CSSR would increase the production of marketable  
5 recyclables by up to 36,000 tons/year (126,000 tons/year overall), producing up to an additional  
6 4,000 tons/year (13 tons/day) of residue which would be disposed of in the landfill.

7           Based on current waste disposal rates the Tajiguas Landfill may reach its permitted  
8 disposal capacity (23.3 million cubic yards) in approximately year 2026. With the additional  
9 diversion provided by the proposed Tajiguas Landfill Project modification (operation of the  
10 Resource Recovery Project), the permitted disposal capacity (which would not be modified as a  
11 part of the project) would not be expected to be reached until approximately year 2036,  
12 extending the landfill life by approximately 10 years.

13           The Resource Recovery Project facilities would be located approximately 3,200 feet  
14 north of U.S. Highway 101 on the existing Tajiguas Landfill Operations Deck, an approximately  
15 6-acre site that currently houses the landfill administrative office, two crew trailers, engineering  
16 trailer, hazardous material storage, electronic-waste storage, equipment storage and parking,  
17 employee parking, maintenance facility and three fuel storage tanks<sup>3</sup>.

18           The Coastal Zone boundary runs through the southern portion of the landfill property  
19 (see Figure 3-3). The facilities (MRF, AD Facility and composting area) associated with the  
20 Resource Recovery Project would be located outside of the Coastal Zone. However, the landfill  
21 operations trailers and other related facilities may be temporarily re-located to an existing  
22 disturbed area northeast of the top deck in the inland area of the landfill property and/or on an  
23 existing deck south of the green waste processing area within the Coastal Zone during  
24 construction of the project (see locations labeled 2 on Figure 3-4). The composting area is  
25 proposed to be located on the top deck of the landfill. The top deck would be closed and a final  
26 landfill cover system installed prior to using it for the project composting area. To protect the  
27 integrity of the landfill and protect water quality, closure, post-closure use and post-closure  
28 maintenance of the top deck area would be subject to review and approval by CalRecycle, the  
29 Local Enforcement Agency (LEA) and the Regional Water Quality Control Board.

30           The vendor selected by the Public Participants to design, construct and operate the  
31 Resource Recovery Project is Mustang Renewable Power Ventures, LLC (Mustang). As a part  
32 of the proposed project, the County expects that each of the Public Participants would enter into  
33 a legal arrangement (i.e. a Joint Powers Authority) which would in turn contract with Mustang to  
34 design, build and operate the facility. If a Public Participant chooses not to participate in the  
35 legal arrangement (i.e. a Joint Powers Authority) then the jurisdiction will contract directly with  
36 Mustang. The County/RRWMD would continue to operate the Tajiguas Landfill. Landfill  
37 operations and engineering offices would be integrated into the new Resource Recovery Project  
38 structures, but landfill staffing would be reduced in response to the reduced amount of waste  
39 requiring burial.

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<sup>3</sup> Pursuant to CEQA requirements, the EIR alternatives analysis will consider sites outside of the Tajiguas Landfill for the Resource Recovery Project facilities including possible locations within the urban area of the county or city.

1 **ALTERNATIVES**

2 **Alternative Site Screening**

3 A screening analysis was completed to identify possible alternative urban locations for  
4 the MRF and/or AD Facility. The alternative urban locations were identified to potentially reduce  
5 potential transportation, air quality, visual, public services and land use compatibility/consistency  
6 impacts associated with siting the Tajiguas Resource Recovery Project facilities at the existing  
7 Tajiguas Landfill on the rural Gaviota Coast. A total of seven alternative urban locations were  
8 initially identified including:

- 9 • Westwind Drive-in (City of Goleta);
- 10 • Airport Drive-in (City of Santa Barbara owned property adjacent to the City of  
11 Goleta);
- 12 • MarBorg David Love Place Recycling Center (and surrounding City-owned  
13 parcels) adjacent to the City of Goleta;
- 14 • MarBorg Industries facility at 620 Quinientos Street, Santa Barbara<sup>4</sup>;
- 15 • County-operated South Coast Recycling and Transfer Station;
- 16 • State-owned Earl Warren Show Grounds; and
- 17 • County-owned Garden Street Parking Lot (located within the City of Santa  
18 Barbara).

19 Factors that were considered in the screening analysis included: site size, zoning,  
20 access (including proximity to U.S. Highway 101), surrounding land uses, ownership (which  
21 could affect acquisition of the site), existing development or uses, known environmental or  
22 regulatory constraints, presence of, or proximity to existing solid waste management facilities,  
23 and ability to reduce anticipated project impacts without generating new significant impacts.

24 Based on the results of this screening analysis, two locations were identified as possible  
25 alternative locations for the MRF, the MarBorg Industries 620 Quinientos Street property and  
26 the South Coast Recycling and Transfer Station (SCRTS)<sup>5</sup> which would feasibly attain most of  
27 the basic project objectives but would avoid or substantially lessen any of the significant effects.  
28 The remaining sites were rejected as infeasible because they were not physically suitable for  
29 the MRF, were privately owned and could not be acquired in reasonable period of time and/or  
30 were not expected to reduce environmental impacts as compared to the proposed location of  
31 the facilities at Tajiguas Landfill. None of the alternative urban locations were determined to be  
32 feasible for the AD Facility and associated Composting Area.

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<sup>4</sup> MarBorg also currently owns and operates a Construction and Demolition (C&D) Recycling and Transfer Facility located at Quarantina Street in Santa Barbara. This site also processes green-waste and wood. The site was initially identified as a possible alternative site for the MRF but due to the existing use of the site for C&D recycling activities MarBorg's Quinientos property has been identified as an alternative MRF site.

<sup>5</sup> The SCRTS was previously identified as a possible MRF site in 1993, 1997 and in 2006 (Preliminary Feasibility Study of Regional MRF Alternatives, CalRecovery November 3, 2006).

1 In addition to the alternative urban locations, four other rural locations were identified as  
2 possible sites for the MRF or AD Facility including:

- 3 • Gaviota Oil Heating Facility (suggested by League of Women Voters);
- 4 • County-operated Santa Ynez Valley Recycling and Transfer Station and Closed  
5 Foxen Canyon Landfill;
- 6 • County-owned Baron Ranch; and
- 7 • Laguna County Sanitation District Wastewater Treatment Facility.

8 Based on the screening analysis, none of these alternative rural locations were  
9 determined to be feasible and/or were expected to reduce environmental impacts as compared  
10 to the proposed location of the facilities at the Tajiguas Landfill and therefore, were not analyzed  
11 in further detail in this Subsequent EIR.

### 12 **Alternatives Identified But Not Subject to Detailed Analysis**

13 The following alternatives were identified during the initial CEQA review process but  
14 were determined not to be feasible and are not studied in further detail in the Subsequent EIR:

- 15 • Alternative urban sites for the MRF or AD Facility including the Westwind Drive-  
16 in, Airport Drive-in, MarBorg David Love Place Recycling Center; State-owned  
17 Earl Warren Show Grounds; and County-owned Garden Street Parking Lot  
18 (located within the City of Santa Barbara);
- 19 • Alternative rural sites for the MRF or AD Facility including the Gaviota Oil Heating  
20 Facility, Santa Ynez Valley Recycling and Transfer Station and Closed Foxen  
21 Canyon Landfill, Baron Ranch, and Laguna County Sanitation District  
22 Wastewater Treatment Facility;
- 23 • Thermal MSW conversion technologies (i.e., gasification);
- 24 • Aerobic composting at the Tajiguas Landfill;
- 25 • Enhanced recycling/source separation and/or waste reduction/prevention  
26 programs; and
- 27 • Alternative sites for the disposal of residue from the Resource Recovery Project.

### 28 **Alternatives Subject to Detailed analysis**

29 The following seven alternatives were subject to detailed analysis:

- 30 A. **No Project Alternative:** continued disposal of MSW at the existing, permitted  
31 Tajiguas Landfill until the disposal capacity is reached in ~2026. As the County  
32 is required to provide waste disposal services for the communities currently  
33 served by the Tajiguas Landfill, after ~2026 the County would need to provide  
34 other disposal options. Absent implementation of the proposed project, the  
35 County would likely either pursue an expansion of the Tajiguas Landfill  
36 (Alternative E) or export waste to another landfill (Alternative F or G);

- 1           **B. Urban Area MRF Alternative 1 (MarBorg Industries MRF):** the MRF would be  
2           located at the MarBorg Industries 620 Quinientos Street facility, the AD Facility  
3           would be located at the Tajiguas Landfill, with disposal of residual waste at the  
4           Tajiguas Landfill;
- 5           **C. Urban Area MRF Alternative 2 (South Coast Recycling and Transfer Station**  
6           **[SCRTS] MRF):** the MRF would be located at the SCRTS and the AD Facility  
7           would be located at the Tajiguas Landfill, with disposal of residual waste at the  
8           Tajiguas Landfill;
- 9           **D. Off-site Aerobic Composting:** the MRF would be located at the Tajiguas  
10          Landfill, the AD Facility would be replaced with aerobic composting of organics at  
11          the Engel & Gray Composting Facility in Santa Maria, with disposal of residual  
12          waste at the Tajiguas Landfill;
- 13          **E. No Project Alternative - Tajiguas Landfill Expansion:** disposal at the Tajiguas  
14          Landfill under the existing capacity and parameters through to approximately  
15          2026 and then expansion of the existing landfill to provide additional waste  
16          disposal capacity to approximately year 2036 (equivalent to the proposed  
17          project);
- 18          **F. No Project Alternative - Waste Export to the Simi Valley Landfill and**  
19          **Recycling Center:** disposal at the Tajiguas Landfill under the existing capacity  
20          and parameters through to approximately 2026 and then export of MSW after the  
21          existing permitted Tajiguas Landfill capacity is reached in ~2026;
- 22          **G. No Project Alternative - Waste Export to the Santa Maria Integrated Waste**  
23          **Management Facility (IWMF):** disposal at the Tajiguas Landfill under the  
24          existing capacity and parameters through to approximately 2026 and then export  
25          of MSW to the City of Santa Maria’s proposed new landfill after Tajiguas Landfill  
26          capacity is reached in ~2026.

27           Excluding the Landfill Expansion and the waste exportation alternatives, each of the  
28           alternatives assume continued operation of the Tajiguas Landfill under the operational  
29           parameters and solid waste disposal capacity discussed in 01-EIR-05 (Section 2.4, pages 2-23  
30           to 2-60) and included in the Tajiguas Solid Waste Facility Permit No. 42-AA-0015 including a  
31           permitted waste disposal capacity of 23.3 million cubic yards, 357 acre permitted area, landfill  
32           waste footprint of 118 acres, 1,500 tons per day permitted maximum tonnage, and maximum  
33           waste elevation of 620 feet (msl).

#### 34           **AREAS OF KNOWN CONTROVERSY**

35           Controversy associated with the Tajiguas Landfill is typically associated with its coastal  
36           location in the Gaviota Coast Rural Region and its continued operation. Based on responses to  
37           the Notice of Preparation (NOP), the following issues are of concern to affected agencies and  
38           the public:

- 1           • The Gaviota Planning Advisory Committee is concerned about any expansion or  
2 industrialization of the landfill site, and increases in traffic and associated safety  
3 and air pollution concerns;
- 4           • The Community Environmental Council is concerned that the objectives identified  
5 in the NOP may limit the range of alternatives analyzed in the Subsequent EIR,  
6 and concerned that using the proposed Santa Maria Landfill Integrated Waste  
7 Management Facility as an alternative disposal site may result in greater  
8 greenhouse gas emissions;
- 9           • The Surfrider Foundation is concerned about impacts on water quality and  
10 wildlife in Pila Creek and nearshore ocean waters, impacts of air pollution on the  
11 Gaviota Coast, any further development of the Gaviota Coast and recommends  
12 exporting waste to the proposed Santa Maria IWMF;
- 13           • The League of Women Voters is concerned about impacts to ocean waters; and
- 14           • The California Department of Transportation has concerns about impacts to the  
15 hydraulics of the Pila Creek/U.S. Highway 101 culvert from additional runoff and  
16 possible change to landfill access/traffic routing if, in the future, Caltrans closes  
17 the existing U.S. Highway 101 at grade crossing at the landfill access road.

## 18 **SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

19           Tables Ex-1 through Ex-3 summarize the identified environmental impacts for each  
20 resource/issue area analyzed in the Subsequent EIR, recommended mitigation measures and  
21 the residual level of significance after mitigation is implemented. Environmental impacts are  
22 classified as follows pursuant to the County's Guidelines for the Implementation of the California  
23 Environmental Quality Act of 1970, as amended:

- 24           • Class I Impacts: Significant unavoidable adverse impacts for which the  
25 decision-maker must adopt a Statement of Overriding Considerations.
- 26           • Class II Impacts: Significant environmental impacts that can be feasibly  
27 mitigated or avoided for which the decision-maker must adopt Findings and  
28 recommended mitigation measures.
- 29           • Class III Impacts: Adverse impacts found not to be significant for which the  
30 decision-maker does not have to adopt findings under CEQA.
- 31           • Class IV Impacts: Impacts beneficial to the environment.

1 The proposed Resource Recovery Project is not anticipated to result in any significant  
2 and unavoidable (Class I) impacts. As indicated in Table Ex-3, the only Class I impacts  
3 identified were extension of significant operational air quality and biological resources impacts  
4 associated with extending the life of the Tajiguas Landfill. Implementation of the Tajiguas  
5 Resource Recovery Project would not increase the capacity or footprint of the existing permitted  
6 Tajiguas Landfill but would extend the operating life of the landfill from approximately 2026 to  
7 approximately 2036. This would result in delaying full closure of the landfill and extending the  
8 duration of time over which some previously disclosed landfill impacts would occur. CEQA  
9 Findings were adopted for the Tajiguas Landfill Project and a Statement of Overriding  
10 Considerations was prepared for the significant and unavoidable impacts (Class I). The  
11 Findings and Statement of Overriding Considerations would remain applicable to the impacts  
12 associated with extending the landfill's life.

### 13 **COMPARISON OF ALTERNATIVES**

14 The following section provides a brief description of the relative impacts of the  
15 alternatives and a comparison to the proposed Tajiguas Resource Recovery Project. More  
16 detailed information is provided in Section 5.3 of this Subsequent EIR, including Table 5-46,  
17 which compares the relative magnitude of each impact for each alternative to the proposed  
18 project.

#### 19 **Alternative A – No Project**

20 This Alternative would not meet any of the project objectives. The No Project Alternative  
21 would involve continued waste disposal at the Tajiguas landfill until the permitted capacity is  
22 reached in approximately 2026. The No Project Alternative would not result in any new impacts,  
23 while existing impacts associated with current operation of the landfill would continue to occur.  
24 Most of these existing impacts would be terminated when the landfill reaches capacity, and  
25 closure activities are completed. Landfill gas would continue to be emitted for decades after  
26 closure as waste decomposes over time. However, some form of waste disposal project would  
27 need to be implemented prior to landfill closure, to continue to meet the solid waste disposal  
28 needs of the Tajiguas Landfill watershed.

29 State CEQA Guidelines Section 15126.6(e)(3)(C) states: "After defining the no project  
30 alternative...the lead agency should proceed to analyze the impacts of the no project alternative  
31 by projecting what would reasonably be expected to occur in the foreseeable future if the project  
32 were not approved, based on current plans and consistent with available infrastructure and  
33 community services." Therefore, as an alternative to the Resource Recovery Project and as a  
34 likely consequence of the No Project Alternative, the County of Santa Barbara will need to  
35 consider other waste management alternatives such as continued landfilling. The impacts of  
36 Alternative E (No Project - Landfill Expansion), Alternative F (No Project - Export to the Simi  
37 Valley Landfill and Recycling Center) and Alternative G (No Project - Export to the Santa Maria  
38 Integrated Waste Management Facility) are identified in Section 5.3. Landfill Expansion would  
39 create a number of Class I impacts that would not occur under the proposed project. Waste  
40 export would eliminate or reduce impacts in the immediate vicinity of the Tajiguas Landfill, but  
41 would contribute to impacts (many of which are identified as significant and unavoidable) at the  
42 respective landfill sites and increase haul distances and off-site mobile air emissions.



1 **Alternative B - Urban Area MRF Alternative 1 (MarBorg Industries MRF)**

2 This Alternative meets the underlying purpose and some of the basic project objectives;  
3 however, MarBorg has formally requested that their proposed MRF and their site on Quinientos  
4 Street no longer be considered, as they have since partnered with Mustang to operate proposed  
5 Resource Recovery Project facilities at the landfill. In addition, based on a preliminary review,  
6 their response to the RFP failed to meet two of the criteria (tipping fee less than \$100/ton,  
7 facility made available to the public participants for \$1 at the end of the 20-year contract). Since  
8 these two criteria were not met, Alternative B does not meet Objective 3 and additional  
9 Objective D. Preliminary engineering design work indicates that construction of a MRF at the  
10 MarBorg property under Alternative B is technically feasible, however, MarBorg is now part of  
11 the Mustang team, and MarBorg has formally withdrawn their proposal to construct and operate  
12 a MRF at their site, it would be financially and legally challenging for the Public Participants to  
13 acquire this privately-owned site within a reasonable period of time.

14 However, because of the desire of the Board and members of the public to analyze  
15 alternative urban area locations for the MRF, the EIR continues to include an analysis of project  
16 impacts of Alternative B<sup>6</sup> even though it may not be a considered a feasible alternative at this  
17 time. A discussion of the impacts of Alternative B as compared to the proposed project is  
18 provided below:

19 Visual Resources/Aesthetics

20 This Alternative would reduce the amount of structural development at the  
21 landfill site; however, views of the facilities at the landfill are already limited by  
22 intervening topography and the AD Facility would still be briefly visible from  
23 U.S. Highway 101 south of the landfill entrance under Alternative B. Alternative  
24 B would have similar visual impacts as the proposed project at the landfill site  
25 (Class II), but also result in impacts at the MRF site. Mitigation proposed for the  
26 landfill site (exterior building colors, landscaping) would reduce aesthetics  
27 impacts to less than significant.

28 Alternative B would result in significant and unavoidable (Class I) aesthetic  
29 impacts at the MRF site associated with the building ventilation exhaust stack.  
30 Architectural design and aesthetic treatments would substantially reduce the  
31 visual impact of the MRF building itself from U.S. Highway 101, South Calle  
32 Cesar Chavez and Chase Palm Park. However, the dimensions and physical  
33 characteristics of the building ventilation exhaust stack required to mitigate air  
34 quality impacts are unknown and may impart a heavy industrial character to the  
35 area. This potential change to the visual character of the MRF site and  
36 surrounding area is considered significant and unavoidable. Overall, aesthetics  
37 impacts would be greater under Alternative B, primarily due to the urban setting  
38 of the MRF site, the greater visibility from public viewing locations, and the  
39 larger number of public and private viewers.

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<sup>6</sup> In the letter dated December 9, 2013 MarBorg withdrew their formal proposal for a MRF on their property; however, they indicated their willingness to include the analysis of the MRF in the CEQA alternatives analysis.

1 Air Quality/Greenhouse Gas Emissions

2 Excluding impacts associated with extending the life of the landfill (which would  
3 occur under Alternatives B, C and D), the proposed project would not result in  
4 any significant and unavoidable (Class I) or significant but mitigable (Class II)  
5 air quality impacts. Alternative B would reduce Class III NO<sub>x</sub> emissions as  
6 compared to the proposed project and would provide slightly greater (Class IV)  
7 GHG benefits due to the reduced transportation-related emissions. However,  
8 significant air quality impacts at the Alternative B MRF site (non-cancer acute  
9 health risk associated with toxic air emissions at the property boundary [Class  
10 I], exceedance of the NAAQS standard for 1-hour NO<sub>2</sub> [Class I] and odor  
11 impacts [Class II]) would be not occur under the proposed project. Therefore,  
12 overall air quality impacts would be greater under Alternative B.

13 Biological Resources

14 The proposed project would not result in any significant and unavoidable  
15 impacts to biological resources. Class II and III biological impacts at the landfill  
16 site associated with night-time operations of the MRF and increased human  
17 activity would be reduced under Alternative B since the MRF would not be  
18 constructed or operated at the landfill. Because the AD Facility and the  
19 associated infrastructure would be constructed under this alternative, the  
20 remaining Class II and III impacts due to loss of habitat, potential impacts to  
21 sensitive plant and wildlife species, common wildlife species and plants and  
22 nesting migratory birds and/or raptors would be similar to the proposed project.  
23 In addition, landscape vegetation removal at the alternative MRF site may also  
24 impact nesting migratory birds or raptors. Overall, biological resource impacts  
25 would be similar to the proposed project.

26 Hazards & Hazardous Materials

27 Due to past industrial land uses on and adjacent to the Alternative B MRF site  
28 there is a greater possibility that hazardous waste or hazardous materials may  
29 be encountered during construction (Class II). In addition, hazardous materials  
30 may still also be encountered at the landfill (Class II) during construction of the  
31 AD Facility. Elimination of the MRF at the landfill would reduce the amount of  
32 structural development and the number of employees located within, and  
33 requiring evacuation from a high fire hazard area, but the risk of fire due to the  
34 generation and processing of bio-gas in the AD Facility would remain under this  
35 alternative. In addition, there would be a risk of fire due to hot loads at the  
36 alternative MRF site.

37 Other hazards and hazardous materials impacts at the landfill under Alternative  
38 B would be virtually the same as the proposed project. Overall, hazards and  
39 hazardous materials impacts would be greater under Alternative B.

1                   Geologic Processes

2                   Both the proposed project and Alternative B would be exposed to geologic  
3                   conditions that would require specialized construction methods (Class II  
4                   geologic impact). The Alternative B MRF would be located in a liquefaction  
5                   hazard zone and may be impacted by liquefaction and seismically-induced  
6                   settlement (Class II). These geologic hazards do not occur at the proposed  
7                   project site, but the MRF and AD Facility at the landfill site would be subject to  
8                   the presence of expansive soils and differential settlement due to the presence  
9                   of MSW east of the proposed MRF building site. Geologic hazards (differential  
10                  settlement [Class II] and landfill slope stability [Class III]) associated with  
11                  construction and operation of the AD Facility and the composting area would be  
12                  the same as the proposed project. The Alternative B MRF would be located in  
13                  a tsunami inundation zone and may adversely affect the adjacent coastal area  
14                  by the spread of solid waste during a tsunami (Class II). Other geologic  
15                  impacts at the landfill would be virtually the same as the proposed project.  
16                  Overall, geologic processes impacts would be greater under Alternative B.

17                  Cultural Resources

18                  Unknown buried cultural resources may be discovered at the MRF site (Class  
19                  II) and the landfill site (Class II). However, due to the cultural sensitivity of the  
20                  Alternative B MRF site (old Estero, 1880's fair site), impacts associated with  
21                  discovery of buried cultural resources would likely be greater. Overall, cultural  
22                  resources impacts would be greater under Alternative B.

23                  Noise

24                  Noise impacts associated with the proposed project would be adverse but less  
25                  than significant (Class III). Construction and operation of the MRF at the  
26                  Alternative B site would further reduce the less than significant noise impact to  
27                  properties surrounding the Tajiguas Landfill. However, due to nearby  
28                  residences, both construction noise and operational noise at the Alternative B  
29                  MRF site would be significant (Class II). Overall, noise impacts would be  
30                  greater under Alternative B.

31                  Land Use

32                  Similar to the proposed project, with implementation of mitigation, Alternative B  
33                  would result in less than significant (Class II) land use conflicts and would not  
34                  be inconsistent with applicable plans and policies. This alternative may reduce  
35                  the perceived development of the rural Gaviota Coast, but land use impacts  
36                  would be similar to the proposed project.

1                   Transportation/Circulation

2                   Traffic impacts (intersection and roadway levels of service and safety) would be  
3                   less than significant (Class III) for the proposed project. Construction of the  
4                   MRF at the Alternative B site would reduce traffic volumes on U.S. Highway  
5                   101 along the Gaviota Coast, which currently is, and is projected to operate at  
6                   acceptable levels of service. This Alternative would increase traffic volumes at  
7                   intersections surrounding the MRF site (Class III for most intersections).  
8                   However, cumulative + Alternative B traffic volumes would generate congestion  
9                   at the U.S. Highway 101 southbound ramps/Garden Street intersection (Class  
10                  I). This cumulative impact would not occur under the proposed project.  
11                  Overall, transportation/circulation impacts would be greater under Alternative B.

12                  Water Resources

13                  The Alternative B MRF may be affected by sea level rise (Class III), generate  
14                  increased storm run-off from the MRF site (Class II), and be affected by  
15                  flooding (Class III). These impacts would not occur under the proposed project.  
16                  Water would be supplied to the proposed MRF from the City of Santa Barbara's  
17                  public water system which would reduce less than significant groundwater  
18                  impacts due to extractions from the Sespe-Alegria hard rock groundwater  
19                  formations at the landfill. Alternative B would result in surface water quality  
20                  impacts associated with construction storm run-off (Class II) at both the landfill  
21                  site and MRF site. Other water resources impacts at the landfill would be  
22                  virtually the same as the proposed project. Overall, water resources impacts  
23                  would be greater under Alternative B.

24                  Public Health/Nuisance

25                  Public health and nuisance impacts may occur at the MRF and landfill site, but  
26                  would be less than significant with proposed design features and vector control  
27                  practices (Class III). Other public health/nuisance impacts at the landfill would  
28                  be virtually the same as the proposed project. Considering the more densely  
29                  populated area surrounding the Alternative B MRF site, more people could be  
30                  exposed to nuisance impacts. However, overall public health/nuisance impacts  
31                  would be very similar under Alternative B.

32                  Environmental Justice

33                  The community surrounding the Alternative B MRF site is considered a minority  
34                  population based on the 2010 Census, such that disproportionate impacts may  
35                  occur. Impacts affecting the local minority population at the MRF site include  
36                  aesthetics, air quality, hazardous materials, noise and surface water quality.  
37                  Although incorporation of mitigation would reduce impacts to this population,  
38                  significant unavoidable impacts (Class I) would occur. In comparison, the  
39                  proposed project would not result in environmental justice impacts.

1                   Summary

2                   In general, Alternative B would have similar impacts at the landfill site as the  
3                   proposed project, but would also involve numerous Class I and Class II impacts  
4                   at the MRF site including:

5                   **Class I Impacts**

- 6                   • Impact ALT B VIS-1: degradation of the coastal view from U.S. Highway  
7                   101 in Santa Barbara;
- 8                   • Impact ALT B VIS-2: degradation of the view from South Calle Cesar  
9                   Chavez;
- 10                  • Impact ALT B VIS-3: degradation of the view from Chase Palm Park;
- 11                  • Impact ALT B VIS-4: degradation of private views;
- 12                  • Impact ALT B AQ-3: exceedance of the 1-hour NO<sub>2</sub> National ambient air  
13                  quality standard;
- 14                  • Impact ALT B AQ-5: exceedance of the SBCAPCD's non-cancer acute  
15                  health risk threshold;
- 16                  • Impact ALT B T-CUM-2: incrementally contribute to a Class I cumulative  
17                  impact at the southbound U.S. Highway 101 ramp at Garden Street; and
- 18                  • Impact ALT B EJ-1: the minority population surrounding the MRF site  
19                  would be disproportionately affected by the above impacts.

20                  **Class II Impacts**

- 21                  • Impact ALT B VIS-6: increased nighttime lighting at the MRF site;
- 22                  • Impact ALT B AQ-7: potential to cause odor-related nuisance;
- 23                  • Impact ALT B BIO-2: disturbance of nesting migratory birds and/or  
24                  raptors during construction, including tree removal;
- 25                  • Impact ALT B HAZ-1: exposure of hazardous waste or hazardous  
26                  material during construction of the MRF;
- 27                  • Impact ALT B G-2: potential spread of solid waste to adjacent coastal  
28                  areas during a tsunami;
- 29                  • Impact ALT B G-3: potential damage of the MRF by liquefaction and  
30                  seismically-induced settlement;
- 31                  • Impact ALT B CR-1: disturbance of unknown archeological resources  
32                  during MRF construction;
- 33                  • Impact ALT B N-1: exceedance of noise standards during construction  
34                  of the MRF;

- 1 • Impact ALT B N-2: exceedance of noise standards during operation of
- 2 the MRF;
- 3 • Impact ALT B LU-1: potential land use conflicts at the MRF site;
- 4 • Impact ALT B WR-2: increase storm run-off from the MRF site;
- 5 • Impact ALT B WR-5: storm run-off during demolition and construction
- 6 activities may adversely affect surface water quality; and
- 7 • Impact ALT B WR-6: storm run-off during MRF operation may adversely
- 8 affect surface water quality.

### 9 **Alternative C - Urban Area MRF Alternative 2 (SCRTS MRF)**

10 This Alternative would meet all of the basic project objectives, including reducing landfill  
11 dependence, divert MSW to meet the requirements of Assembly Bill 341, provide a long term  
12 solution (minimum operational life of 20 years) to the region's solid waste management needs  
13 and substantially extend the life of the Tajiguas Landfill.

14 Although the Alternative C MRF would not be located in proximity to the proposed AD  
15 Facility and other project facilities at the landfill, it would be closer to communities generating  
16 MSW and would reduce transportation requirements. In addition, the site is currently a part of  
17 the County's existing waste management infrastructure. Therefore, Alternative C would meet  
18 Primary Objective 2.

19 Alternative C would meet Primary Objective 3 as the facility would be administered  
20 under the same structure as the proposed project; a Joint Powers Authority would enter into a  
21 20-year contract with the vendor to design, build, own and operate and then transfer (DBOOT)  
22 the facility at a specified price, the MRF would still be located on County-owned property  
23 reducing land costs, and the same entity would own/operate the MRF and AD facilities although  
24 they would be in different locations under Alternative C.

25 Alternative C would also meet the Additional Project Objectives by achieving the MSW  
26 diversion goal of 60 percent, reducing greenhouse gases consistent with CalRecycle's  
27 Anaerobic Digestive Initiative and Assembly Bill 32, providing green energy (solar and  
28 alternative fuels [bio-gas]), providing a cost effective tipping fee, implementing a project that can  
29 adapt to the changing waste management needs of the region and providing a safe and  
30 humane work environment for all employees.

31 Alternative C is a potentially feasible alternative to the proposed project because  
32 preliminary engineering design work indicates it is technically feasible, the MRF site selected is  
33 suitable for the proposed MRF, the site is owned by the County, adequate infrastructure is  
34 available, and it is economically viable. A discussion of the impacts of Alternative C as  
35 compared to the proposed project is provided below:

1 Visual Resources/Aesthetics

2 Neither the proposed project nor Alternative C would result in significant and  
3 unavoidable (Class I) aesthetic impacts. Alternative C would have similar visual  
4 impacts at the landfill site (Class II), but would reduce Class III night-time  
5 lighting impacts at the landfill. This Alternative would reduce the amount of  
6 structural development at the landfill site. However, the views of the facilities at  
7 the landfill are limited by intervening topography and the AD Facility would be  
8 briefly visible from U.S. Highway 101 south of the landfill entrance under  
9 Alternative C. The amount of structural development at the Alternative C MRF  
10 site would increase. However, because of the location of the site and  
11 surrounding topography, the views of the MRF would be limited from public and  
12 private viewing locations (Class III). Overall, visual resource impacts would be  
13 very similar to the proposed project, but night time lighting impacts would be  
14 reduced.

15 Air Quality/Greenhouse Gas Emissions

16 Excluding impacts associated with extending the life of the landfill (which would  
17 occur under any of the alternatives considered), neither the proposed project  
18 nor Alternative C would result in any significant and unavoidable (Class I) or  
19 significant but mitigable (Class II) air quality impacts. Alternative C would  
20 reduce Class III NO<sub>x</sub> emissions impacts as compared to the proposed project  
21 and would provide slightly greater (Class IV) GHG benefits due to the reduced  
22 transportation-related emissions. Less than significant (Class III) nuisance odor  
23 impacts and criteria pollutants may impact a larger number of people in the  
24 vicinity of the Alternative C site, but the MRF at this location would replace the  
25 current outdoor storage and processing of CSSR and self-haul MSW and both  
26 the MRF at Tajiguas Landfill and at the Alternative C MRF site would be  
27 equipped with bio-filters to remove odors. MRF operation under Alternative C  
28 would result in a less than significant cancer and non-cancer health risk (Class  
29 III). Overall, air quality impacts would be slightly greater under Alternative C.

30 Biological Resources

31 The proposed project would not result in any significant and unavoidable  
32 impacts to biological resources. Class II and III biological impacts at the landfill  
33 site associated with night-time operations of the MRF and increased human  
34 activity would be reduced under Alternative C since the MRF would not be  
35 constructed or operated at the landfill. Because the AD Facility and the  
36 associated infrastructure would be constructed at the landfill under this  
37 Alternative, the remaining Class II and III impacts due to loss of habitat,  
38 potential impacts to sensitive plant and wildlife species, common wildlife  
39 species and plants and nesting migratory birds and/or raptors would be similar  
40 to the proposed project.

1 In addition, planted oak trees would be removed and nesting migratory birds or  
2 raptors may be affected by construction activity at the Alternative C MRF site.  
3 Overall, biological resource impacts would be very similar to the proposed  
4 project.

#### 5 Hazards & Hazardous Materials

6 The proposed project would not result in any significant and unavoidable  
7 hazards or hazardous materials impacts. Due to past use of portions of the  
8 Alternative C MRF site as a MSW disposal site, there is a possibility that  
9 hazardous waste or hazardous materials may be encountered during  
10 construction (Class II). In addition, hazardous materials may also be  
11 encountered at the landfill (Class II) during construction of the AD Facility.

12 Elimination of the MRF at the landfill would reduce the amount of structural  
13 development and the number of employees located within, and requiring  
14 evacuation from a high fire hazard area, but the risk of fire due to the  
15 generation and processing of bio-gas in the AD Facility would remain under this  
16 alternative. In addition, there would be a risk of fire due to hot loads at the  
17 Alternative C MRF site, which is an area that has been impacted by wildland  
18 fire in the past. Other hazards and hazardous materials impacts at the landfill  
19 under Alternative C would be virtually the same as the proposed project.  
20 Overall, hazards and hazardous materials impacts would be greater under  
21 Alternative C.

#### 22 Geologic Processes

23 Both the proposed project and Alternative C would be exposed to geologic  
24 conditions that would require specialized construction methods (Class II  
25 geologic impact). The parking area associated with the Alternative C MRF  
26 would be exposed to differential settlement (Class II) as well as the AD Facility  
27 and parking areas at the landfill (Class II). Other geologic impacts at the landfill  
28 would be virtually the same as the proposed project. Since facilities at both  
29 sites (SCRTS site and landfill) would be adversely affected, geologic processes  
30 impacts would be greater under Alternative C.

#### 31 Cultural Resources

32 Unknown buried cultural resources may be discovered at the Alternative C MRF  
33 site (Class II) and the landfill site (Class II). Due to the greater cultural  
34 sensitivity of the Alternative C MRF site (two Native American village sites  
35 within 0.25 miles), impacts associated with discovery of buried cultural  
36 resources may be greater than the proposed project. Overall, cultural  
37 resources impacts would be greater under Alternative C.



1                   Noise  
2                   Noise impacts associated with the proposed project would be adverse but less  
3                   than significant (Class III). Construction and operation of the MRF at the  
4                   Alternative C site would further reduce the less than significant noise impacts to  
5                   agricultural and open space properties surrounding the Tajiguas Landfill. Due  
6                   to the presence of residentially zoned land surrounding the County campus  
7                   under Alternative C, more sensitive receptors would be exposed to adverse, but  
8                   less than significant (Class III) noise impacts associated with construction and  
9                   operation of the MRF. Overall, noise impacts would be greater under  
10                  Alternative C.

11                  Land Use  
12                  Similar to the proposed project, with implementation of mitigation, Alternative C  
13                  would not result in significant land use conflicts or be inconsistent with  
14                  applicable plans and policies. This alternative may reduce the perceived  
15                  development of the rural Gaviota Coast, but land use impacts would be similar  
16                  to the proposed project.

17                  Transportation/Circulation  
18                  Traffic impacts (intersection and roadway levels of service and safety) would be  
19                  less than significant (Class III) for the proposed project. Implementation of the  
20                  MRF at the Alternative C site would reduce traffic volumes on U.S. Highway  
21                  101 along the Gaviota Coast, which currently is, and is projected to operate at  
22                  acceptable levels of service. However, temporary closure of the SCRTS during  
23                  the MRF construction period would require re-directing solid waste  
24                  transportation to the MarBorg C&D RTF, which would result in two critical  
25                  downtown intersections exceeding the City's traffic threshold (Class II). In the  
26                  long-term, this Alternative would increase traffic volumes at intersections  
27                  surrounding the MRF site (Class III for intersections and roadway segments).  
28                  Due to temporary traffic congestion in Santa Barbara and long-term increased  
29                  traffic in the vicinity of the Alternative C MRF site, transportation/circulation  
30                  impacts would be greater under Alternative C.

31                  Water Resources  
32                  Both the proposed project and Alternative C would result in surface water  
33                  quality impacts associated with construction storm water run-off (Class II).  
34                  Other water resources impacts at the landfill would be virtually the same as the  
35                  proposed project. Water would be supplied to the alternative MRF site from the  
36                  Goleta Water District public water system which would reduce less than  
37                  significant groundwater impacts due to extractions from the Sespe-Alegria hard  
38                  rock groundwater formation at the proposed project site. Other water resources  
39                  impacts at the landfill site would be virtually the same as the proposed project.  
40                  Overall, water resources impacts would be very similar under Alternative C.

1                   Public Health/Nuisance

2                   Public health and nuisance impacts may occur at the MRF and landfill site, but  
3                   would be less than significant with proposed design features and vector control  
4                   practices (Class III). Other public health/nuisance impacts at the landfill site  
5                   would be virtually the same as the proposed project. Considering the more  
6                   densely populated area surrounding the Alternative C MRF site, more people  
7                   could be exposed to nuisance impacts, however, many waste management  
8                   activities that currently occur outdoors at the SCRTS site would be moved  
9                   indoors. Overall, public health/nuisance impacts would be very similar under  
10                  Alternative C.

11                  Environmental Justice

12                  Neither Alternative C nor the proposed project would impact a minority or low  
13                  income population. Therefore, environmental justice impacts would not occur.

14                  Summary

15                  In summary, Alternative C would have similar impacts at the landfill site as the  
16                  proposed project, but would also involve several Class II impacts at the MRF  
17                  site including:

- 18                         • Impact ALT C BIO-3: disturbance of nesting migratory birds and/or  
19                         raptors during MRF construction;
- 20                         • Impact ALT C HAZ-1: exposure of hazardous waste or hazardous  
21                         material during construction of the MRF;
- 22                         • Impact ALT C G-4: potential damage of the MRF parking areas due to  
23                         differential settlement;
- 24                         • Impact ALT C CR-1: disturbance of unknown archeological resources  
25                         during MRF construction;
- 26                         • Impact ALT C T-2: temporary traffic congestion due to redirection of  
27                         solid waste to the MarBorg C&D RTF during the MRF construction  
28                         period;
- 29                         • Impact ALT C WR-3: storm run-off during demolition and construction  
30                         activities may adversely affect surface water quality; and
- 31                         • Impact ALT C WR-4: storm run-off during MRF operation may adversely  
32                         affect surface water quality.

## Alternative D: MRF at Tajiguas Landfill and Off-Site Aerobic Composting

Alternative D would meet the underlying purpose and Primary Objective 1a and 1c by reducing landfill dependence, diverting MSW to meet the requirements of Assembly Bill 341, and substantially extending the life of the Tajiguas Landfill. Alternative D would meet Additional Project Objectives A, B, E and F by achieving the MSW diversion goal of 60 percent, reducing greenhouse gases consistent with Assembly Bill 32, implementing a project that can adapt to the changing waste management needs of the region, and providing a safe and humane work environment for all employees. However, as compared to the proposed project, greenhouse emission reductions would be less due to increased transportation emissions. Objectives not met by Alternative D include:

- Ensuring the project elements can function together effectively and efficiently (because MRF and composting facilities would be owned/operated by different entities);
- Ensuring the facility would minimize environmental and community impacts (because the aerobic composting facility would not capture the bio-gas converting it to green energy and the increased travel distance would increase GHG emissions); and
- Providing long-term financial stability (because facility is on leased land that could be terminated prior to the end of the project period and due to the increased costs of making facility adjustments to process organics from mixed solid waste as well as added transportation costs).

Alternative D is technically feasible, the aerobic composting facility is permitted, and adequate infrastructure is available, but because of the nature of the site lease and unknown costs associated with facility upgrades needed to process organic waste recovered from the mixed MSW, the alternative may not be economically feasible. A discussion of the impacts of Alternative D as compared to the proposed project is summarized below:

### Visual Resources/Aesthetics

Neither the proposed project nor Alternative D would result in significant and unavoidable (Class I) aesthetic impacts. Visual impacts at the composting facility site would be less than significant. Alternative D would have similar visual impacts at the landfill site (Class II), but would reduce the amount of structural development. However, the views of the facilities at the landfill are limited by intervening topography and the MRF would still be briefly visible from U.S. Highway 101 south of the landfill entrance under Alternative D. Therefore, visual resource impacts would be very similar to the proposed project.

1 Air Quality/Greenhouse Gas Emissions

2 Alternative D would generate greater air pollutant emissions associated with  
3 compost windrows (ROC emissions, Class I) and motor vehicles (NO<sub>x</sub>  
4 emissions, Class II) as compared to the proposed project. However,  
5 operational criteria pollutant emissions (Class III), health risk (Class III), odor-  
6 related nuisance (Class III) and H<sub>2</sub>S/organic sulfide (Class III) impacts would be  
7 reduced at the landfill as compared to the proposed project. This Alternative  
8 would not include production of green energy, which, under the proposed  
9 project would provide an additional GHG benefit. Overall, air quality impacts  
10 would be greater under Alternative D and the GHG reduction benefits would be  
11 less.

12 Biological Resources

13 Aerobic composting at the Engel & Gray facility would have a minimal effect on  
14 biological resources at/near the facility (Class III). Impacts associated with  
15 constructing only the MRF at the landfill would virtually be the same as the  
16 proposed project. Overall, biological resource impacts would be very similar to  
17 the proposed project.

18 Hazards & Hazardous Materials

19 Organic waste from the Tajiguas MRF may contain hazardous materials and  
20 expose the public or environment during transportation or at the composting  
21 facility (Class III). Aerobic composting may be a source of fire starts (due to the  
22 elevated temperatures that occur during the composting process), but the area  
23 surrounding the composting facility is a low fire hazard area. The elimination of  
24 the AD Facility, Energy Facility and composting area would reduce the potential  
25 for construction-related discharge of hazardous materials, avoid accidental  
26 release and potential explosion of bio-gas, reduce the potential for LFG to  
27 collect and reach flammable concentrations, reduce the potential to discover  
28 buried hazardous materials, and reduce project-related fire risk at the landfill.  
29 Overall, hazards and hazardous materials impacts would be less under  
30 Alternative D.

31 Geologic Processes

32 Alternative D would reduce the Class II impacts associated with differential  
33 settlement by eliminating the placement of the composting area over the landfill  
34 top deck area. Other geologic impacts at the landfill would be virtually the  
35 same as the proposed project. Overall, geologic processes impacts would be  
36 less than the proposed project under Alternative D.

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### Cultural Resources

No cultural resources would be impacted at the Alternative D composting site. Unknown buried cultural resources may be discovered at the landfill site during construction (Class II). Since the area of disturbance would be very similar, cultural resources impacts would be virtually the same under Alternative D.

### Noise

Under Alternative D, noise generation from the Energy Facility engines and from composting area equipment operations would be eliminated at the landfill. However, construction noise and operational noise associated with the MRF (which is the project's primary noise source) would continue to result in adverse but less than significant (Class III) impacts to residences on agricultural properties near the landfill. In addition, noise levels on agricultural properties surrounding the composting facility site may increase due to increased equipment operations and truck traffic. Overall, noise impacts would be virtually the same under Alternative D.

### Land Use

Aerobic composting requires greater land area, energy input and water than anaerobic digestion; however, with implementation of mitigation, Alternative D would not result in significant land use conflicts or be inconsistent with applicable plans and policies.

### Transportation/Circulation

Alternative D would generate traffic at both the composting facility (Class III) and the landfill (Class III). The elimination of an AD Facility, Energy Facility and composting area would slightly reduce employee trips at the landfill but increase truck trips to transport the wet organic material to the Engel & Gray composting facility. Overall, transportation/circulation impacts would be virtually the same under Alternative D.

1 Water Resources

2 Elimination of an AD Facility, Energy Facility and composting area would  
3 reduce potential water quality impacts (Class II) from potential pollutants  
4 associated with these facilities (Impact TRRP WR-9) and would reduce  
5 groundwater pumpage from the Vaqueros and Sespe Alegria Formations at the  
6 landfill. However, processing, handling, and transport of the recovered organic  
7 material (which would have a high moisture content) would be a potential  
8 source of storm water contaminants and require implementation of BMPs at the  
9 landfill site. Processing of organic material recovered from the MSW by  
10 aerobic composting under Alternative D requires more water than an anaerobic  
11 digestion process and as a result would increase groundwater usage (Class III)  
12 from the Santa Maria Groundwater Basin and adversely affect water quality  
13 (due to the presence of plastics and other contaminants) at the composting  
14 facility (Class III). Water quality impacts would be similar under Alternative D.  
15 However, water supply impacts would be greater due to substantially greater  
16 water use.

17 Public Health/Nuisance

18 Aerobic composting of organic waste from the Tajiguas wasteshed at the Engel  
19 & Gray facility may increase public health and nuisance impacts (Class III).  
20 However, impacts at the landfill would be reduced by the elimination of the AD  
21 Facility, Energy Facility and composting area, which could attract and/or harbor  
22 vectors and pathogens. Overall, public health/nuisance impacts would be very  
23 similar under Alternative D.

24 Environmental Justice

25 The community surrounding the Engel & Gray composting facility site is  
26 considered a minority population based on the 2010 Census, such that  
27 disproportionate impacts may occur. Although air pollutant emissions  
28 associated with Alternative D (ROC and NO<sub>x</sub>) would contribute to ozone  
29 formation, this is a regional impact that may affect northern Santa Barbara  
30 County. Due to the large population potentially affected, ozone impacts would  
31 not affect minority and/or low income populations with substantially greater  
32 severity and magnitude. Therefore, environmental justice impacts are  
33 considered less than significant (Class III). Comparatively, the proposed  
34 project would not result in environmental justice impacts.

35

1                    **Summary**

2                    In summary, Alternative D would reduce some impacts at the landfill site as  
3                    compared to the proposed project, but would contribute to previously disclosed  
4                    impacts at the aerobic composting site, and also result in new Class I and Class  
5                    II impacts including:

- 6                    • Impact ALT D AQ-1: significant ROC emissions from compost windrows  
7                    (Class I); and
- 8                    • Impact ALT D AQ-2: significant NO<sub>x</sub> emissions from transportation of  
9                    organic waste to the composting facility (Class II).

10                   **Other Alternatives**

11                   The impacts of Alternative E (Landfill Expansion), Alternative F (Export to the Simi Valley  
12                   Landfill and Recycling Center) and Alternative G (Export to the Santa Maria Integrated Waste  
13                   Management Facility) are identified in Section 5.3, and compared to the impacts of the  
14                   proposed project in Table 5-46 of the SEIR. However, these alternatives would not feasibly  
15                   meet the basic objectives of the project. Landfill Expansion would create a number of Class I  
16                   impacts (aesthetics, air quality, greenhouse gas emissions, biology, land use) that would not  
17                   occur under the proposed project. Waste export would eliminate or reduce impacts in the  
18                   immediate vicinity of the Tajiguas Landfill, but would contribute to impacts (aesthetics, air  
19                   quality, greenhouse gas emissions, biology, land use), many of which are identified as  
20                   significant and unavoidable at the respective landfill sites and increase haul distances and off-  
21                   site mobile air emissions.

22                   **ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

23                   Excluding impacts associated with extending the life of the landfill (which would also  
24                   occur under Alternatives B, C, and D), no significant and unavoidable (Class I) impacts were  
25                   identified in association with the construction and operation of the proposed Tajiguas Resource  
26                   Recovery Project. Section 5.4 provides a comparison of each feasible alternative to the  
27                   proposed project, for each issue area. In addition, Sections 5.4.2, 5.4.3 and 5.4.4 list significant  
28                   impacts associated with Alternatives B, C and D that would not occur under the proposed  
29                   project.

30

1 Section 15126.6(e)(1) of the State CEQA Guidelines requires identification and  
2 evaluation of the No Project Alternative and Section 15126.6(e)(2) states that “if the  
3 environmentally superior alternative is the “no project” alternative, the EIR shall also identify an  
4 environmentally superior alternative among the other alternatives.” (emphasis added). Under  
5 the No Project Alternative, continued disposal at the Tajiguas Landfill through to approximately  
6 2026 would not result in any new impacts. After capacity is reached in approximately 2026,  
7 continued landfilling of waste under the No Project Alternative through landfill expansion  
8 (Alternative E) or through waste exportation (Alternatives F and G) would result in either new  
9 significant and unavoidable (Class I) impacts at the Tajiguas Landfill site or would contribute to  
10 Class I impacts at the other landfill sites. Waste export would also increase haul distances and  
11 associated traffic and air quality impacts, and the GHG reduction benefits of removing organic  
12 waste from the landfill, recovering additional recyclable and generation of green energy would  
13 not occur. Therefore, because continued waste disposal via landfilling would be reasonably  
14 expected to occur in the foreseeable future if the project were not approved, and the impacts of  
15 continued landfilling would be greater and the beneficial impacts would be less than the  
16 proposed project, the No Project Alternative is not considered to be the Environmentally  
17 Superior Alternative.

18 Of the other alternatives studied (B, C and D), Alternative C (SCRTS MRF Alternative) is  
19 considered to be the Environmentally Superior Alternative. Alternatives B and D would have  
20 greater impacts than Alternative C. Alternative C meets all of the project objectives, is feasible,  
21 would not result in any significant and unmitigable (Class I) impacts, and would further reduce  
22 less than significant transportation and transportation related air quality impacts. However,  
23 because impacts would occur at both locations (Tajiguas Landfill and SCRTS) under this  
24 alternative and because of the more densely populated area surrounding the Alternative C MRF  
25 site, several Class II and III impacts would be greater than the proposed project.

26 In conclusion, Alternative C (SCRTS MRF Alternative) is identified as the  
27 environmentally superior alternative. However, the proposed project, with implementation of the  
28 mitigation measures identified in this Subsequent EIR, would have lesser impacts overall as  
29 compared to the No Project Alternative (Alternatives E, F and G) and Alternatives B, C and D.  
30 While adverse but less than significant (Class III) transportation and transportation related air  
31 quality emissions would slightly increase, the inclusion of the CSSR Option into the project has  
32 virtually no effect on impact classification levels or the determination that the proposed project  
33 has less impacts overall as compared to the No Project Alternatives (Alternatives E, F and G)  
34 and Alternatives B, C and D.

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**Table Ex-1. Summary of Project-Specific Environmental Impacts and Mitigation Measures**

DESCRIPTION OF IMPACT	MITIGATION MEASURES and RESIDUAL IMPACTS
<b>Class I Impacts (Significant and Unavoidable)</b>	
None	
<b>Class II Impacts (Significant but Mitigable)</b>	
<p><b>Impact TRRP VIS-2: Project implementation would significantly alter the visual setting as seen from U.S. Highway 101, (View 6), an eligible scenic highway – Class II Impact.</b></p>	<p><b>MM TRRP VIS-1a: Building Exterior Color.</b> The exterior of the MRF and AD Facility shall be an earth tone color selected to visually blend with the surrounding landscape.</p>
<p>The existing operations deck has reached its final permitted elevation and the existing condition is generally reflective of the permitted condition. The proposed MRF and AD Facility would involve additional cut and placement of fill (to create a level building pad and to provide a setback from the waste footprint) and the facilities would be visible between two hills as an incongruous element of the background view. As compared to the existing landfill operations trailers, the proposed MRF and AD Facility would be a substantively larger and a more prominent feature of the view as shown in the photo simulation. Viewers from this perspective are typically motorists on the heavily traveled highway and would typically be moving at a speed of about 65 miles per hour. Thus, the duration of the view (a few seconds) would be very brief as the topography of the surrounding hills would obscure the view from perspectives further north or south. However, the duration of the view may be considered to be additive for frequent travelers of this route. Although the view would brief and limited, without proper aesthetic treatment, the introduction of the MRF and AD Facility may be considered to have a significant visual impact to public viewers as U.S. Highway 101 is a well-traveled transportation corridor and an eligible scenic highway.</p>	<p><b>Plan Requirements and Timing.</b> The above measure shall be reflected in the project plans and contract specifications for the Resource Recovery Project and shall be implemented during construction.</p>
<p><b>Impact TRRP BIO-2: Construction activities may adversely affect sensitive vegetation located adjacent to the direct impact area – Class II Impact.</b></p>	<p><b>Monitoring.</b> RRWMD shall monitor for compliance.</p>
<p>Construction activities may cause indirect temporary impacts within 0.89 acres of sensitive vegetation communities (0.22 acre of California bay seep woodland, 0.39 acre of coast live oak woodland, and 0.28 acre of southern coast live oak riparian forest) identified within 200 feet of the direct impact area. These temporary impacts may include increased fugitive dust, introduction of invasive or weedy species, soil erosion, and run-off which could compromise plant respiration, photosynthesis, and growth.</p>	<p><b>MM TRRP VIS-1b: Landscape Screening.</b> A landscape architect shall be retained to develop a landscape plan for the project that includes vegetative plantings that would break up the massing of the MRF and AD Facility as viewed from the south. Native plants shall be used to the extent feasible to maximize visual compatibility with the surrounding vegetation communities, minimize irrigation requirements, minimize spread of invasive species, and augment nearby wildlife habitat.</p>
<p></p>	<p><b>Plan Requirements and Timing.</b> The landscape plan shall be developed prior to project construction and implemented during construction and prior to operation of project facilities.</p>
	<p><b>Monitoring.</b> RRWMD shall monitor for compliance.</p>
	<p><b>Residual Impacts.</b> Implementation of the mitigation measures above would reduce the scenic vista impact from View 6 to a less than significant level.</p>
	<p><b>MM TRRP BIO-1: Construction Requirements.</b> To prevent inadvertent damage to sensitive vegetation adjacent to work areas, the construction disturbance area shall be clearly delineated on the project construction plans and in the field by staking, fencing, or equivalent methods. Field delineation shall occur prior to beginning ground-disturbing activities or vegetation removal.</p>
<p></p>	<p>RRWMD shall monitor the project area and, where feasible, control infestations of plants identified as highly invasive by the California Invasive Plant Council. Invasive plants shall not be planted at project facility sites for erosion control or other uses.</p>
<p></p>	<p>Throughout construction, exposed soil within active construction areas shall be periodically wetted to prevent excessive fugitive dust from drifting into adjacent areas.</p>
<p></p>	<p>In construction areas where excessive erosion may occur, soil shall be stabilized through the use of appropriate measures such as silt fencing, straw wattles, and/or hydroseeding.</p>
<p></p>	<p><b>Plan Requirements and Timing:</b> These measures shall be included in the project’s plans and specifications, and implemented during the entire construction period for each proposed facility.</p>
<p></p>	<p><b>Monitoring:</b> RRWMD shall ensure these measures are fully implemented during the construction period.</p>
<p></p>	<p><b>Residual Impacts:</b> Implementation of <b>MM TRRP BIO-1</b> would reduce biological resources Impact TRRP BIO-2 to a level of less than significant.</p>

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**Table Ex-1. Continued**

**DESCRIPTION OF IMPACT**

**MITIGATION MEASURES and RESIDUAL IMPACTS**

**Class II Impacts (Significant but Mitigable)**

**Impact TRRP BIO-4: Construction activity may significantly affect nesting migratory birds and/or raptors – Class II Impact.**

Construction activities during the nesting season could directly impact active nests or cause abandonment or failure of nests, which would be inconsistent with the MBTA and Section 3503.5 of the California Fish and Game Code. Nesting birds affected may include special-status species, such as Cooper’s hawk and southern California rufous-crowned sparrow. It should be noted that construction activities would occur in areas already subject to significant noise and dust from existing landfill operations, and the species present are likely to be habituated to the existing noise environment.

**MM TRRP BIO-2: Breeding Bird Protection.** Clearing and grubbing of areas of native habitat or areas immediately adjacent to native habitat shall avoid the migratory bird and raptor breeding season (February 1 to August 15).

If construction in these areas cannot be avoided during this period, a nest survey within the area of impact and a 200 foot buffer for passerines and any available raptor nesting areas within 500 feet shall be conducted by a qualified biologist no earlier than 14 days and no later than 5 days prior to any native habitat removal or ground disturbance to determine if any nests are present.

If an active nest is discovered during the survey, a buffer of 200 feet for migratory birds or 500 feet for raptors (or as determined by the biologist based on a field assessment) would be established around the nest. No construction activity may occur within this buffer area until a biologist determines that the nest is abandoned or fledglings are adequately independent from the adults.

Plan Requirements and Timing: The survey shall be conducted by a qualified biologist and the measures shall be included in the project’s plans and specifications, and implemented during the entire construction period for each proposed facility.

Monitoring: RRWMD shall ensure these measures are fully implemented during the construction period.

Residual Impacts: Implementation of *MM TRRP BIO-2* would reduce biological resources Impact TRRP BIO-4 to a level of less than significant.

**Impact TRRP BIO-8: Project-related habitat loss could adversely affect American Badger and Ringtail – Class II Impact.**

The proposed project would result in the loss of 1.07 acres of potential foraging, breeding, and natal denning habitat for American badger such as open sage scrub and chaparral. Because this species is mobile and can avoid construction activities, direct and indirect impacts to this species are not anticipated unless clearing and grubbing occurs during the natal denning period (March through August) when the species is less mobile. Disturbance of occupied natal dens or direct mortality of individual badgers during clearing, grubbing and construction would be considered an adverse and significant impact.

**MM TRRP BIO-3: American Badger and Ringtail Surveys.** Prior to any ground disturbing construction activities within the badger or ringtail natal denning period (February to August), the area scheduled for clearing and grubbing shall be surveyed for American badger and ringtail. If a badger or ringtail den is observed a qualified biologist shall monitor the den to determine if it is an active or an abandoned den. If the biologist determines that the den is not active, the biologist shall dismantle the den immediately and the construction activity can be initiated. If the biologist determines that the den is an active natal den, the biologist shall mark the den and establish a buffer (300 feet or as determined appropriate by the biologist based on field conditions) surrounding the active den. No ground disturbing work shall take place within this buffer. The biologist shall monitor the active den until the den is abandoned. Once abandoned, the den shall be filled/dismantled and construction activities can commence.

Plan Requirements and Timing: These measures shall be included in the project’s plans and specifications. Surveys shall be conducted by a qualified biologist familiar with American badger and ringtail prior to clearing of native vegetation, if the clearing occurs during the period from February to August.

Monitoring: RRWMD shall monitor for compliance. The biologist shall submit a report to RRWMD regarding the result of the pre-disturbance surveys and the relocation efforts following destruction of the den.

Residual Impacts: With avoidance of the breeding period or survey and avoidance of active breeding dens, impacts to American badgers and ringtails associated with the proposed project are unlikely to substantially affect the local populations and residual impacts would be less than significant.

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**Table Ex-1. Continued**

**DESCRIPTION OF IMPACT**

**MITIGATION MEASURES and RESIDUAL IMPACTS**

**Class II Impacts (Significant but Mitigable)**

**Impact TRRP BIO-9: Project-related habitat loss could significantly impact the San Diego desert woodrat – Class II Impact.**

San Diego desert woodrat is known to occur in rock crevices in mature chaparral north of the approved landfill footprint (Hunt and Associates, 2001), and woodrat nests (unidentified species) have been previously identified within the area affected by landfill reconfiguration. San Diego desert woodrats could be affected by habitat removal and by direct mortality due to the limited mobility of this species. The proposed project would directly and permanently eliminate a small area (1.07 acres) of nesting and foraging habitat for this species during clearing, grubbing, and infrastructure construction. Habitat loss and/or direct mortality associated with construction of the proposed project would represent a significant but mitigable biological impact.

**Impact TRRP BIO-10: Project-related removal of trees and rock outcrops may eliminate and/or disturb habitat for sensitive bat species – Class II Impact.**

Four bat species listed as CDFW species of special concern (pallid bat, Townsend’s big-eared bat, western mastiff bat, and big free-tailed bat) were determined to have a moderate potential to roost and/or forage within the Study Area. In general, habitat modifications resulting from implementation of the Reconfiguration Project, particularly the reduction of available surface water at the landfill, and the elimination of the riparian corridor in the lower portion of the Pila Creek drainage have diminished the potential that these bats would utilize the project impact area.

The proposed project would result in the removal of 0.02 acres of rock outcrop within the utility corridor to the proposed Well no. 6 site. The rock outcrop is part of a rock cliff face that occurs along a ridge perpendicular to the channelized portion of Pila Creek. Because the area of rock outcrop that would be impacted is low to the ground and close to the active disturbance of the landfill, it is unlikely that it would serve as a location for bat day roosting as day roost sites are typically more cryptic and protected. Higher parts of the rock outcrop or trees with cavities within the Study Area may be more suitable as bat day roost locations. The rock outcrop may be used for night roosts, which are resting areas between foraging flights.

While bats are not likely to roost in the project impact area and no known roosts are present within the Study Area, construction activities may result in temporary disturbance and/or permanent habitat loss. Substantial disturbance of maternal roosts would be considered an adverse and significant impact.

**MM TRRP BIO-4: San Diego Desert Woodrat Relocation.** Prior to initial clearing and grubbing in areas of previously-undisturbed native habitat, the area shall be surveyed for the San Diego desert woodrat.

Prior to initiation of construction, any woodrat nests considered active would be dismantled to entice occupants to leave the area and build new nests outside of the project impact area. Dismantling is recommended during the fall, following the breeding season to minimize the potential to affect reproduction and/or cause increased mortality to the species.

Plan Requirements and Timing: These measures shall be included in the project’s plans and specifications. Surveys and nest dismantling (if needed) shall be conducted immediately prior to clearing of native vegetation.

Monitoring: The biologist shall submit a report to RRWMD regarding the result of the pre-disturbance surveys and of the relocation efforts following dismantling of the nest.

Residual Impacts: Impacts to San Diego desert woodrat associated with the proposed project are unlikely to substantially affect the local population and residual impacts would be less than significant.

**MM TRRP BIO-5: Avoidance of Bat Maternity Colonies.** Removal of rock outcrops and construction of project-related facilities in the vicinity of potential bat habitat such as trees and rock outcrops shall avoid the peak breeding season (May 1 to August 15), unless a bat survey by a qualified biologist is completed to determine presence or absence of maternity colonies. Bat surveys shall be conducted no longer than a week prior to any construction in the vicinity of such habitat.

If no maternity colonies are observed, construction can proceed without restriction.

If active bat maternity colonies are discovered during the survey, a buffer of 500 feet shall be established around the bat maternity colonies. No construction activity may occur within this buffer area until a biologist determines that the young are independent of the adults.

Plan Requirements and Timing: These measures shall be included in the project’s plans and specifications. Surveys shall be conducted prior to removal of rock outcrops or construction work adjacent to bat habitat, when construction work is planned for the peak bat breeding period.

Monitoring: RRWMD shall monitor compliance with the measure.

Residual Impacts: Implementation of these mitigation measures would reduce impacts to bat maternity colonies (Impact TRRP BIO-10), and residual impacts would be less than significant.

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**Table Ex-1. Continued**

**DESCRIPTION OF IMPACT**

**MITIGATION MEASURES and RESIDUAL IMPACTS**

**Class II Impacts (Significant but Mitigable)**

**Impact TRRP BIO-12: Operation of the proposed project may significantly impact transient California red-legged frogs – Class II Impact.**

Removal of all breeding habitat was conducted as part of the Reconfiguration Project, and California red-legged frogs have not been observed at the landfill since April 2012. California red-legged frogs are present in Arroyo Quemado and Arroyo Hondo and the landfill is located between these two known locations, within dispersal distance. Due to the disturbed and relatively barren nature of the landfill site and lack of breeding habitat, California red-legged frogs are not expected to inhabit the landfill, including proposed facility sites. However, there is a small potential that California red-legged frogs may be present while making overland dispersal movements, which typically occur at night and/or during or following rain events.

Currently, nighttime activities do not occur at the landfill. With implementation of the project, nighttime activities would occur at the operations deck area in association with operation of the MRF and AD Facility, including use of the paved roads between the landfill entrance and the MRF/AD Facility site by employees and for transport of commodities from the MRF. California red-legged frogs have not been observed at the proposed MRF and AD Facility sites, or on paved roads between the landfill entrance and the operations deck during past nighttime surveys. However, when aquatic habitat was present in the back canyon area (prior to implementation of the Reconfiguration Project) frogs were infrequently observed on unpaved back canyon roads north of the operations deck.

The potential for California red-legged frogs to be present in the vicinity of project operations is considered low. However, if present, conflicts with equipment activity and motor vehicle use may occur (particularly at night) and direct impacts (crushing) to transient frogs would be potentially significant.

The proposed project would marginally increase storm water flow into Pila Creek and/or the existing north sedimentation basin during rain events due to additional run-off from project facility sites. However, these flows would only occur during storm events or immediately following storm events. Therefore, these flows are not expected to provide sufficient water to support breeding by California red-legged frog. In addition, the north sedimentation basin is equipped with a skimmer to maintain minimum water levels. Therefore, project-related storm water discharges are not anticipated to attract California red-legged frog to the landfill.

**MM TRRP BIO-6: Avoidance and Minimization Measures for California Red-legged Frog and Sensitive Mammal Species.**

- Lighting used on the project facilities shall be of low intensity, low glare design and shall be hooded to direct the light downward and prevent spill-over onto adjacent undisturbed habitat areas.
- Use of artificial lighting shall be minimized and used on an as needed basis.
- To reduce hazards to wildlife that may ingest or become trapped by debris, portable fences shall continue to be used to limit the spread of litter on the working face of the landfill and around project facilities.
- Litter shall be collected on a regular basis (Litter Control Program, see Section 3.5.9.2).
- Vehicles travelling on the landfill shall observe posted speed limits at all times.
- Nighttime motor vehicle travel within the landfill shall be limited to established paved roads and parking areas.
- Nighttime vehicle access and operational activities shall be limited to paved areas surrounding and south of the MRF and AD Facility. Access to back canyon area of the landfill property shall be restricted to daylight hours, unless access is required by landfill personnel in response to an emergency.
- Worker environmental awareness training shall be provided to all personnel prior to project implementation, including information on potential sensitive biological resources at the landfill site.
- Prior to project implementation in previously undisturbed areas, the area scheduled for clearing shall be surveyed by a qualified biologist familiar with all of the sensitive species with the potential to occur at the landfill site. In the event that sensitive species are identified, a buffer around the individual shall be established and the individual shall be monitored until it leaves the construction area.
- Project-related construction in undisturbed areas and in the back canyon area (e.g., for installation of Well 6) shall be limited to daylight hours.
- A biologist shall monitor construction activities during initial ground disturbance in previously undisturbed native plant communities. The biologist shall have the authority to stop work and shall immediately contact the RRWMD if unintended effects to sensitive species occur.

Plan Requirements and Timing: These measures shall be included in the project's plans and specifications and in the contractual agreements with the project vendor. Surveys shall be conducted prior to or during construction, or during project operation, as indicated.

Monitoring: RRWMD shall monitor compliance with the measures.

Residual Impacts: Implementation of these mitigation measures would reduce impacts to California red-legged frog, and residual impacts would be less than significant.

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**Table Ex-1. Continued**

**DESCRIPTION OF IMPACT**

**MITIGATION MEASURES and RESIDUAL IMPACTS**

**Class II Impacts (Significant but Mitigable)**

**Impact TRRP BIO-13: Operation of the proposed project may significantly impact ringtail, San Diego desert woodrat and American badger – Class II Impact.**

The project would result increase daytime activity and introduce nighttime activity at the landfill site. Mortality of ringtail, San Diego desert woodrat and American badger may occur as a result of increased equipment and motor vehicle activity, especially at night. These impacts are considered potentially significant.

**Impact TRRP HAZ-5: Hazardous materials may be encountered during construction and released to the environment – Class II Impact.**

The landfill site is not a hazardous materials site identified pursuant to Government Code Section 65962.5. The MRF, AD Facility and relocated landfill maintenance facility would be located in areas constructed of engineered fill composed of clean native soil placed by landfill operations, and the composting area would be constructed on top of the closed landfill. In general, the potential for encountering hazardous materials during construction of the Tajiguas Resource Recovery Project facilities is expected to be low because of the history of use of those areas. However, localized soil contamination from spills or leaks may be present in areas where hazardous materials may have been or are currently used or stored as a part of existing landfill operations (e.g., fuel tanks, hazardous material storage areas, etc.). Construction activities could encounter contaminated soils and potentially expose construction personnel, the public, or the environment to hazardous materials. Contaminated soil could also require disposal as a hazardous waste. Impacts associated with exposure of hazardous materials are considered a potentially significant impact.

Implementation of Mitigation Measure **MM TRRP BIO-6** would reduce the potential for project-related mortality of these sensitive mammal species.

Residual Impacts: Implementation of these mitigation measures would reduce impacts to sensitive mammals to a level of less than significant.

**MM TRRP HAZ-1: Hazardous Materials Assessment and Remediation.**

Prior to earth disturbing activities, a preliminary assessment of areas within the project footprint where historical hazardous materials use occurred shall be conducted to identify the potential presence of contaminated soil. If contaminated soil is identified, additional assessment including collection of soil samples and a work plan to determine the lateral and vertical extent of impacts shall be prepared. If the results of the soil assessment identify contaminants that exceed threshold levels, affected soils shall be remediated to the satisfaction of the Santa Barbara County, Public Health Department Environmental Health Services Division (EHS), Site Mitigation Unit (SMU). Screening levels for environmental media such as soil, groundwater and soil vapor have been published by the U.S. Environmental Protection Agencies (known as Regional Screening Levels or RSLs) and California EPA (known as Environmental Screening Levels or ESLs). These screening levels will be used as threshold levels for determining the need for soil remediation. If multiple chemicals of concern are detected the published screening levels will be adjusted as appropriate to account for potential cumulative health effects. The final remediation goal may be the RSL, ESL or alternative goals that may be based on potential cumulative health effects and/or site-specific conditions.

A Soil Management Plan shall be developed and implemented, to provide guidance for the proper identification, handling, on-site management, and disposal of contaminated soil that may be encountered during construction activities. Depending on the type and extent of impacted material, remediation may include excavation and offsite disposal, onsite aeration, on or offsite treatment and backfilling. The EHS will grant closure of an impacted site when confirmatory samples of soil taken demonstrate that levels of contaminants are below the standards described above.

Plan Requirements and Timing: These measures shall be included in the project's plans and specifications, and implemented prior to ground disturbance. If contamination is observed, prior to initiating work on the soil management plan, the site shall be enrolled in the Voluntary Remedial Oversight Program per California H&S Code Section 101480 et seq.

Monitoring: RRWMD shall ensure these measures are implemented and review the results of the preliminary assessment, the work plan and Soil Management Plan. If contaminated soil is identified, RRWMD shall verify that soil remediation is completed as per EHS requirements.

Residual Impacts: Implementation of **MM TRRP HAZ-1** would reduce impacts associated with exposure of hazardous materials during construction to a less than significant level.

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**Table Ex-1. Continued**

**DESCRIPTION OF IMPACT**

**MITIGATION MEASURES and RESIDUAL IMPACTS**

**Class II Impacts (Significant but Mitigable)**

**Impact TRRP HAZ-7: The project would increase site structural development, introduce new fuel sources, new ignition sources and increase the number of personnel at the landfill site in a high fire hazard area, which could significantly increase fire risk – Class II Impact.**

The proposed project has the potential to increase fire hazards by increasing the amount of structural development requiring fire protection, increasing the number of employees present on-site, introducing new fuel sources (bio-gas, propane tank, diesel tanks) and ignition sources (flare, sorting equipment, mobile equipment, composting operations, and hot loads [smoldering materials in waste delivery trucks]). In addition, fires originating in vegetation off-site may threaten project facilities.

The SBCFD provides fire protection services to the existing landfill site within an approximate response time of 9 minutes. Existing fire protection resources at the landfill include 17,000 gallons of water stored in one 10,000-gallon tank and one 7,000-gallon tank. An existing fire break is present around the perimeter of the landfill and large areas of the landfill have low biomass present due to the ongoing waste disposal activities which help to reduce the potential for wildland fires.

A 220,000-gallon gravity-fed water tank would be provided to serve the project's potable and fire water needs. A dedicated fire protection water distribution system would convey the fire flow to the site fire hydrants and to the building sprinkler systems. The design would include a 360 degree fire vehicle access driveway with fire hydrants around the AD Facility and MRF buildings. Flammable storage tanks (i.e., diesel and propane) would be located away from the proposed buildings and according to applicable fire codes. The buildings would have a fire buffer zone including paved areas and irrigated vegetation. However, considering the large amount of additional structural development, the increase in onsite population, the increase in possible ignition sources, and given the presence of the proposed facilities in a high fire hazard area, operation of the Tajiguas Resource Recovery Project could result in a potentially significant fire hazard impact.

**MM TRRP HAZ-2: Fire Protection and Prevention Plan.** To reduce potential fire hazards, a Fire Protection and Prevention Plan shall be prepared prior to operation of the proposed project. The Plan shall identify fire hazards, describe facility operations, procedures to prevent ignition of fires, include regular inspection of fire suppression systems, and provide for worker training in safety procedures as well as protocols for responding to fire incidents. In addition, the Plan shall identify firefighting equipment and systems at the landfill and methods to safely store flammable and combustible materials. Fire protection equipment shall be installed and maintained in accordance with all applicable NFPA standards and recommendations. Fire reporting protocols (based on the size of the fire) and investigation protocols shall be detailed in the Plan.

The Fire Protection and Prevention Plan shall include the following information (as a minimum):

- Names and/or job titles responsible for maintaining equipment and monitoring flammable or combustible materials.
- Procedures to be followed in the event of fire.
- Fire alarms and fire protection equipment and facilities.
- System and equipment maintenance.
- Monthly and annual inspections.
- Firefighting demonstrations.
- Housekeeping practices.
- Training.

**Plan Requirements and Timing:** The plan shall be submitted to the County Fire Department and LEA for review and approval, and implemented prior to operation of project facilities.

**Monitoring:** RRWMD, LEA and the County Fire Department shall monitor and inspect the facility operations to ensure compliance with the Fire Protection and Prevention Plan.

**Residual Impacts:** Implementation of **MM TRRP HAZ-2** would reduce fire risk impacts to a less than significant level.

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**Table Ex-1. Continued**

**DESCRIPTION OF IMPACT**

**MITIGATION MEASURES and RESIDUAL IMPACTS**

**Class II Impacts (Significant but Mitigable)**

**Impact TRRP G-1: Earthwork associated with project construction and application of reclaimed water on graded slopes may result in unstable slopes that may generate landslides – Class II Impact.**

A numerical slope stability analysis was conducted by GeoSolutions on the following slopes:

- Cut slope west of the proposed MRF/AD Facility site: 2.5:1 (horizontal:vertical), 40 feet in height, 15 foot wide bench, then extending up another 8 to 20 feet where it would daylight with the existing 3:1 cut slope (cross-sections 1-1' and 2-2');
- Fill slope south of the proposed MRF/AD Facility site: 2:1, existing 85 feet in height, benched every 40 feet, with the addition of 10 to 14 feet of fill proposed at 3:1 at the top of the slope (cross-section 3-3'); and
- Fill slope west of the proposed maintenance building site: 2:1, existing 250 feet in height, benched every 40 feet (145 feet of fill) (cross-section 4-4').

The engineering standard for permanent slopes is a factor of safety of 1.5 for static conditions, and 1.1 for pseudo-static (seismic) conditions. The slope stability analysis and indicates the minimum safety standards are met for both static and pseudo-static conditions. However, slope erosion by storm flows may substantially affect slope stability over time. Impacts to the proposed MRF, AD Facility and maintenance building associated with landslides and seismically-induced slope failures are considered potentially significant.

**Impact TRRP G-6: The use of expansive soils for fill may result in significant damage to the MRF, AD Facility and maintenance building – Class II Impact.**

Laboratory testing of soil samples of the Rincon Formation at the landfill site indicate these soils have a medium expansion index (GeoSolutions, 2013). Additional fill at the operations deck is proposed to be Rincon Formation-derived soils from the west borrow area. Without proper engineering design, use of these soils could significantly impact the structural integrity of the proposed MRF and AD Facility buildings. The proposed maintenance building would be constructed on fill derived from the Sespe Formation (typically with a moderate shrink-swell potential) and may also be significantly affected by expansive soils.

**MM TRRP G-1: Slope Stability Control.** The following measures shall be implemented to facilitate stability of cut slopes:

Excess free water shall not be allowed to pond on the slopes. Surface grades shall be maintained such that collected water is diverted and discharged away from the slope face.

Concentrated over-slope drainage is to be strictly prevented. All water above the slope shall be maintained in secure pipelines or other approved erosion resistant structures.

An engineer or engineering geologist shall observe the slope at the time construction is performed to verify subsurface conditions.

Vegetation shall be established and maintained on cut and fill slopes.

Plan Requirements and Timing. The above drainage control measures shall be reflected in the construction plans and contract specifications for construction of the Resource Recovery Project. Grading and Drainage Plans shall be reviewed and approved by RRWMD and Planning & Development, Building and Safety.

Monitoring: During the excavation phase of the construction an approved engineer or engineering geologist shall be on-site to monitor conditions. A RRWMD approved construction manager shall monitor construction activities to ensure compliance with the plan and specifications. Drainage control devices shall be inspected for function and maintained as necessary.

Residual Impacts. Implementation of this mitigation measure would reduce geologic processes Impact TRRP G-1 associated with implementation of the proposed project to a level of less than significant.

**MM TRRP G-2: Expansive Soils.** Placement of fill at the operations deck shall be conducted per the recommendation of the Soils Engineering Report and Engineering Geology Investigation, including the top 3 feet of fill placed under the MRF and AD Facility shall consist of a non-expansive material such as aggregate base or decomposed granite, which extends a minimum of 5 feet beyond the perimeter foundation. Alternatively, a foundation system designed for expansive soils may be utilized.

The maintenance building pad shall be over-excavated at least 24 inches and extend a minimum of 5 feet beyond the perimeter foundation. The exposed surface shall be scarified to a depth of 12 inches, moisture conditioned and compacted to a relative density of 90 percent.

Plan Requirements and Timing. The above measure shall be incorporated into the grading and building design plans and included in the construction plans and contract specifications for the Resource Recovery Project. The design measures shall be implemented during construction. The grading and building design plans shall be reviewed and approved by RRWMD and Planning & Development, Building and Safety.

Monitoring: A RRWMD approved construction manager/construction quality assurance manager shall monitor for compliance.

Residual Impacts. Implementation of this mitigation measure would reduce geologic processes Impact TRRP G-6 associated with implementation of the proposed project to a level of less than significant.

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**Table Ex-1. Continued**

**DESCRIPTION OF IMPACT**

**MITIGATION MEASURES and RESIDUAL IMPACTS**

**Class II Impacts (Significant but Mitigable)**

**Impact TRRP G-7: Differential settlement, associated with previously buried MSW and as a result of the differing soil types across the proposed building area, could significantly impact the MRF and AD Facility structures – Class II Impact.**

The operations deck (including the MRF/AD Facility site) is located in a valley formed by Rincon Shale to the west and a refuse slope to the east. Artificial fill was placed and compacted within the valley to its current approximate 380 foot elevation height in 2006 and completed in 2007. A final cover system was installed over the refuse area of the operations deck. Surface cracking on the operations deck along the MSW footprint indicates long-term settlement is actively occurring at the site. Portions of the MRF and AD Facility parking areas would be constructed over the MSW footprint. A settlement analysis was performed to determine the potential settlement of the refuse during the 20-year design life of the facilities on the operations deck. Primary settlement of the refuse below the operations deck is assumed to have occurred due to the passage of time. Analysis of the secondary settlement of refuse utilized Sharma and De's method for secondary settlement under external loads (Sharma and De, 2007).

Eleven existing settlement monuments are located at various locations within the operations deck both within the area underlain with MSW and the area of fill. Settlement readings taken from December 12, 2007 to July 11, 2012 were utilized to establish a site-specific coefficient of secondary compression. Approximately 1.26 to 2.94 feet of total settlement is anticipated in areas overlying MSW at the MRF/AD Facility site. Buildings are proposed to be constructed within the area underlain by artificial fill or Rincon Shale, which is anticipated to experience much lower total and annual settlement rates (0.15 to 0.38 feet). However, settlement at the MRF/AD Facility site has the potential to significantly affect the project structures and operation of the facilities.

**MM TRRP G-3: Differential Settlement Control – MRF/AD Facility Site.** The MRF and AD Facility shall be constructed consistent with the design specifications contained in the Soils Engineering Report and Engineering Geology Investigation, Tajiguas Resource Recovery Project. The MRF and AD Facility shall be constructed with drilled cast-in-place caissons joined with grade beams, founded a minimum of 24 inches below the lowest adjacent grade. Alternatively, a system of end-bearing helical pier anchors shall be used instead of the concrete caissons.

Plan Requirements and Timing. The above foundation design measures shall be reflected in the building and construction design plans and included in the contract specifications for the Resource Recovery Project and shall be implemented during construction. The Plans shall be subject to review and approval by RRWMD and Planning & Development, Building and Safety.

Monitoring: RRWMD and Planning & Development, Building and Safety shall review the construction design plans to confirm inclusion of the required foundation design measures. A RRWMD approved construction manager/construction quality assurance manager shall monitor for compliance during construction.

Residual Impacts. Implementation of this mitigation measure would reduce geologic processes Impact TRRP G-7 associated with implementation of the proposed project to a level of less than significant.

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**Table Ex-1. Continued**

**DESCRIPTION OF IMPACT**

**MITIGATION MEASURES and RESIDUAL IMPACTS**

**Class II Impacts (Significant but Mitigable)**

**Impact TRRP G-8: Settlement associated with existing and planned MSW disposal in the Tajiguas Landfill top deck area could significantly impact the operation of the composting area – Class II.**

The proposed composting area would be located on the landfill top deck, in an area which is currently being filled with MSW and which will receive up to 80 additional feet of MSW prior to reaching its final design elevation and capacity in approximately 2016. Prior to locating the composting facilities in this area, the top deck area will undergo final closure and an engineered landfill cover system will be installed. Above the landfill cover, the composting area would include a separate multi-layer foundation system. The composting area system would consist of 3 inches of asphalt over MPV 600 paving mat, over 3 inches of asphalt base course, over geofabric, over 9 inches of crushed aggregate base, over geogrid, over 6 to 24 inches of compacted earth fill.

A previous Settlement Analysis was performed on the top deck by SWT Engineering (2009), which stated “the total projected remaining settlement expected during the Post-Closure life is estimated to range from approximately 0.51 feet to 19.67 feet.” Settlement monitors were installed along the west and south boundaries of the proposed top deck in January, 2012. Although the composting area would not support any habitable structures, settlement may result in damage to the composting area multi-layer system and adversely affect use of the area for composting operations.

**Impact TRRP CR-1: Ground disturbance associated with implementation of the proposed project may result in damage to unknown archeological resources at the landfill site – Class II Impact.**

Based on past archeological field surveys and those conducted for the project, no evidence of archeological resources were found in areas that would be affected by project-related ground disturbance. However, excavation at the tank sites has the potential to encounter unknown buried cultural resources.

**MM TRRP G-4: Settlement Control – Composting Area.** The composting area shall be constructed consistent with the design specifications contained in the Soils Engineering Report and Engineering Geology Investigation, Tajiguas Resource Recovery Project (GeoSolutions, Inc., October 2013). The composting area pad shall not be developed for a minimum of 6 months after final waste placement is complete in this section of the landfill to allow for primary settlement to occur. The structure pavement section for the composting area shall consist of a minimum of 3 inches of asphalt concrete over 12 inches of Class II aggregate base moisture conditioned to 3-5 percent over optimum moisture content. Additional detail concerning geotechnical foundation requirements is provided in Appendix G.

Plan Requirements and Timing. The above measures shall be reflected in the plans and contract specifications for the Resource Recovery Project, and shall be implemented during construction. Plans shall be reviewed and approved by RRWMD and the RWQCB.

Monitoring: A RRWMD approved construction manager/construction quality assurance manager shall monitor for compliance during construction.

Residual Impacts. Implementation of these mitigation measures would reduce geologic processes Impact TRRP G-8 associated with implementation of the proposed project to a level of less than significant.

**MM TRRP CR-1: Evaluation and Protection of Discovered Resources.** In the event that archaeological resources are exposed during construction, all earth disturbing work within the vicinity of the find shall be temporarily suspended or redirected until a professional archaeologist has been retained to evaluate the nature and significance of the find pursuant to a Phase 2 investigation. The RRWMD shall be notified immediately of any such find. The find shall be appropriately documented through a Phase 3 data recovery program and/or avoided if deemed necessary by a qualified archaeologist.

If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC.

Plan Requirements and Timing. The above measures shall be reflected in the contract specifications for the Resource Recovery Project and shall be implemented if evidence of cultural resources are observed during project-related earth disturbing activities.

Monitoring: RRWMD shall monitor for compliance.

Residual Impacts. Implementation of this mitigation measure would reduce cultural resources Impact TRRP CR-1 associated with implementation of the proposed project to a level of less than significant.

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**Table Ex-1. Continued**

**DESCRIPTION OF IMPACT**

**MITIGATION MEASURES  
 and RESIDUAL IMPACTS**

**Class II Impacts (Significant but Mitigable)**

**Impact TRRP LU-1: The project could result in land use conflicts with adjacent and nearby residential, agricultural and recreational uses – Class II Impact.**

Mitigation provided for other issue areas (as listed in the impact discussion) would reduce impacts to a level of less than significant.

Although the Tajiguas Landfill is designated and zoned for agricultural use, it has been used as a County municipal waste disposal facility since 1967 and has a Waste Disposal Overlay in the Land Use Element recognizing its use as a landfill. The proposed project would be located within the existing landfill property and includes uses which are compatible with and supportive of the existing activities at the landfill. The project would increase the amount of public facility-related development present at the Tajiguas Landfill. Additionally, the AD Facility and Energy Facility would operate 24 hours/day, 365 days per week but employees would only be on site up to 6 days/week, thus increasing the intensity of use at the site. The project would also extend the active life of the landfill (and associated operations) for approximately 10 additional years.

Because the project is completely located within the Tajiguas Landfill property, its footprint would not directly impact adjacent agricultural properties, the National Forest, Arroyo Hondo Reserve or former Hercules Gas Plant area. Properties to the south of the landfill property are agriculturally zoned, but permitted uses on these agriculturally zoned properties include a single family dwelling. The project would have some indirect effects on on-site and neighboring land uses which could result in land use conflicts as summarized below.

The project would be briefly visible from some adjacent public viewing corridors (e.g., U.S. Highway 101 and public trails) and would be visible from privately-owned property (e.g., APN 081-150-034, Hart property south of the site) as described in Section 4.1 (Visual Resources/Aesthetics). Mitigation measures **MM TRRP VIS-1a** and **VIS-1b** would reduce visual impacts to a less than significant level.

Odors, air pollutant emissions and noise generated by the project may create nuisances at adjacent land uses, but not to a significant degree.

The project would impact vegetation, wildlife habitat and wildlife within the landfill property boundaries. However, the project would not result in the loss of a substantial amount of open space and with implementation of mitigation measures (**MM TRRP BIO-1, MM TRRP BIO-2, MM TRRP BIO-3, MM TRRP BIO-4, MM TRRP BIO-5, MM TRRP BIO-6**) all potential biological impacts would be reduced to a level of less than significant

The project may result in releases of hazardous materials, but not to a degree that would be expected to significantly impact adjacent land uses. The project could be a potential source of fire starts which could affect adjacent land uses. However, the landfill has a perimeter fire break, the facilities would be equipped with fire protection systems (e.g., sprinkler system within the MRF) and this potential effect would be further mitigated by the implementation of **MM TRRP HAZ-1**.

The project would not result in significant impacts to traffic operations.

The project is not expected to result in any significant health/nuisance effects (e.g. vectors or pathogens) and would reduce the potential for off-site transport of litter.

Therefore, considering the historic and existing public facility use of the Tajiguas Landfill property, its remote location, the nature of the surrounding land uses (agricultural, open space, former oil and gas), and with implementation of identified mitigation measures, potential land use conflicts associated with the proposed Tajiguas Resource Recovery Project would be potentially significant but mitigable.

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**Table Ex-1. Continued**

**DESCRIPTION OF IMPACT**

**MITIGATION MEASURES and RESIDUAL IMPACTS**

**Class II Impacts (Significant but Mitigable)**

**Impact TRRP WR-6: Construction and operation of proposed Well no. 6 may enable landfill gas migration into groundwater which could significantly degrade groundwater quality – Class II Impact.**

The construction and operation of proposed Well no. 6 has the potential to enable landfill gas migration to the groundwater table. Landfill gas migration can potentially degrade groundwater quality of an aquifer by landfill gas interacting with groundwater at the capillary fringe (top of groundwater table), causing gas constituents (such as volatile organic compounds) to dissolve, and the casing of the well may provide a conduit for landfill gas migration to groundwater.

The potential for groundwater pumping in Well no. 6 to enable gas migration and degrade groundwater quality is expected to low because:

- To meet state water well setback requirements, Well no. 6 would be located at least 150 feet to the west of a lined portion of the landfill, and approximately 800 feet north of an unlined portion of the landfill. The landfill liner, where present, and existing and proposed landfill gas collection system would reduce the potential for landfill gas to migrate westward to the proposed well location.
- Groundwater pumping in the proposed well would decrease groundwater levels, thus increasing the distance from the bottom of the landfill to the top of the groundwater table. The increased distance between the groundwater table and the bottom of the landfill would reduce the potential for landfill gas to interact with groundwater.

However, the potential exists for the new well casing to facilitate landfill gas migration to adjacent groundwater. This impact is considered potentially significant.

**Impact TRRP WR-7: Storm run-off from proposed facility sites during the construction period may significantly degrade surface water quality - Class II Impact.**

Construction of the MRF/AD Facility building pad would require 107,000 cubic yards of grading over a 6 acre area on and adjacent to the operations deck. Additional ground disturbance would also be required for installation of new fire water storage tank, relocated landfill maintenance facilities, reclaimed water storage tanks, Well no. 6 and the connecting pipelines and power lines, the composting area run-off collection tank and other ancillary facilities. Construction would occur over an 18-month period which may include construction during the rainy season. Construction could potentially result in erosion-induced sedimentation in Pila Creek.

In addition, potential construction related contaminants may include incidental spills of petroleum products (e.g., fuels and lubricants) from excavation and grading equipment, concrete washout, construction chemicals, cleaning solvents, pesticides, trash and construction debris. These contaminants could potentially impact surface waters through direct contact with storm water run-off or through spills into the on-site storm drain system which ultimately discharges to Pila Creek. All of these contaminants have the potential to impair surface water quality.

**MM TRRP WR-1: Compliance with Well Construction Standards.** The following measure shall be implemented to avoid groundwater contamination from well construction and operation.

- The screened portion of the well shall be installed below the top of the groundwater table, and below the base of the landfill liner system adjacent to the well. The well screen shall be installed to a depth sufficiently below the top of the groundwater table so that the well screen is not exposed if water levels decline from pumping. In addition, the well sanitary seal (which is required per California Well Standards) shall be installed so it extends through the unsaturated portion of the formation (vadose zone) and to at least the top of the static groundwater table.

Plan Requirements and Timing. The well design shall be submitted and approved to the RWQCB and LEA prior to well construction.

Monitoring: RRWMD shall review and approve the well design, well completion and development reports, and review groundwater monitoring reports.

Residual Impacts: Implementation of this mitigation measure would reduce water resources Impact TRRP WR-6 to a level of less than significant.

**MM TRRP WR-2: Construction Storm Water Quality BMPs.** The following measures shall be fully implemented to ensure that project construction activities are in compliance with RWQCB storm water quality standards:

All discharges of storm water from construction activities are prohibited unless covered under the General Construction Storm Water Permit issued by the RWQCB. A Notice of Intent (NOI) to obtain coverage under the General Construction Storm water Permit shall be filed and a construction SWPPP shall be prepared.

An Erosion and Sediment Control Plan (ESCP) shall be prepared as a part of the SWPPP and designed to control erosion and sedimentation during construction. The ESCP shall be implemented for the duration of the grading period and until re-graded areas have been stabilized by structures, long-term erosion control measures or permanent landscaping.

Water contamination shall be prevented during construction by implementing the following construction site measures:

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**Table Ex-1. Continued**

**DESCRIPTION OF IMPACT**

**MITIGATION MEASURES and RESIDUAL IMPACTS**

**Class II Impacts (Significant but Mitigable)**

**Impact TRRP WR-7 (continued)**

The project would exceed one acre of disturbance and would require coverage under the NPDES Construction General Storm Water Permit. Compliance with the Construction General Storm Water Permit requires preparation of a SWPPP that would include the following measures to reduce off-site water quality impacts during construction: Implementation of erosion control measures, including slope drains, silt fences, fiber rolls, gravel bag berms, use of soil binders and post construction stabilization of disturbed slopes using hydroseeding;

Implementation of standardized BMPs, including stabilized construction entrance/exit, exit tire wash, wind erosion control, stockpile management, controlled areas for vehicle and equipment cleaning, fueling, and maintenance; specifications for concrete curing and finishing; proper hazardous materials storage and use; spill prevention and control; and control of solid waste, hazardous waste, sanitary/septic waste, and liquid waste; and Implementation of non-storm water management and materials/waste management activities, including general site clean-up, spill control, and ensuring that no materials (unless otherwise permitted) other than storm water are discharged from the construction site.

Implementation of construction BMPs and compliance with the Construction General Storm Water Permit could reduce construction impacts to surface water quality to less than significant levels. However, the following mitigation measures are provided to ensure BMPs are fully implemented and maintained during the construction period.

**MM TRRP WR-2: Construction Storm Water Quality BMPs (continued).**

- All entrances/exits to the construction site shall be stabilized using methods designed to reduce transport of sediment off site. Stabilizing measures may include but are not limited to use of gravel pads, steel rumble plates, temporary paving, etc. Any sediment or other materials tracked off site shall be removed the same day as they are tracked using dry cleaning methods. Entrances/exits shall be maintained until graded areas have been stabilized by structures, long-term erosion control measures or landscaping.
- Apply concrete, asphalt, and seal coat only during dry weather.
- Cover storm drains and manholes within the construction area when paving or applying seal coat, slurry and fog seal.
- Store, handle and dispose of construction materials and waste such as paint, mortar, concrete slurry, and fuels in a manner which minimizes the potential for storm water contamination.
- Designate a washout area(s) for the washing of concrete trucks, paint, equipment, or similar activities to prevent wash water from discharging to storm drains, streets, drainage ditches, creeks, or wetlands. Polluted water and materials shall be contained in this area and removed from the site as needed to prevent over-spilling. The area shall be located at least 100 feet from any storm drain, waterbody or sensitive biological resources.
- Straw wattles (or equivalent measures) shall be used to trap suspended sediment around work areas containing disturbed soils.
- Construction materials and soil piles shall be placed in designated areas to prevent spillage or erosion into Pila Creek or storm drains.
- Waste and debris generated during construction shall be stored in designated waste collection areas and containers away from Pila Creek, and shall be disposed of regularly.
- All fueling of heavy equipment shall occur in a designated area at least 100 feet from Pila Creek, such that any spillage would not enter surface waters. The designated area shall include a drain pan or drop cloth and absorbent materials to clean up spills.
- Vehicles and equipment shall be maintained properly to prevent leakage of hydrocarbons and coolant, and shall be examined for leaks on a daily basis. All maintenance shall occur in a designated area at least 100 feet from Pila Creek. The designated area shall include a drain pan or drop cloth and absorbent materials to clean up spills.
- Any accidental spill of hydrocarbons or coolant that may occur on the construction site shall be cleaned immediately. Absorbent materials shall be maintained on the construction site for this purpose.

Plan Requirements and Timing: The NOI shall be submitted, and the SWPPP prepared prior to the start of construction. The ESCP including BMPs to stabilize the site, protect natural watercourses/creeks, prevent erosion, convey storm water run-off to existing drainage systems keeping contaminants and sediments onsite shall be a part of the SWPPP required for compliance with the General Construction Storm Water Permit. A copy of the SWPPP shall be kept at the project site during grading and construction activities.

Monitoring: RRWMD shall regularly inspect each project facility site during construction for compliance with the SWPPP and ESCP.

Residual Impacts: Implementation of these mitigation measures would reduce water resources Impact TRRP WR-7 to a level of less than significant.

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**Table Ex-1. Continued**

**DESCRIPTION OF IMPACT**

**MITIGATION MEASURES and RESIDUAL IMPACTS**

**Class II Impacts (Significant but Mitigable)**

**Impact TRRP WR-8: Operation of the proposed project may significantly impact surface water quality through discharge of contaminated storm water, inadvertent discharge of AD Facility percolate, wastewater disposal, and leaks or spills from fueling activities - Class II Impact.**

MSW would be tipped and processed within the MRF to extract recyclable materials and organics. The incoming MSW could contain high levels of organic matter (which could have high biological oxygen demand [BOD]), sediment, nutrients, inorganic salts, plastic and paper. Other potential water quality pollutants may be present in small quantities, including heavy metals, pathogens, hydrocarbons, and other contaminants. The MSW may also have a high liquid content associated with materials such as partially empty beverage or food containers. During tipping and handling operations, the MSW, and associated contaminants, could be accidentally released from the project facilities or discharged during storm events, and enter surface waters and adversely affect water quality.

The organic waste recovered from the MSW would be separated and stored for processing in the AD Facility. The organic waste may be a source of BOD, pathogens, sediment and other contaminants if the material were to come in contact with storm water.

Liquid "percolate" would pass through the organic waste and has the potential to contain contaminants such as coliform bacteria. The percolate would be stored in one 150,000 gallon and two 75,000 gallon tanks. Contamination of storm water and/or surface water may occur if a leak developed in the storage tanks or in the piping system between the tanks and the digesters.

The proposed project includes the installation and operation of an advanced septic treatment system to treat water from employee domestic use and facility wash down water. The treated wastewater would be disposed through irrigation of the slope west of the MRF/AD Facility site, and not discharged to Pila Creek. However, run-off of irrigation water, system leaks or inadequate treatment may result in contamination of surface waters with BOD, nutrients and pathogens.

The mobile equipment would be fueled from a single 10,000 gallon above-ground diesel storage tank, with secondary containment. Additionally, a 7,500 gallon diesel fuel tank would be provided under the standby generator. Organic compounds, petroleum hydrocarbons and heavy metals could potentially contact surface waters through fuel leakage or spills during fuel transfer.

Paved areas surrounding the MRF and AD Facility would be used for parking, equipment storage, and baled recyclable storage. A number of pollutants could accumulate within the parking areas including antifreeze, oil, hydrocarbons, metals, rubber particles from vehicle and equipment operations and use, sediment from equipment transiting between the project facilities and the landfill, and fugitive trash from operation of the MRF. Proposed storm drains installed within the operations deck could carry materials accumulated in the parking areas to Pila Creek during storm events resulting in an adverse impact to surface water quality.

Although numerous features and measures have been incorporated into the project to minimize surface water contamination, the potential exists for surface water impacts if proper installation, maintenance and monitoring of these measures is not conducted.

**MM TRRP WR-3: Industrial Storm Water Permit Compliance and Spill Prevention.** The following measures shall be fully implemented to minimize surface water contamination associated with waste handling, processing and related activities.

The project facilities shall obtain coverage under the General Industrial Storm Water Permit and an Industrial SWPPP shall be prepared (either a new SWPPP or a modification to the existing Tajiguas Landfill SWPPP). The SWPPP shall include the following elements: identification of potential pollutant sources that may affect the quality of the storm water discharges; proposed design and placement of structural and non-structural BMPs to address identified pollutants; proposed inspection and maintenance program; method for ensuring maintenance of all BMPs over the life of the project and monitoring and reporting procedures. Records of maintenance of the BMPs shall be kept onsite.

A Spill Prevention, Control, and Countermeasure (SPCC) Plan shall be prepared to minimize water quality degradation associated with accidental spills. The SPCC Plan shall contain measures to prevent, contain, and otherwise minimize potential spills of pollutants (wastewater, percolate, fuels, etc.) during facility operation, in accordance with federal, state, and local requirements. The SPCC Plan shall provide for installation and monitoring of secondary containment and/or leak detection systems to ensure that pollutants are not accidentally discharged to the storm drain system or directly to Pila Creek. Monitoring of these systems shall be in accordance with SPCC Plan requirements. Additionally, the project shall adhere to the requirements and recommendations of WDRs identified in the Industrial Storm Water Permit.

**Plan Requirements and Timing:** The Notice of Intent (NOI) shall be submitted to the RWQCB, and the SWPPP prepared prior to the start of operations. A copy of the SWPPP shall be kept at the project site through the life of the project. All measures specified in the Industrial SWPPP shall be constructed and in place prior to operations. Annual training on the SWPPP and BMP implementation shall be provided to staff operating project facilities. Training shall occur prior to the start of the rainy season (October 1<sup>st</sup>). Maintenance records shall be kept on site. The SPCC Plan shall be prepared prior to initiating operations at the project facilities, and updated annually at a minimum to address any changes in operations that may affect the type or nature of spills that could occur from the facilities.

**Monitoring:** RRWMD shall inspect each facility following completion of construction to ensure measures are constructed in accordance with the approved Industrial SWPPP and SPCC Plan. Operating staff shall conduct regular inspections and prepare annual monitoring reports over the life of the project.

**Residual Impacts:** Implementation of these mitigation measures would reduce water resources Impact TRRP WR-8 to a level of less than significant.

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**Table Ex-1. Continued**

**DESCRIPTION OF IMPACT**

**MITIGATION MEASURES and RESIDUAL IMPACTS**

**Class II Impacts (Significant but Mitigable)**

**Impact TRRP WR-9: Operation of the composting area could adversely affect surface water quality - Class II Impact.**

Storm run-off from the composting area could be generated during large rain events, and inadvertent application of excess water for moisture conditioning the compost windrows. Storm events up to, and including the 24-hour, 25-year storm event would be collected in two portable tanks to remove sediment, and then pumped to a 325,000 gallon composting area run-off collection tank. The collected run-off water would be reused on the compost windrows to maintain proper moisture content in the windrows, and supplemented with well water only as needed. Run-off generated by rainfall events exceeding the 24-hour, 25-year storm would be diverted through an overflow system to the existing north sedimentation basin, and to Pila Creek via the existing sedimentation basin skimmer system.

Large-scale municipal composting of anaerobically digested MSW is relatively new in California. Therefore, the types and potential concentrations of contaminants in runoff from anaerobically-digested compost windrows has not been specifically studied. Based on the available data, storm run-off from composting facilities may exceed water quality objectives for aluminum, arsenic, copper and zinc. Although data is unavailable to determine potential concentrations of organic chemicals in composting facility run-off, it is possible that MUN water quality objectives for these compounds may also be exceeded.

The composting activities would be included in the Tajiguas Landfill WDRs issued by the Regional Water Quality Control Board and the composting area would also be subject to compliance with the General Industrial Storm Water Permit program.

Overall, the project has been designed to collect, treat and re-use runoff from the composting area to the extent feasible and BMPs have been incorporated into the project design to limit contact of the compost with storm water. However, given the absence of water quality data specifically for digestate/compost from anaerobically digested MSW, a potentially significant impact to water quality could occur if proper implementation, maintenance and monitoring of these measures is not conducted.

**MM TRRP WR-4: Water Quality Monitoring and Corrective Action Plan.**

The composting area shall be included in the SWPPP prepared for the Tajiguas Resource Recovery Project facilities. The SWPPP shall include identification of potential pollutant sources at the composting area that may affect the quality of the storm water discharges; proposed design and placement of structural and non-structural BMPs to address identified pollutants; proposed inspection and maintenance program; employee training, method for ensuring maintenance of all BMPs over the life of the project and monitoring and reporting procedures. Records of maintenance of the BMPs shall be kept onsite. Annual training on the SWPPP and BMP implementation shall be provided to Tajiguas RRP employees. Training shall occur prior to the start of the rainy season (October 1st). In addition, a water quality monitoring program shall be developed for the composting area. Each runoff discharge event shall be monitored at the point of discharge of the composting area overflow (greater than 25 year event) (location CW-1).

Consistent with the landfill's existing monitoring requirements, the discharge shall be tested for pH, specific conductance, total suspended solids, ammonia, BOD, total organic carbon, oil & grease, nitrate and nitrite as nitrogen, aluminum, arsenic, copper, iron, nickel, zinc, alpha-terpineol, benzoic acid, p-cresol, and phenol.

Other sampling locations and constituents may be identified by the RWQCB as a part of compliance with the General Industrial Storm Water Permit or as a part of the issuance of new or modified WDRs for the composting operations.

The discharge shall not exceed water quality standards set forth in the General Industrial Storm Water Permit or established in the Landfill WDRs. If any of the constituents of concern measured at sample location CW-1 are found to exceed these levels, the following action shall be taken:

- Evaluation of the composting area management/operating measures to further identify water quality best management practices such as earlier covering of stockpiles during heavy rainfalls, use of filters on the composting area storm drain inlets, and/or more frequent sweeping of aisles between stock piles.

**Plan Requirements and Timing:** The Water Quality Monitoring and Corrective Action Plan shall be prepared prior to initiating operations at the composting area.

**Monitoring:** RRWMD staff shall ensure water quality sampling and analysis is conducted, review testing results, and ensure corrective actions are taken if necessary to protect water quality. Additional monitoring and reporting shall be conducted as required by the WDRs issued under the Industrial Storm Water Program.

**Residual Impacts:** Implementation of these mitigation measures would reduce water resources Impact TRRP WR-9 to a level of less than significant.

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**Table Ex-1. Continued****DESCRIPTION OF IMPACT****Class III Impacts (Less than Significant)****Impact TRRP VIS-1: Project implementation would not significantly alter the visual setting from public vantage points (View 2, View 7 and View 8) – Class III Impact.**

The proposed project facilities would not be visible from most of the views evaluated. From View 2 (the landfill access road), an additional 80 feet of waste fill would be placed between existing conditions and permitted conditions. The proposed composting area would be slightly visible above the landscape under permitted landfill conditions. This small variation in the visual condition of the landfill as seen from this perspective would not be considered a substantial adverse effect on a scenic vista because the degree of change in the view would be slight.

Implementation of the project would result in an almost unperceivable change in the view from the Baron Ranch Trail (View 7). With project development the 325,000 gallon composting area collection tank could barely be seen on the plateau within the mid-ground view from this location, but would likely be discernable as a tank. However, distant views of tanks are not completely incongruous with the visual setting of the general area as such tanks are not unusual within areas used for agricultural purposes such as grazing. This project element would not block views of the ocean.

The view from the Upper Outlaw Trail (View 8) toward the Pacific Ocean presently includes the active landfill area including the top deck area. As evident in the visual modeling, under permitted condition the visual condition of the landfill will significantly change from current conditions. The development of the proposed composting area would alter the view from the existing and permitted conditions by introducing an additional element of man-modified landscape. However, the composting windrows and stockpiles that would be created, the runoff storage tank, and the relocated landfill maintenance facility would not block views of the ocean as they would be just below the elevation of the topographic features to the south. Additionally, project-related view modifications would be an insubstantial element of the view relative to the landscape which has already been substantially modified by landfill operations and will continue to appear as a man-altered landscape after closure. Visual impacts to the view from the Upper Outlaw Trail are considered to be adverse, but less than significant.

**Impact TRRP VIS-3: Project implementation would result in an adverse but less than significant change in the visual setting as seen from private views - Class III Impact.**

The proposed project facilities would not be visible from View 1 (Arroyo Quemada community entrance); therefore no change in the visual setting would occur as seen from this view point. The proposed project facilities would be visible from private property in the project area. The closest residence to the project site is presently under construction on APN 081-150-034 (Hart property) which borders the landfill property immediately to the south. The residence is located approximately 0.4 miles south of the proposed composting area and 2,500 feet southeast from the proposed location of the MRF and AD facilities. Portions of the landfill property, including fill slopes, operations trailers and the west borrow area cut slope are currently visible from the Hart property. As would be expected, views from the new residence (under construction) are primarily focused to the south towards the Pacific Ocean. However, based on site visits by RRWMD staff, the existing landfill operations trailers are visible from a small portion of the driveway to the Hart residence and would be visible from a small area of the building pad (pool and northwestern corner of the patio). Therefore, with project implementation, the proposed MRF and AD Facility would also be visible from these locations. However, given that views from private residences would be limited, the views occur in areas substantially affected by existing landfill operations, construction of the facilities would not obstruct scenic vistas on or across the landfill property, and that Appendix G of the State CEQA Guidelines and the County's Visual Aesthetic Impact Guidelines address public views, rather than private views, the visibility of the Tajiguas RRP facilities from private views is considered an adverse but less than significant impact. Additionally, the implementation of mitigation measure *MM TRRP VIS-1a and 1b* would help to reduce the adverse visual impact from private property, as well as mitigate impacts from public viewpoints (U.S. Highway 101, View 6).

**Impact TRRP VIS-4: Project-related construction activities could result in less than significant lighting and glare impacts - Class III Impact.**

Construction work for the Resource Recovery Project would generally be conducted during daylight hours, in compliance with the County permitted landfill construction hours of 6:00 am to 8:00 pm, Monday through Saturday, and 7:00 am to 6:00 pm on Sunday. However, non-daylight work hours on weekdays or daytime work on Saturdays and holidays may occur to minimize conflicts with ongoing landfill waste disposal operations, make up schedule deficiencies and/or to complete critical construction activities safely, such as MRF equipment installation and testing. In the event that nighttime work was required and it would occur outside, portable lighting may be necessary. However, because this occurrence is not anticipated to be a normal part of the construction process which itself would only be temporary, and due to the distance of the landfill from existing likely stargazing venues such as Refugio State Beach, construction-related nighttime lighting impacts are expected to be less than significant.

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**Table Ex-1. Continued****DESCRIPTION OF IMPACT****Class III Impacts (Less than Significant)****Impact TRRP VIS-5: Project operation could result in less than significant lighting and glare impacts - Class III Impact.**

The MRF and AD Facility building roofs would include a series of translucent sky lights. The sky lights would include built-in blinds or external adjustable blinds to prevent light from escaping from the building at night. Assuming that the blinds are closed, interior lighting would not affect nighttime views. Exterior lighting would be provided on the Resource Recovery Project buildings and in the parking areas to allow continued operations after dark, accommodate safe traffic flow, and employee safety. No lighting is proposed along the site access roads, and unmanned facilities. The proposed lighting would consist of energy efficient lights positioned to minimize off-site impacts by being directed inward and downward with appropriate shielding and away from U.S. Highway 101, Baron Ranch and from nearby habitat areas. Due to the measures incorporated into the project to reduce the potential for nighttime lighting to spill off the site or skyward, nighttime lighting introduced by the project is not expected to result in significant deterioration of nighttime views in the area. The MRF and AD Facility would include south-facing rooftop solar panels. Currently available solar panels have anti-reflective coatings that have a reflectivity or albedo of 30 percent or less (dry sand has a reflectivity of 45 percent) resulting in glare that would be less than or equivalent to natural earth materials such as sand. Additionally, due to the angle of the panels relative to the orientation of U.S. Highway 101, solar panel reflectivity should not cause a significant glare impact on drivers.

**Impact TRRP AQ-1: Construction of project facilities would result in criteria air pollutant emissions that would not significantly affect regional air quality – Class III Impact.**

Construction activities would involve sources of air pollutants, including heavy equipment, heavy-duty trucks and worker vehicles. SBCAPCD Rule 202 D.16 applies to projects that include a stationary source that requires an Authority to Construct permit, and includes a 25 tons per year threshold for criteria pollutant emissions, except carbon monoxide. If pollutants exceed the 25 tons per year threshold, the owner of the stationary source is required to provide offsets and must demonstrate that no ambient air quality standard will be violated. This threshold is used to determine the significance of construction emissions of the proposed project. The maximum construction emissions during a 12-month time period would not exceed this threshold, and are considered a less than significant impact.

**Impact TRRP AQ-2: Operation of project facilities would result in criteria air pollutant emissions that would not significantly affect regional air quality – Class III Impact.**

Project operation would generate air pollutant emissions from on-site equipment used to handle, sort and process solid waste, on-site motor vehicles used to transport solid waste, and off-site motor vehicles to transport employees, solid waste and recyclables. Overall, project operations emissions would not exceed any County thresholds, and would have less than significant impacts to regional air quality. Note that NO<sub>x</sub> emissions for vehicles would be less under the CSSR option because the trip distance for trucks carrying CSSR would be shorter (from SCRTS to the landfill, instead of to Gold Coast in Ventura) and trucks used to transport recovered recyclables to market would be fueled by compressed natural gas.

**Impact TRRP AQ-3: Normal operation of project facilities would result in criteria air pollutant emissions that would not cause or contribute to exceedances of ambient air quality standards – Class III Impact.**

An air dispersion model (ISCST3) was used with one year of meteorological data to determine ground level concentrations of pollutants emitted by the project for comparison to the NAAQS and CAAQS. The modeled project contribution (from all sources), when combined with the appropriate ambient background concentration, are below the NAAQS for all pollutants. Therefore, project-related emissions would not cause or contribute to an exceedance of the NAAQS, and air quality impacts are considered less than significant. In addition, the modeled project contribution (from all sources), when combined with the appropriate ambient background concentration, are below the CAAQS for all pollutants. Therefore, project-related emissions would not cause or contribute to an exceedance of the CAAQS, and air quality impacts are considered less than significant.

**Impact TRRP AQ-4: Short-term operational scenarios of the flare and CHP engines would result in criteria pollutant emissions that would not cause or substantially contribute to exceedances of air quality standards – Class III Impact.**

Hourly emissions were estimated for three short-term scenarios as requested by the SBCAPCD to represent unusual circumstances that would produce greater emissions for short periods:

- The flare combusting the landfill gas while both CHP engines are offline;
- Start-up of one CHP engine while the second is in normal operating mode; and,
- SCR burn-in on one CHP engine while the second is in normal operating mode.

An air dispersion model (ISCST3) was used with one year of meteorological data to determine ground level pollutant concentrations for comparison to the NAAQS and CAAQS. This analysis indicates that the NAAQS and CAAQS would not be exceeded.



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## Table Ex-1. Continued

### DESCRIPTION OF IMPACT

#### Class III Impacts (Less than Significant)

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**Impact TRRP AQ-5: Operation of project facilities would result in emissions of toxic air contaminants, but emissions would not result in significant health risks at adjacent land uses – Class III Impact.**

An air dispersion model (ISCST3) was used with one year of meteorological data to determine ground level concentrations of toxic air contaminants emitted by the project. The HARP model was then used to identify cancer risk and non-cancer health hazards at the nearest residence (planned Hart residence), which represents the maximum exposed residence (MEIR) and maximum exposed worker (MEIW). Project-related cancer risk and health hazard index values are less than the SBCAPCD thresholds, and are considered a less than significant impact.

A facility-wide health risk assessment was conducted and includes both existing and proposed sources of TAC emissions at the landfill. While the facility-wide health risk assessment indicates the acute hazard index threshold would be exceeded at the property boundary, this area is uninhabited, inaccessible (steep terrain with dense vegetation) and the area is not reasonably accessible by the public and individuals would not be exposed to this risk. Therefore, facility-wide TAC emissions would not result in a significant health risk impact.

**Impact TRRP AQ-6: Construction of project facilities would generate greenhouse gas emissions that would result in a less than significant contribution to global climate change – Class III Impact.**

GHGs would be emitted during project construction prior to the realization of any benefits associated with the project (diversion of organic waste). Total project-related GHG emissions during construction would be less than the adopted significance threshold (10,000 MT CO<sub>2</sub>e).

**Impact TRRP AQ-9: Odors generated by solid waste processing in the TRRP facilities may create a less than significant nuisance air quality impact. – Class III Impact.**

For the purposes of this impact analysis, if an odor can be detected more than two percent of the time by a considerable number of receptors, a significant nuisance odor impact may occur and violate Section 41700 of the Health and Safety Code and SBCAPCD Rule 303. Odor impact modeling was conducted using the ISCST3 air dispersion model and odor emission rates for proposed sources, including the bio-filter exhausts and compost windrows. Modeling results indicates the 5.0 OU/m<sup>3</sup> odor guideline would be exceeded at each of the three receptors (Baron Ranch hiking trail, Arroyo Quemada community, planned Hart residence), with the odor guideline exceeded 15 hours per year at the hiking trail. Note that the hiking trail is not heavily utilized and it is unlikely persons would be present when odor concentrations exceeded 5.0 OU/m<sup>3</sup>. Because of the limited frequency exceeding 5.0 OU/m<sup>3</sup> and the limited number of affected persons, nuisance odor impacts at the hiking trail would be less than significant. Although a larger number of receptors may be present in the Arroyo Quemada community (nearest existing residence), the modeling indicates that the odor concentration of 5.0 OU/m<sup>3</sup> would only be exceeded 12 hours per year (<0.1 percent of the year). Therefore, nuisance odor impacts at this location would also be less than significant. The modeling indicates that the odor guideline concentration of 5.0 OU/m<sup>3</sup> may be exceeded 30 hours per year (0.2 percent) at the planned Hart residence, located just south of the landfill. This value does not exceed the two percent frequency (or 175 hours per year), and the number of receptors at this location would not meet the definition of considerable. Therefore, odor impacts at this location would also be less than significant.

**Impact TRRP AQ-10: H<sub>2</sub>S and organic sulfides may be produced in the anaerobic digesters and resulting compost but would not result in exceedances of SBCAPCD Rule 310 limits – Class III Impact.**

Organic sulfur compounds present in the MSW and SSOW would be converted to H<sub>2</sub>S and organic sulfides in the anaerobic digester vessels, and included in the bio-gas. However, these compounds would be captured (in part) by the proposed activated carbon filter pre-treatment of the bio-gas, with the residual concentrations combusted in the CHP engines or in the flare, converting any residual sulfur compounds to SO<sub>2</sub>. A very small amount of organic sulfur compounds may remain in the digestate, and could be released during composting of this material. However, aerobic conditions would be maintained in the compost windrows, which would minimize the generation of H<sub>2</sub>S and organic sulfides.

Ventilation air from the MRF and AD Facility buildings may contain very low concentrations of H<sub>2</sub>S and organic sulfides, but would be treated using bio-filters which provide removal efficiencies of 99 percent for H<sub>2</sub>S and 80 percent for organic sulfides.

Based on the project design, fugitive emissions of H<sub>2</sub>S and organic sulfides is expected to be below the specified thresholds in Rule 310 (hydrogen sulfide concentrations at or beyond the property line of 0.06 ppm for an averaging time of 3 minutes and 0.03 ppm for an averaging time of 1 hour), and considered less than significant.

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## Table Ex-1. Continued

### DESCRIPTION OF IMPACT

#### **Class III Impacts (Less than Significant)**

**Impact TRRP BIO-1: Implementation of the proposed project would result in the permanent loss of approximately 3.33 acres of non-native and native vegetation communities within the project impact area which would be an adverse but less than significant biological impact – Class III Impact.**

Implementation of the proposed project would result in the permanent loss of approximately 3.33 acres of vegetation communities. This loss includes 1.09 acres of native vegetation communities/cover types (*Ceanothus megacarpus* chaparral and rock outcrops) and 2.24 acres of ruderal areas dominated by non-native plant species. Although Venturan coastal sage scrub and *Ceanothus megacarpus* chaparral are not considered sensitive by Holland (1986) or the County within inland areas (1992, updated 2008), impacts to these vegetation communities were considered significant and unavoidable in 01-EIR-05 for the Tajiguas Landfill Expansion Project. The level of significance was based on the size (approximately 71 acres) of the native habitat impacted, the loss of the buffer from landfill activities that these communities afforded wildlife, and the reduction in areas available for wildlife species particularly those that are habitat specialists or require a large home range. The proposed project would impact 1.07 additional acres of *Ceanothus megacarpus* chaparral. Due to the small area of anticipated permanent loss of this common native vegetation community, permanent impacts are considered adverse but less than significant.

**Impact TRRP BIO-3: Construction activities would result in an adverse but less than significant direct loss of wildlife habitat and adverse but less than significant impact to wildlife habitat located adjacent to the direct impact area – Class III Impact.**

The proposed project would result in the permanent loss of 3.33 acres of habitat for common wildlife species during clearing and grubbing prior to construction, primarily near the western and eastern ridges of Cañada de la Pila. Common wildlife species (especially small mammals and reptiles with low mobility) may be inadvertently killed or injured during construction activities, though many birds and large mammals that have higher mobility are less likely to be crushed during the construction of proposed facilities. Project construction activities would result in indirect temporary impacts to wildlife habitat and common wildlife species, such as increased fugitive dust, elevated noise levels, and increased human activity within and adjacent to the Resource Recovery Project facility sites. However, storage of construction materials and staging of equipment would not affect wildlife or wildlife habitats because these types of project activities would be limited to existing disturbed landfill areas. Indirect construction-related impacts to common wildlife species are considered an adverse but less than significant impact because the project would affect only a small amount of native habitat, other undeveloped areas of the landfill property and neighboring properties are available for use by common wildlife species, and the project is not expected to reduce common wildlife populations below self-sustaining levels.

**Impact TRRP BIO-5: Project construction activities would result in a less than significant loss of special-status plant species – Class III Impact.**

Approximately 15 individuals of two sensitive plant species occur within the project impact area, eight Plummer's baccharis and seven Santa Barbara honeysuckle. Ten additional Plummer's baccharis are located near the water tanks site, but would be avoided. The eight Plummer's baccharis that would be removed are located along the pipeline/power line alignment to proposed Well no. 6. These individuals are part of a group of plants that are within the disturbance footprint of the Reconfiguration Project and were assumed to be removed as part of that project. Although the plants have not yet been removed, impacts to these plants were mitigated through planting and maintenance of 30 plants at the Baron Ranch. The seven Santa Barbara honeysuckle plants to be removed have already been offset through planting 40 individuals at Baron Ranch as mitigation for loss of 13 plants as part of the Reconfiguration Project. Therefore, loss of these plants has already been mitigated and impacts would be less than significant.

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**Table Ex-1. Continued****DESCRIPTION OF IMPACT****Class III Impacts (Less than Significant)****Impact TRRP BIO-6: Project construction activities would result in an adverse but less than significant loss of California red-legged frog upland dispersal habitat – Class III Impact.**

California red-legged frogs have been known to occur within the immediate vicinity of the project impact area (ERA 2008, Padre Associates, Inc. 2012), primarily within Pila Creek prior to its channelization and within the sedimentation basins prior to their removal. As part of the Reconfiguration Project and included in the USFWS Biological Opinion, California red-legged frogs were relocated from the landfill site to Arroyo Quemado east of the landfill. However, the authority to relocate frogs is granted by the Biological Opinion for the Reconfiguration Project and only permitted for specified reconfiguration activities and will expire when that project is completed. Compensation for the loss of California red-legged frog habitat at the landfill as a result of the Reconfiguration Project has been provided through habitat restoration and enhancements at Baron Ranch and through the proposed protection in perpetuity of approximately 30 acres of occupied habitat in the Arroyo Quemado watershed.

The in-channel sedimentation basins were removed, the north sedimentation basin (formerly the out-of-channel basin) was reconstructed and modified to minimize ponding of water, seeps within Pila Creek were removed, and Pila Creek was channelized as part of the Reconfiguration Project. These actions have resulted in the removal of breeding habitat, and permanent or semi-permanent water sources suitable for California red-legged frog. Upland habitat surrounding former habitat locations has also been substantially modified. California red-legged frogs have not been observed at the landfill during surveys conducted during the 2012/2013 rainy season; the last observation of California red-legged frog occurred on April 19, 2012 (Padre Associates, Inc. 2012).

California red-legged frogs are present in Arroyo Quemado and Arroyo Hondo and the landfill site is within a potential dispersal corridor between these two known locations. The proposed project would permanently remove a small amount of upland native vegetation on the western ridge of Cañada de la Pila that California red-legged frogs may pass through during their movement from one habitat area to another. It is recognized that California red-legged frogs may travel through various habitat types when dispersing to and from breeding habitat without apparent regard to vegetation type or topography (Bulger et al. 2003). Due to the lack of permanent or semi-permanent water near any of the proposed facility locations, the frogs would only be expected as transients.

The removal of this native vegetation would expand the area of exposed ground for frogs to cross during overland movement, increasing the chances of predation. However, impacts to the California red-legged frog would be considered less than significant considering the very low likelihood of the presence of a California red-legged frog within these upland areas and the small amount of proposed native vegetation removal.

**Impact TRRP BIO-7: Construction-related loss of habitat may result in an adverse but less than significant reduction in foraging opportunities for transient special-status birds - Class III Impact.**

Sharp-shinned hawk, ferruginous hawk, northern harrier, white-tailed kite and loggerhead shrike have been observed at the landfill site or vicinity and may forage within the project impact area. Impacts to these species are considered less than significant due to the small area of habitat removal as compared to their typical foraging area, and the lack of suitable nesting habitat at the landfill site.

**Impact TRRP BIO-11: Operation of the proposed project may result in an adverse but less than significant impact to common wildlife species – Class III Impact.**

Habitat quality adjacent to project facilities would be reduced through the encroachment of landfill infrastructure (i.e., tanks and associated pipelines). Project-related operations would generate noise, dust, mobile equipment activity and odors, and may reduce the habitat value of adjacent areas to common wildlife species. However, the habitat area affected would be small (a few acres) and approximately 200 acres would remain available on the landfill property for use by these common species.

Operation of the project would result in indirect and permanent impacts to wildlife primarily due to the increase in the amount and duration of human activity at the landfill. The MRF and AD Facility would require additional personnel and operated 24 hours per day, seven days per week. Waste delivery would only occur during the existing landfill operating hours; however, MRF processing, operation of the AD Facility and energy facility, and off-site transport of recyclable materials would occur during the evening. Increased motor vehicle activity at night may also result in increased mortality to wildlife from vehicle collisions. Vehicles driving off-road and vehicles driving during rainy conditions may also increase the potential for wildlife road kill incidents at the landfill. Increased human activity, lighting, and noise may result in more secretive species further avoiding areas of active operations within habitat areas surrounding project facilities, particularly at night. Conversely, the night lighting may attract additional insects that could be preyed upon by nocturnal species such as bats.

MSW and SSOW would be off-loaded and contained within the enclosed MRF and AD Facility, respectively, and, as such, would not provide an additional attractant to opportunistic nocturnal species such as the striped skunk (*Mephitis mephitis*), common raccoon (*Procyon lotor*), and Virginia opossum (*Didelphis virginiana*), which may prey on other sensitive wildlife, or diurnal opportunists such as gulls, though they are currently controlled under a falconry program. Overall, operational impacts to common wildlife are expected to be less than significant, due to the small area of wildlife habitat affected.

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## Table Ex-1. Continued

### DESCRIPTION OF IMPACT

#### **Class III Impacts (Less than Significant)**

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#### **Impact TRRP BIO-14: The project-related construction disturbance and habitat loss may result in an adverse but less than significant impact on habitat connectivity and wildlife corridors – Class III Impact.**

The majority of the land within, north, and west of the Study Area provides suitable habitat and cover, and may be used by wildlife moving between the coastal foothills and the Santa Ynez Mountains north of the Study Area. Wildlife movement along Cañada de la Pila is currently constrained by the recently completed concrete channel and spillway, active portions of the landfill, and culverts at the landfill access road, U.S. Highway 101, and the Union Pacific Railroad.

Proposed facility sites are located within or immediately adjacent to active areas of the landfill, which is composed of steep graded hillsides, dirt and paved roads, ruderal areas devoid of vegetation, and other outbuildings associated with active landfill operations. These developed and active portions of the Tajiguas Landfill provide little value to resident and transient wildlife. Construction of the proposed project would incrementally encroach on potential wildlife movement corridors, the coastal canyons of Arroyo Hondo to the west and Arroyo Quemado and Baron Ranch to the east.

Habitat restoration activities occurring at Baron Ranch as mitigation for impacts from the Reconfiguration Project likely benefit wildlife movement by enhancing the cover along and immediately adjacent to Arroyo Quemado, which provides relatively unobstructed connectivity between the coastal foothills and the Santa Ynez Mountains. Due to the distance and topographic separation between project facility sites and these corridors (at least 1,800 feet), construction-related habitat loss and disturbance would not significantly reduce the value of Arroyo Hondo and Arroyo Quemado as potential wildlife movement corridors.

#### **Impact TRRP BIO-15: Operation of the proposed project may result in an adverse but less than significant impact on habitat connectivity and wildlife corridors – Class III Impact.**

Operation of the proposed project would involve increased equipment and motor vehicle activity and night lighting, and introduce nighttime operations to the landfill site. As discussed above, proposed facility sites are located within developed and active portions of the Tajiguas Landfill and provide little value to resident and transient wildlife. However, project-related activities may incrementally encroach on potential wildlife movement corridors, such as the adjacent coastal canyons of Arroyo Hondo to the west and Arroyo Quemado and Baron Ranch to the east. Project-related impacts to these potential movement corridors are considered less than significant due to distance and topographic separation between project facility sites and these corridors (at least 1,800 feet).

#### **Impact TRRP HAZ-1: Construction activities associated with the proposed project may result in an adverse but less than significant inadvertent discharge of small quantities of hazardous materials – Class III Impact.**

During construction, small quantities of hazardous materials (i.e., fuel, lubricating oils, hydraulic fluid, engine coolant) would be used at the landfill site and transported to and from the site. Small quantities of these substances could be accidentally released and result in soil contamination. However, hazardous materials handling procedures and worker safety procedures would be implemented as required by applicable regulations, and RRWMD landfill contractor requirements. Due to the small amounts of hazardous materials used during construction activities and the implementation of applicable regulations, potential impacts associated with use of hazardous materials for project construction purposes would be less than significant.

#### **Impact TRRP HAZ-2: Use or storage of hazardous materials associated with project operations would not significantly affect the public or the environment – Class III Impact.**

Small quantities of hazardous materials would be used at the proposed facilities, including diesel fuel, propane and sulfuric acid. The project operator would be required to maintain a HMBP with the CUPA, for the use and storage of hazardous materials. The HMBP would meet Emergency Planning and Right to Know Act requirements and would require the reporting of hazardous materials over regulatory thresholds. The HMBP would outline emergency response procedures and on-site equipment as well as training requirements. The final design and siting of diesel fuel tanks (four tanks having a total capacity of 37,500 gallons) would be in accordance with the Uniform Fire Code, ensuring proper spatial separation with other fuel and ignition sources. Overall, impacts associated with operational hazardous materials use and storage would be less than significant.

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## Table Ex-1. Continued

### DESCRIPTION OF IMPACT

#### Class III Impacts (Less than Significant)

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**Impact TRRP HAZ-3: Operation of the AD Facility could result in an accidental release of bio-gas which could result in an adverse but less than significant increase in the risk of fire or explosion – Class III Impact.**

Bio-gas generated in the anaerobic digesters consists of methane and carbon dioxide, with small amounts of H<sub>2</sub>S and ammonia. Methane is not toxic, but is classified as a simple asphyxiate. Bio-gas itself is not flammable and will not burn unless oxygen is present within a specific range of concentrations. The methane in bio-gas is flammable when mixed with air in concentrations of 5 to 15 percent. Above or below these concentrations methane is not flammable. In open spaces, bio-gas readily mixes with air, reducing its potential to reach flammable concentrations.

Operation of the AD Facility could increase the risk of fire and explosion hazards due to the potential accidental release and ignition of bio-gas. A review of the generation, handling and processing of bio-gas at the proposed AD Facility was conducted, with a focus of identifying events where an oxygen-methane mixture could occur within flammability limits. This could occur when digesters are opened to add organic waste or remove digestate. It is anticipated that about 208 purging cycles would occur per year when the AD Facility is at capacity. Each digester would be purged with exhaust gas from the CHP engines prior to opening, with the resulting gas combusted in a flare. Therefore, bio-gas would not be released when the digesters are opened.

The MRF and AD Facility would be equipped with methane monitors and alarms that would identify methane buildup and potentially flammable conditions. This equipment would provide early detection of flammable conditions and allow quicker response. The AD Facility would have a detailed loading and processing schedule of the individual digesters to prevent the mixing of oxygen and methane within flammability limits. A logic controller would be programmed to carefully control the gas (fuel and oxygen) ratios and enable proper purging of the digesters.

A worst-case explosion risk analysis (based on U.S. EPA requirements) was conducted assuming the failure of control and monitoring systems, and release of bio-gas forming a vapor cloud containing 427 pounds of methane. Assuming hypothetical ignition (e.g., from a very hot material or welding/cutting activity) and calm atmospheric conditions for dispersion, the methane would ignite very quickly and produce a flash flame. The rapid combustion would result in an expansion of the ignited gases and subsequently produce a pressure wave (referred to as overpressure). Typically, a regulatory agency acceptable level of concern for this hazard is an overpressure of 1 pound per square inch (psi) in the atmosphere, which can lead to broken glass and debris (EPA, 1999). The 1 psi overpressure hazard zone would be approximately 400 feet downwind (in a circular radius) of the AD Facility, which would be entirely contained within the landfill property. The probability of a bio-gas explosion is anticipated to be low, and contingent on multiple failures/errors of equipment and operating procedures. Since the explosion footprint would not affect areas beyond the landfill property, and would therefore not affect the general public, and the probability of multiple failures/errors of equipment is low, this impact is considered less than significant.

**Impact TRRP HAZ-4: With implementation of the proposed landfill gas (LFG) barrier and monitoring system and the existing LFG collection system there is a less than significant potential for LFG to collect within the MRF and/or AD Facility and reach flammable concentrations – Class III Impact.**

LFG produced in landfill buried waste may migrate from the disposal areas and collect in enclosed structures, resulting in risk of fire/explosion. Project facilities constructed on top of areas where waste has been deposited would be limited to the MRF/AD Facility parking lots, and the composting area which do not include enclosed/habitable structures. The MRF and AD Facility would be located near the waste footprint, but pursuant to California Code of Regulations Title 27 requirements they would be constructed with an impermeable membrane and equipped with LFG monitors and alarms that would identify LFG buildup and flammable/explosive conditions. In addition, the existing LFG collection system would substantially reduce the potential for LFG migration into the proposed facilities. Monthly maintenance of the LFG collection wells is conducted and documented by the LFG collection system operator to ensure the integrity of the entire system (i.e., proper distribution of flow and minimizing leakage). Overall, the potential impact associated with LFG migration into project facilities is considered less than significant.

**Impact TRRP HAZ-6: The proposed project would not significantly interfere with emergency response and evacuation of the landfill site – Class III Impact.**

Emergency response and evacuation procedures for the project area are coordinated by the Santa Barbara County Sheriff's Department and the SBCFD. The proposed project would involve changes to the landfill site, including modest increases in employees, automobile traffic, and truck trips. In addition, the proposed project includes construction of new buildings, new industrial processes (MRF/AD Facility), and changes to the existing landfill procedures. Emergency access to and in the vicinity of the project site could potentially be affected during construction activities. However, a traffic control plan would be prepared to provide access for emergency vehicles during the construction period. During construction and operation activities of the proposed project, the SBCFD would require that adequate vehicular access be provided and maintained. Therefore, the proposed project would not impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan.

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**Table Ex-1. Continued****DESCRIPTION OF IMPACT****Class III Impacts (Less than Significant)****Impact TRRP G-2: Placement of the compost area on the landfill top deck would not significantly compromise the stability of waste fill slopes – Class III Impact.**

Two dimensional slope stability analyses were performed for five cross-sections (A-A' through E-E') using the computer program SLOPE/W. Cross-section A-A' was located in a north-south direction across the proposed composting area footprint to evaluate the local stability of the compost windrows above the proposed linear low density polyethylene (LLDPE) membrane. The interface between the LLDPE membrane and the overlying and underlying non-woven geotextiles was assumed to be the critical interface for potential slope movement.

Cross sections B-B', C-C', D-D' and E-E' were located to evaluate the overall (gross) stability of the waste fill slopes in the post-closure configuration in three directions with the maximum height of the compost windrows in place. The minimum static factor of safety for the cross sections analyzed with the proposed compost in place is 1.55 (see Table 4.5-2). This result exceeds the engineering standard of 1.5 provided by the CCR Title 27. Therefore, the waste fill slopes are considered adequately stable under static conditions, and impacts would be less than significant.

In addition, seismic-induced permanent displacement of the waste fill slopes due to the maximum probable earthquake was estimated using procedures described by Bray et al., (1998), and Bray and Rathje (1998). The procedure is based on the premise that the sliding block will undergo displacement only during the periods when the maximum ground acceleration ( $k_{max}$ ) exceeds the yield acceleration ( $k_y$ ) for the sliding block, (i.e., displacements occur when  $k_{max}$  is greater than  $k_y$ ). Therefore, slopes with a ratio of  $k_y/k_{max}$  greater than 1.0 are considered stable. This ratio is greater than 1.0 for all slopes analyzed. Therefore, the waste fill slopes are considered adequately stable under seismically-induced conditions, and impacts would be less than significant.

**Impact TRRP G-3: Grading and irrigation of the manufactured slope west of the proposed MRF/AD Facility site would not result in severe erosion and would not significantly affect the stability of the existing mapped landslides – Class III Impact.**

Treated domestic wastewater stored in the proposed 70,000 gallon recycled water storage tank would be used to drip irrigate the slope west of the MRF/AD Facility site. The irrigation rates would be controlled automatically by a system that incorporates data received by soil moisture sensors and an on-site weather station. Controlled irrigation would facilitate establishment of vegetation that would stabilize the soil surface and minimize erosion. Overall, impacts associated with potential severe erosion are considered less than significant.

**Impact TRRP G-4: The proposed facilities would not be impacted by fault rupture but may be subject to adverse but less than significant damage due to seismic ground-shaking - Class III Impact.**

No active faults or earthquake fault zones are located on the project site. Therefore, significant impacts to project facilities associated with fault rupture would not occur. A seismic event on a nearby fault could produce ground-shaking at the project site; however, with implementation of standard building code requirements for seismically active areas, loss of life or damage to project facilities are not anticipated.

**Impact TRRP G-5: The proposed facilities have a less than significant potential for damage due to seismic liquefaction – Class III Impact.**

Based on laboratory testing of soils on-site, the consistency and relative density of the in-situ soils (clay/rock) are not conducive to liquefaction. In addition, groundwater is relatively deep, such that soil saturation is not anticipated. Overall, the potential for loss of life and/or property damage associated with liquefaction is considered less than significant.

**Impact TRRP N-1: Project-related construction could generate short-term noise that would result in an adverse but less than significant impact on noise-sensitive receptors on adjacent agriculturally zoned land – Class III Impact.**

Construction of the proposed project would include use of heavy-duty trucks and equipment at the MRF/AD Facility site (current landfill operations deck), proposed composting area, proposed maintenance building site, proposed water tanks site and proposed composting area run-off collection tank site. Each of these areas are located at least 1,600 feet from the nearest noise-sensitive land use (planned Hart residence), which would not be significantly impacted by construction noise (see County threshold e.).

Landfill operations trailers would be temporarily relocated to either a location northeast of the landfill top deck or on a deck southeast of the green waste operations deck within 800 feet of the planned Hart residence during construction of the project facilities. However, noise associated with re-locating landfill operations would involve installing pre-fabricated trailers and moving existing intermodal containers rather than constructing new buildings. These activities would be limited to less than a month, and would be limited to the existing permitted landfill operating hours. Overall, construction noise impacts would be less than significant.

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## Table Ex-1. Continued

### DESCRIPTION OF IMPACT

#### **Class III Impacts (Less than Significant)**

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**Impact TRRP N-2: Project-related vehicle traffic on U.S. Highway 101 would result in an adverse but less than significant increase in noise levels at noise-sensitive receptors near the landfill – Class III Impact.**

Project-related traffic increases would be minimal as compared to existing traffic on U.S. Highway 101, and result in noise increases at nearby residential land uses of less than 0.1 dBA CNEL. Project-related noise would not result in new exceedances of the 65 dBA CNEL threshold, or cause noise increases of 1.5 dBA or more. Therefore, traffic noise impacts are considered less than significant.

**Impact TRRP N-3: Noise associated with operation of project facilities would result in an adverse but less than significant impact on noise-sensitive land uses near the landfill – Class III Impact.**

Noise would be generated from many of the project facilities, including the MRF (sorting equipment, mobile equipment), the AD Facility (mobile equipment, screening equipment), the composting area (mobile equipment, grinder), and from the energy facility (CHP engines). Noise levels were estimated for each facility at each noise-sensitive receiver, based on the respective operating hours for each facility. The resulting noise levels were then combined to produce a 65 dBA CNEL noise contour, and a combined noise level at each noise-sensitive receiver. These combined noise levels are conservatively high since they do not account for any noise reduction due to intervening topography between project facilities and noise-sensitive receptors. Noise levels at sensitive receptors are projected to be below 65 dBA CNEL criteria and the resulting increase above existing landfill operations noise is projected to be no greater than 1 to 2 dBA. Project-related operations noise would result in a less than significant noise impact.

**Impact TRRP N-4: Vibration associated with operation of project facilities would result in an adverse but less than significant impact on residential land uses near the landfill – Class III Impact.**

The ground-borne vibration assessment is based on the vibration effects from mobile equipment. As a worst-case scenario, it was assumed a large bulldozer would be operating at each of the project facility sites. The procedure described by the Caltrans Vibration Guidance Manual was used (Caltrans, 2004) to estimate vibration levels. The reference source vibration for a large bulldozer is a peak particle velocity (PPV) of 0.089 in/sec at a distance of 25 feet (Federal Transit Administration, 2006). Project-related vibration would not exceed the 0.01 inches/second threshold for human annoyance and would be well below the 0.08 threshold for building damage; therefore, project generated vibration impacts would not be significant.

**Impact TRRP T-1: Implementation of the proposed project would generate construction-related traffic which could result in an adverse but less than significant impact to traffic operations on U.S. Highway 101 and the U.S. Highway 101/landfill access road – Class III Impact.**

Levels of service were calculated for U.S. Highway 101 and for the U.S. Highway 101/landfill access road intersection based on Existing + Construction peak period traffic volumes. The construction phase of the Resource Recovery Project would not significantly impact U.S. Highway 101 or the U.S. Highway 101/landfill access road intersection.

**Impact TRRP T-2: Operation of the proposed project would generate additional traffic which could result in an adverse but less than significant impact on U.S. Highway 101 traffic operations (level of service) – Class III Impact.**

Levels of service were calculated for U.S. Highway 101 using the Baseline + Project peak period traffic volumes (with and without the CSSR Option). U.S. Highway 101 is forecast to operate at LOS A-B adjacent to the project site during the a.m. and p.m. peak hour periods with Baseline + Project traffic, which meets both Caltrans and County standards. The Resource Recovery Project (with or without the CSSR Option) would not generate significant impacts to U.S. Highway 101 operations.

**Impact TRRP T-3: Implementation of the proposed project would generate additional traffic which could result in an adverse but less than significant impact on the landfill access road/U.S. Highway 101 intersection level of service – Class III Impact.**

Levels of service were calculated for the U.S. Highway 101/landfill access road intersection using the Baseline + Project peak period volumes (with and without the CSSR Option). The Baseline + Project delays for traffic entering and exiting the landfill access road during the a.m. peak period equate to LOS A-B and the delays during the p.m. peak period equate to LOS A-C, which meet both Caltrans and County standards. The Resource Recovery Project (with or without the CSSR Option) would not significantly impact traffic operations at the U.S. Highway 101/landfill access road intersection.

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## Table Ex-1. Continued

### DESCRIPTION OF IMPACT

#### **Class III Impacts (Less than Significant)**

**Impact TRRP T-4: Implementation of the proposed project would generate additional traffic at the existing U.S. Highway 101/landfill access road intersection which could result in adverse but less than significant traffic safety impacts – Class III Impact.**

Trucks/vehicles exiting the landfill to go southbound on U.S. Highway 101 or trucks/vehicles entering the landfill from southbound U.S. Highway 101 must use the existing at-grade intersection, and cross highway traffic lanes. Caltrans accident data show that the rate of accidents at the intersection is well below the statewide average for similar intersections and none of the accidents within the 10-year period involved landfill vehicles. Based on the results of the traffic analysis (Appendix K), there are adequate traffic gaps and sight distances for the additional project-generated traffic. In addition, the existing intersection contains turn lanes for all movements, which although less than Caltrans recommended lengths, are beneficial to the safety and efficiency of the intersections. Therefore, the Resource Recovery Project would not significantly impact traffic safety at the U.S. Highway 101/landfill access road at-grade intersection.

**Impact TRRP WR-1: The proposed project would introduce impervious surfaces and modify drainage patterns, but would not result in a flooding impact or damage downstream drainage structures – Class III Impact.**

The proposed project involves changes to the existing operations deck consisting of the replacement of the existing administration facilities (office trailers, dirt parking lot, and asphalt parking lot) with a MRF, AD Facility, asphalt parking areas and related facilities (e.g., percolate storage tanks, energy facility, etc.). The existing administration facilities would be temporarily moved to a deck northeast of the landfill top deck and/or south of the green-waste pad. In addition, a composting area is proposed to be located on the top deck of the landfill, once the top deck reaches capacity/final elevations and is closed through the installation of a final landfill cover system. Both the MRF/AD Facility site and composting area would be virtually 100 percent impervious, which would prevent infiltration of rainfall and storm run-off. Run-off generated at the composting area would be diverted to the proposed composting area run-off collection tank. However, run-off exceeding the estimated flows generated by a 24-hour, 25-year storm event may be conveyed to the north sedimentation basin by a pipe culvert.

Based on the results of Hydrology and Hydraulic Analysis Report, peak storm flows from the 24-hour, 100-year event under existing + project conditions would be 404 cfs at the southern boundary of the Tajiguas Landfill property, which is less than existing conditions (409 cfs). However, peak storm flows from the 100-year event under future + project conditions (357 cfs) would be slightly greater than future (no project) conditions (353 cfs).

The landfill access road culvert and the U.S. Highway 101 culvert appear to have been adequately sized for a 100-year event under existing and future + project conditions. The Union Pacific Railroad culvert appears to have been adequately sized for a 25-year event under pre-landfill conditions, but appears to have adequate capacity for the 100-year event under both existing + project and future + project conditions (HDR Engineering, 2013). In addition, the project-related addition of impervious surfaces would be much less than 25 percent of the landfill site (County threshold). Impervious surfaces and drainage modifications associated with proposed project would result in a less than significant impact to drainage facilities and would not result in flooding.

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## Table Ex-1. Continued

### DESCRIPTION OF IMPACT

#### **Class III Impacts (Less than Significant)**

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#### **Impact TRRP WR-2: Increased water demand and project-related increases in groundwater pumping would result in an adverse but less than significant impact to local groundwater supplies – Class III Impact.**

The total water demand for the project is estimated to be 11.5 acre-feet/year. The water demand for the MRF and AD Facility is planned to be derived from a new supply well (Well no. 6) installed in the Sespe-Alegria Formation, located approximately 800 feet north of the MRF/AD Facility site. Proposed Well no. 6 would replace former Well no. 4 which was destroyed as part of landfill reconfiguration and is not included in the baseline landfill water supply estimate.

Water demand for proposed composting operations would primarily be provided from the reuse of collected storm water and any excess moisture conditioning water collected within the composting area. During the summer months, some supplemental water may be required to offset evaporation (0.6 acre-feet/year), which would be supplied by Well no. 5 located in close proximity to the proposed composting area. Overall, the estimated total landfill (with project) water demand (42.5 acre-feet/year) would be less than the estimated total water supply (with proposed Well no. 6) (42.8 to 56.5 acre-feet/year).

Similar to Well no. 4, proposed Well no. 6 is proposed to be completed in the Sespe-Alegria Formation. Yield for Well no. 4 was estimated by the RRWMD to be 20 acre-feet/year. Between 2006 and 2011, Well no. 4 was pumped at an average annual rate of 6.3 acre-feet/year with no substantial changes in groundwater pumping levels. Consequently, it is assumed that proposed Well no. 6, as a replacement well for Well no. 4, will have a similar yield (20 acre-feet/year (of which 6.3 acre-feet/year was pumped), and groundwater level response from pumping will be similar, i.e., no significant change in groundwater pumping level.

Supplemental water required for the composting area would be supplied by existing Well no. 5, completed in the Vaqueros Formation. The Vaqueros is considered an important water source in the area. Geosyntec (2008) estimated a safe yield value of 4 acre-feet/year for the Vaqueros Formation located within the landfill watershed. Since the water demand of 0.6 acre-feet/year is far less than the 4 acre-feet/year safe yield for the Vaqueros Formation and the landfill would have a water supply surplus; no significant impacts are expected associated with project-related increase in groundwater pumping from Well no. 5. Overall, increases in groundwater production required to meet project demands would not significantly impact local groundwater supplies.

#### **Impact TRRP WR-3: Project-related increases in groundwater pumping would not significantly degrade groundwater quality – Class III Impact.**

Groundwater pumping can potentially degrade groundwater quality if wells are over pumped or if safe yields are exceeded. Over pumping an aquifer can potentially produce groundwater level declines (head loss in the aquifer) that cause deeper saline waters to intrude into fresher portions of the aquifer and, in the case of the Gaviota coast, sea water intrusion. Available water quality data, although limited, for Well no. 4 (destroyed Sespe-Alegria well) and Well no. 5 indicate that the salinity or total dissolved solids concentrations did not increase substantially during initial pumping of these wells. Furthermore, sea water intrusion into the bedrock aquifers is highly unlikely because the Vaqueros and Sespe-Alegria Formations are not hydraulically connected to the ocean as the formations lie stratigraphically below the Rincon and Monterey Formations which are shale formations and act as hydraulic boundaries to ocean water intrusion.

As discussed under Impact TRRP WR-2 above, the amount of groundwater to be pumped to supply the proposed project would be relatively small, such that over pumping and substantial declines in groundwater levels are not expected. Consequently, the potential for increased project-generated groundwater pumping to impact groundwater quality is considered low and impacts would be less than significant.

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**Table Ex-1. Continued****DESCRIPTION OF IMPACT****Class III Impacts (Less than Significant)****Impact TRRP WR-4: Project-related increases in groundwater pumping would not result in significant interference or adversely affect groundwater production of other wells – Class III Impact.**

Groundwater pumping in a well has the potential to drawdown groundwater levels in neighboring wells. If the drawdown is large then there is potential to significantly increase pumping costs (i.e., electrical consumption) or even dry up a well. Hydraulic connection between the bedrock aquifers beneath the project area is generally considered low because of the interlayered shale, mudstone, and claystone layers in the bedrock formations. These interbedded shale and claystone/mudstone layers act as hydraulic boundaries. Wells completed in one bedrock formation or bedrock aquifer should not significantly impact groundwater levels in other adjacent formations or aquifers. The highest potential for well interference is for pumping in any one well to impact groundwater levels in a well installed in the same bedrock aquifer.

Proposed increased pumping in Well no. 5 (Vaqueros Formation) equates to an additional 0.4 gallons per minute (gpm). The nearest Vaqueros well is the Aera Well located in Cañada de la Huerta, located approximately 2,500 feet west of Well no. 5. The County's Environmental Thresholds and Guidelines Manual indicates that a reasonable radius of influence for a Vaqueros Formation well is 800 feet. Based on the low estimated demand for the project (additional 0.4 gpm) and the fact that the closest neighboring well is located greater than 800 feet away from Well no. 5, well interference is not anticipated. Proposed pumping in new Well no. 6 to be completed in the Sespe-Alegria Formation equates to a long-term pumping rate of approximately 6.75 gpm. The nearest neighboring Sespe-Alegria wells are located within Baron Ranch (wells A and C) and are approximately 3,500 feet away. The County's Environmental Thresholds and Guidelines Manual does not indicate a reasonable radius of well influence for the Sespe-Alegria Formation.

To estimate the potential well interference of the proposed Well no. 6 on the Baron Ranch wells A and C, drawdown was estimated using the Theis equation, based on the average hydraulic conductivity (0.032 feet/day), a long term pumping rate of 6.75 gpm, and a screen interval or aquifer thickness of 450 feet at the planned Well no. 6 location. It is estimated that after 20 years of pumping, groundwater level drawdown (well interference) would be approximately 6.5 feet at the Baron Ranch well locations. Wells A and C are 585 and 561 feet deep, respectively and have 411 and 226 feet of water column above the reported pump depths, respectively. Therefore, the estimated drawdown from the pumping of proposed Well no. 6 would not substantially impact the water column (and related groundwater production) in the Baron Ranch Sespe-Alegria wells. Overall, the potential for well interference is low, and considered a less than significant impact.

**Impact TRRP WR-5: Project-related increases in groundwater pumping would not significantly impact rising groundwater at springs, and stream baseflow – Class III Impact.**

Natural springs/seeps were historically present in the Pila Creek watershed and are currently present in the Arroyo Quemado watershed. As a part of the landfill reconfiguration project and modification of the Pila Creek channel, springs/seeps located within Pila Creek were covered with low permeability material and a subdrain was installed to collect the seepage water. Within Pila Creek, low permeability material was placed over the entire Vaqueros Formation and portions of the Sespe-Alegria Formation. No additional seeps or springs are known to exist in Pila Creek within the Vaqueros or Sespe-Alegria Formations. Pumping from proposed Well no. 6 is not expected to substantially affect springs or stream base flow at Arroyo Quemado on Baron Ranch because there are no reported springs in the Sespe-Alegria Formation, the bedded nature of the Sespe-Alegria Formation would impede the vertical communication of groundwater and surface water, and low amount of drawdown predicted. Therefore, impact to springs/seeps and stream baseflow from groundwater pumpage would be less than significant.

**Impact TRRP NUI-1: MRF and/or AD Facility operations may attract and harbor vectors that may result in an adverse but less than significant public health/nuisance impact – Class III Impact.**

Similar to existing landfill operations, MSW delivered to the site for processing at the MRF, AD Facility and composting area could provide an attractive environment for disease carrying vectors including birds, small mammals and insects, such as flies and cockroaches. In addition, organic waste separated from MSW, and SSOW may also provide a similarly attractive environment for vectors. Under the proposed project, MSW would be deposited on the MRF tipping floor for sorting and processing. The tipping would be conducted indoors which would limit access to MSW by birds and small mammals. However, vectors could enter the building through door openings, window frames, vents, or masonry cracks. Vectors also could be present in the MSW and/or SSOW when delivered to the MRF. The SSOW and organics would be processed with in the AD Facility and the anaerobic digestion would be conducted in closed air-tight vessels at elevated temperatures (131-140°F) and low oxygen levels, such that vectors are not anticipated to survive. However, aerobic curing of the digestate would occur in outdoor windrows at the proposed composting area, which could be an attractant to vectors. The project includes the development of a Vector Management Plan focusing on good housekeeping practices to minimize accessibility of waste as a food source and refuges for breeding. In addition, CCR Title 14, Division 7, Chapter 3.1, Section 17867 requires composting operations to conduct handling operations to minimize vectors, and prevent unauthorized animal access. Implementation of a Vector Management Plan and compliance with Section 17867 is anticipated to minimize vector populations, and avoid significant public health impacts associated with vector-related spread of disease.

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**Table Ex-1. Continued****DESCRIPTION OF IMPACT****Class III Impacts (Less than Significant)****Impact TRRP NUI-2: MSW and/or SSOW may contain pathogens that may result in an adverse but less than significant impact to public health – Class III Impact.**

Pathogens may be present in incoming MSW and/or SSOW. The majority of pathogens is expected to be in the organic fraction of the waste and would be processed in the anaerobic digesters. The low oxygen levels and high temperatures in the digesters have the effect of reducing the amount of pathogens in the resulting digestate. In addition, aerobic curing would be conducted at relatively high temperatures (130-140°F), in compliance with CCR Title 14, Division 7, Chapter 3.1, Section 17868.3, which is intended to destroy pathogens in the resulting compost. In addition, implementation of the Vector Management Plan would minimize spread of pathogens by vectors.

Pathogens could be carried off-site through surface water and wind; however, the following features have been incorporated into the project to minimize off-site transport of pathogens:

- Unloading of MSW and SSOW indoors at the MRF to prevent storm water contact with waste containing pathogens, reduce the potential for spreading pathogens in fugitive dust, and windblown plastic and paper.
- Trench drains at MRF and AD Facility door thresholds to intercept liquids found in waste (that could contain pathogens) and direct them to the advanced wastewater treatment system.
- Chain link fence around MRF and AD Facility to collect wind-blown plastic and paper that could harbor pathogens.
- Pavement sweeping and vacuum clean-up to remove dust in parking lots, driveways and the composting area that could harbor pathogens.
- Hydrodynamic separators on the storm drain system to remove sediment that could harbor pathogens.
- Sediment traps in concrete swales to intercept sediment from slopes and driveways surrounding the MRF and AD Facility.

Implementation of a Vector Management Plan and project features listed above are anticipated to destroy pathogens, and avoid significant public health impacts associated with spread of pathogens in MSW and SSOW.

**Class IV Impacts (Beneficial)****Impact TRRP AQ-7: Implementation of the TRRP would reduce GHG emissions associated with landfill disposal by diversion of organic waste that would produce landfill gas emissions, and export of electricity that would offset GHG emissions associated with electricity generation – Class IV Impact (Beneficial).**

GHG emissions associated with disposal of MSW at the Tajiguas Landfill would be reduced by removal of organic waste at the proposed MRF and anaerobic digestion of this waste at the proposed AD Facility to generate bio-gas, which would be combusted in the CHP engines to produce heat and power to operate the facility. These actions would avoid GHG emissions associated with landfill gas that would be produced if the organic waste was buried, and reduce the disposal rate at the landfill active face which would reduce GHG emissions associated with heavy equipment.

**Impact TRRP AQ-8: Implementation of the TRRP would reduce GHG emissions by improved recovery and recycling of materials – Class IV Impact (Beneficial).**

The project would also provide additional life-cycle GHG reduction benefits associated with the recycling activities of the proposed MRF. A landfill is the end location for resource use. Recycling material (rather than landfill disposal) and reusing it, reduces the need for additional resources (extraction, energy, and production), thereby decreasing emissions in the production system. Using the USEPA's Waste Reduction Model (WARM), the RRWMD in consultation with the TRRP vendor has estimated that the additional GHG reduction benefits of recycling materials recovered by the MRF processing activities would be 67,675 MTCO<sub>2</sub>e per year.

**Impact TRRP NUI-3: Tipping of MSW indoors at the MRF would reduce the potential for off-site transport of litter from the landfill working face resulting in a beneficial impact – Class IV Impact.**

Currently, local collection trucks, and trucks carrying consolidated loads tip MSW at the active face of the landfill, which allows for paper, plastics and similar materials to be blown away before they are covered with soil. Although measures are in place at the landfill to minimize litter (covered trucks, litter fences, litter pick-up), some off-site transport of litter occurs. The proposed project would involve tipping MSW indoors within the MRF, which would reduce the potential for litter to be produced. Although residual waste from the proposed MRF and AD Facility would be disposed at the active face, the average tonnage would be reduced by about 60 percent and the more mobile fraction of the waste (plastics and paper) would be removed. In addition, a litter control program would be developed and implemented for the proposed project. Overall, the potential for off-site transport of litter would be reduced, and considered a beneficial impact.

1 **Table Ex-2. Summary of Cumulative Environmental Impacts and Mitigation Measures**

DESCRIPTION OF IMPACT	MITIGATION MEASURES and RESIDUAL IMPACTS
<b>Class I Impacts (Significant and Unavoidable, Project Contribution)</b>	
None	
<b>Class II Impacts (Significant but Mitigable, Project Contribution)</b>	
<p><b>Impact TRRP VIS-CUM-1: Project implementation, combined with other related cumulative projects, could degrade the visual character/quality of scenic vistas from U.S. Highway 101 along the Gaviota Coast – Class I Cumulative Impact; Project Contribution – Not Considerable with Mitigation (Class II).</b></p> <p>The County of Santa Barbara considers the coastal view corridor along U.S. Highway 101 and the railroad tracks from Goleta to the Gaviota Tunnel as providing ocean and inland public views of the highest quality in the region. Further, stretches of this view corridor are considered to be highly susceptible to visual degradation from future development due to broad near-field views largely devoid of major stands of trees or intervening topographical breaks. Factors including appropriate site selection, architecture, grading and landscaping are integral elements to be considered in minimizing visual impacts of future development and protecting the visual resources of the corridor.</p>	<p>Following implementation of project-specific mitigation proposed for the project (<b>MM TRRP VIS-1a, VIS-1b</b>), the project's contribution to this scenic vista impact would not be cumulatively considerable.</p>
<p>The cumulative project list includes a number of residential subdivisions located along the Gaviota Coast. The following discussion is specific to the assessment of the Tajiguas Resource Recovery Project together with known cumulative projects in the immediate vicinity of the proposed project. The Shell Hercules Remediation and Slope Stabilization Project is located 0.2 miles west of the Tajiguas Landfill. Continuation of site remediation at this State Superfund site for poly-cyclic biphenyls, mercury and hydrocarbons is proposed. Modification of landforms associated with this project may be visible from U.S. Highway 101 within Canada de la Huerta where the site is located. Northbound motorists would pass this site within about 20 seconds after passing View 6 wherein they would have views of the proposed MRF and AD Facility.</p> <p>The proposed Hart residence is located 400 feet south of the Tajiguas Landfill property boundary and is currently under construction. The residence would be visible following construction as a noticeable feature of the mid-ground view for persons traveling on U.S. Highway 101. Northbound motorists would view the residence a few seconds before passing View 6. The combined effect of the potential view modification from these two projects and the approved landfill, in addition to the proposed project may be considered cumulatively significant due to their proximity.</p>	
<p><b>Impact TRRP BIO-CUM-1: Implementation of the project combined with other cumulative projects could result in significant impacts to transient California red-legged frogs – Class I Cumulative Impact; Project Contribution – Not Considerable with Mitigation (Class II).</b></p>	<p>With implementation of Mitigation Measure <b>MM TRRP BIO-6</b> would reduce the project-specific impacts and the project's contribution to the cumulative impact would not be considerable.</p>
<p>In addition to the proposed project, several other projects are located in areas supporting California red-legged frog, and may also adversely impact habitat for this species or movement of transient individuals, including:</p>	
<ul style="list-style-type: none"> <li>• Las Varas/Edwards Ranch: impacts to California red-legged frog may include temporary habitat disturbance associated with bridge construction at Gato Creek (less than 0.1 acres), and encroachment of development along drainages;</li> <li>• Paradiso del Mar: a proposed utilities crossing and trail construction at Eagle Canyon Creek would impact this species;</li> <li>• Santa Barbara Ranch: impacts to California red-legged frog include temporary habitat disturbance associated with construction of a bridge over Tomate Canada Creek (less than 0.1 acres), and encroachment of development along drainages (URS, 2006); and</li> <li>• Baron Ranch Trail extension: transient California red-legged frogs in Arroyo Quemado may be adversely affected by trail construction.</li> </ul>	
<p>It should be noted that mandated creek setbacks (typically 100 feet) for development projects in rural areas and project specific monitoring, mitigation measures required through the CEQA review process or the endangered species permit process would reduce help impacts from these cumulative projects. Due to past sightings of transient California red-legged frog at the landfill site and the project-related increase in equipment and motor vehicle activity, the project would incrementally contribute to potentially significant impacts to the California red-legged frog.</p>	

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**Table Ex-2. Continued**

DESCRIPTION OF IMPACT	MITIGATION MEASURES and RESIDUAL IMPACTS
<b>Class II Impacts (Significant but Mitigable, Project Contribution)</b>	
<p><b>Impact TRRP BIO-CUM-2: Implementation of the project combined with other cumulative projects could result in significant direct and indirect cumulative loss of native plant communities, sensitive habitats and sensitive plants – Class II Cumulative Impact; Project Contribution – Not Considerable with Mitigation (Class II).</b></p>	<p>Implementation of Mitigation Measure <i>MM TRRP BIO-1</i> would reduce the project-specific impacts and the project's contribution to the cumulative impact would not be considerable and the overall impact would be reduced to a level of less than significant (Class II).</p>
<p>The proposed project would result in the permanent loss of 1.09 acres of native vegetation (<i>Ceanothus megacarpus</i> chaparral and rock outcrops), and indirect temporary impacts within 0.89 acres of sensitive vegetation communities (0.22 acre of California bay seep woodland, 0.39 acre of coast live oak woodland, and 0.28 acre of southern coast live oak riparian forest). In addition, approximately 15 individuals of two sensitive plant species would be removed (Plummer's baccharis and Santa Barbara honeysuckle). Several other projects may also adversely impact these resources through construction activities in native habitats, introduction of invasive species, and native vegetation removal as a result of fuel management activities, including:</p> <ul style="list-style-type: none"> <li>• San Jose Creek Bikeway: loss of sensitive native riparian vegetation;</li> <li>• El Capitan Canyon campground expansion: loss of coastal sage scrub and Santa Barbara honeysuckle;</li> <li>• Las Varas/Edwards Ranch: loss of native vegetation and wildlife habitats;</li> <li>• Paradiso del Mar: loss of about 3 acres of native vegetation and wildlife habitats;</li> <li>• Santa Barbara Ranch: impacts to several special-status plant species, potentially including Santa Barbara honeysuckle and Plummer's baccharis, and loss of 146 acres of wildlife habitat (mostly annual grassland);</li> <li>• Zacara Ranch Development: loss of native vegetation;</li> <li>• Baron Ranch Trail extension: loss of native vegetation, including <i>Ceanothus megacarpus</i> chaparral; and</li> <li>• Development of single family dwellings along the Gaviota Coast which may require localized vegetation removal and brush clearance to reduce fire hazards.</li> </ul>	
<p>Given the biological sensitivity of the Gaviota Coast region, the cumulative effect from the construction of these projects could be potentially significant. Restoration/replacement of sensitive habitats and plants impacted by the cumulative projects would likely be required as a part of their respective CEQA analyses and the area and sensitivity of native vegetation that would be removed by the proposed project is low. However, indirect impacts to sensitive vegetation and wildlife habitat may be significant.</p>	<p>Implementation of Mitigation Measures <i>MM TRRP BIO-3</i> and <i>MM TRRP BIO-6</i> would reduce the project-specific impacts and the project's contribution to the cumulative impact would not be considerable and the overall impact would be reduced to a level of less than significant.</p>
<p><b>Impact TRRP BIO-CUM-4: Implementation of the project combined with other cumulative projects could result in a significant impacts to American badger and ringtail – Class II Cumulative Impact; Project Contribution – Not Considerable with Mitigation (Class II).</b></p>	
<p>Project-related construction activities may result in disturbance of occupied natal dens and cause direct mortality of badgers and/or ringtails. In addition, project-related increases in activity at the landfill site (especially at night) may adversely impact these species. Several other projects may adversely impact these species through habitat loss or disturbance of occupied dens, including:</p>	<p>Given the number of projects affecting habitat in the Gaviota Coast region, the cumulative effect of these projects would be potentially significant. Avoidance and habitat replacement measures for the cumulative projects would likely be required as a part of their respective CEQA analyses.</p>
<ul style="list-style-type: none"> <li>• San Jose Creek Bikeway: loss of riparian foraging habitat for ringtail;</li> <li>• El Capitan Canyon campground expansion: removal of coastal sage scrub habitat suitable for badger;</li> <li>• Las Varas/Edwards Ranch: badger reported from Gato Canyon, loss of suitable habitat and indirect impacts associated with development;</li> <li>• Paradiso del Mar: loss of about 12 acres of suitable grassland habitat for badger;</li> <li>• Santa Barbara Ranch: loss of 146 acres of grassland foraging habitat for badgers;</li> <li>• Zacara Ranch Development: loss of native vegetation potentially suitable for badger and ringtail; and</li> <li>• Baron Ranch Trail extension: loss of suitable chaparral habitat for badger and ringtail.</li> </ul>	

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**Table Ex-2. Continued**

**DESCRIPTION OF IMPACT**

**MITIGATION MEASURES and RESIDUAL IMPACTS**

**Class II Impacts (Significant but Mitigable, Project Contribution)**

**Impact TRRP BIO-CUM-5: Implementation of the project combined with other cumulative projects could result in a permanent loss and significant degradation of San Diego desert woodrat habitat – Class II Cumulative Impact; Project Contribution – Not Considerable with Mitigation (Class II).**

The proposed project would permanently remove a small area (1.07 acres) of nesting and foraging habitat for this species during clearing, grubbing, and infrastructure construction. In addition, project-related increases in activity at the landfill site (especially at night) may adversely impact San Diego desert woodrat. Several other projects may adversely impact habitat for this species, including:

- El Capitan Canyon campground expansion: removal of coastal sage scrub habitat suitable for San Diego desert woodrat;
- Las Varas/Edwards Ranch: loss of suitable habitat and indirect impacts associated with development;
- Paradiso del Mar: loss of about one acre of suitable coastal sage scrub habitat;
- Santa Barbara Ranch: loss of 0.32 acres of suitable coastal scrub habitat; and
- Baron Ranch Trail extension: loss of chaparral habitat suitable for San Diego desert woodrat.

Given the number of projects affecting habitat in the Gaviota Coast region, the cumulative effects of these projects would be potentially significant. Avoidance, relocation and habitat replacement measures for the cumulative projects would likely be required as a part of their respective CEQA analyses.

**Impact TRRP BIO-CUM-6: Implementation of the project combined with other cumulative projects could result in a significant loss and/or disturbance of roosting habitat for sensitive bat species – Class II Cumulative Impact; Project Contribution – Not Considerable with Mitigation (Class II).**

The project would result in the loss of 0.02 acres of rock outcrops suitable for crevice-roosting bats, and construction-related disturbance of adjacent roosting and foraging habitats. Several other projects may adversely impact these species through habitat loss or disturbance of roosting habitat, including:

- San Jose Creek Bikeway: no bats reported from the affected bridges, but construction may disrupt bat foraging;
- Hollister Avenue Improvements: project would affect the Atascadero Creek bridge, which may support roosting bats;
- Las Varas/Edwards Ranch: habitat loss and development-related disturbance may disrupt bat foraging and roosting;
- Santa Barbara Ranch: habitat loss and development-related disturbance may disrupt bat foraging and roosting; and
- Baron Ranch Trail extension: may result in loss or disturbance of suitable roosting habitat.

The abundance and distribution of bats in the Gaviota Coast region is poorly known, and the cumulative effects of these projects may be potentially significant. Avoidance and habitat replacement measures for the cumulative projects would likely be required as a part of their respective CEQA analyses.

**Impact TRRP HAZ-CUM-1: Hazardous materials use, storage and disposal associated with the project combined with the cumulative projects would contribute to potentially significant hazards – Class II Cumulative Impact; Project Contribution - Not Considerable with Mitigation (Class II).**

Many of the cumulative projects would involve the transportation, use and disposal of hazardous materials, primarily associated with fuel for construction equipment. However, contaminated soils may be transported as a result of the Gaviota Marine Terminal Demolition and Shell Hercules projects.

Implementation of Mitigation Measures *MM TRRP BIO-4* and *MM TRRP BIO-6* would reduce the project-specific impacts and the project's contribution to the cumulative impact would not be considerable and the overall impact would be reduced to a level of less than significant.

Implementation of Mitigation Measure *MM TRRP BIO-5* would reduce the project-specific impacts and the project's contribution to the cumulative impact would not be considerable and the overall impact would be reduced to a level of less than significant.

The incremental contribution of the project with implementation of Mitigation Measure *MM TRRP HAZ-1* would not be considerable.

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**Table Ex-2. Continued**

DESCRIPTION OF IMPACT	MITIGATION MEASURES and RESIDUAL IMPACTS
<b>Class II Impacts (Significant but Mitigable, Project Contribution)</b>	
<p><b>Impact TRRP HAZ-CUM-2: The project combined with the cumulative projects could contribute to a significant increase in fire hazard in the region – Class II Cumulative Impact; Project Contribution - Not Considerable with Mitigation (Class II).</b></p>	<p>The incremental contribution of the project would be less than considerable with implementation of the proposed fire prevention facilities and development of a Fire Protection and Prevention Plan (<i>MM TRRP HAZ-2</i>).</p>
<p>Most of the cumulative projects are located in a high fire hazard area which has been subject to wildfires in the past. These cumulative projects would increase the amount of structural development, increase potential ignition sources, and increase the number of persons exposed to fire hazard. However, these projects (including the proposed project) would be required to comply with local fire prevention requirements of the SBCFD which generally include adequate water supply and pressure for firefighting, adequate access for fire equipment, and reduction of flammable vegetation in proximity to structural development.</p>	
<p>The Tajiguas Landfill currently implements fire prevention measures (provision of water for firefighting, vegetation management, fire breaks, etc.) and the Tajiguas Resource Recovery Project would include additional measures (fire water storage, fire hydrants, building sprinkler systems, vegetation management, etc.) and in addition would be required to prepare and implement a Fire Protection and Prevention Plan. The cumulative fire risk impact is considered less than significant with compliance with SBCFD requirements and project specific CEQA mitigation requirements,</p>	
<p><b>Impact TRRP CR-CUM-1: Ground disturbance associated with the proposed project combined with disturbance associated with the cumulative projects could result in significant disturbance of unreported cultural resources – Class II Cumulative Impact; Project Contribution – Not Considerable with Mitigation (Class II).</b></p>	<p>With implementation of site-specific cultural resource measures <i>MM TRRP CR-1</i>, the project's contribution to potentially significant impacts to unreported cultural resources in the region would not be cumulatively considerable.</p>
<p>The project region (Gaviota coast) provides abundant resources for pre-historic human populations and includes numerous archeological sites, as indicated by 14 sites located within 0.5 miles of the landfill site (Conejo Archeological Consultants, 2008), and over 240 pre-historic and historic archeological sites identified within the Gaviota Coast Plan Area (Santa Barbara County, 2013).</p>	
<p>Significant impacts to archeological sites would occur as a result of the Las Varas/Edwards Ranch and Paradiso del Mare projects, and indirect impacts to known sites would occur at Santa Barbara Ranch. In addition, these and other cumulative projects listed in Section 3.6 have the potential to disturb unreported cultural resources in the region.</p>	
<p>The importance of cultural resources that may be discovered during implementation of these projects is unknown; therefore, the significance of such impacts cannot be determined. Given the cultural sensitivity of the area, most of these cumulative projects would also include measures requiring ground disturbing activities to be stopped or redirected if resources are discovered. However, such impacts are considered potentially significant for the purposes of this Subsequent EIR. The proposed project would not contribute to any cumulative impacts associated with recorded cultural resource sites.</p>	
<p><b>Impact TRRP WR-CUM-3: Project-related construction activities and post-construction use of the proposed project combined with other cumulative projects may result in significant surface water quality impacts in the Pila Creek watershed – Class II Cumulative Impact; Project Contribution – Not Considerable with Mitigation (Class II).</b></p>	<p>With implementation of site-specific mitigation measures <i>MM TRRP WR-2, MM TRRP WR-3 and MM TRRP WR-4</i>, the project's contribution to potentially significant impacts to unreported cultural resources in the region would not be cumulatively considerable.</p>
<p>From a cumulative standpoint, Pila Creek and the nearshore environment in the vicinity of the proposed project are not identified as impaired. With the exception of the construction and use of the planned Hart residence, no other cumulative projects would be located within the Pila Creek watershed and would therefore not contribute to cumulative water quality impacts. The construction and operation of the various Resource Recovery Project facilities would result in significant but mitigable project-specific surface water quality impacts. Given the limited construction disturbance area and because the Hart residence would be subject to site-specific requirements for storm water management during construction, as well as design review of the wastewater treatment system, significant cumulative water quality impacts are not expected. The incremental contribution of the proposed project (as mitigated) to cumulative surface water impacts would not be considerable.</p>	

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## Table Ex-2. Continued

### DESCRIPTION OF IMPACT

#### **Class III Impacts (Less than Significant, Project Contribution)**

**Impact TRRP AQ-CUM-1: Project construction emissions would contribute to construction emissions generated by the cumulative projects and would not significantly affect regional air quality – Class III Cumulative Impact; Project Contribution – Not Considerable (Class III).**

There are 11 cumulative projects located within 5 miles of the proposed MRF/AD Facility site. These projects are highly dispersed and few are anticipated to generate construction emissions at the same time as the proposed project. The cumulative construction emissions (including the Tajiguas Resource Recovery Project) are unlikely to exceed the 25 ton per year ROC and NO<sub>x</sub> thresholds under SBCAPCD Rule 202. Therefore, the cumulative impact to regional air quality is considered less than significant.

**Impact TRRP AQ-CUM-2: Criteria pollutant emissions generated by project operation would contribute to emissions generated by the cumulative projects and would not significantly affect regional air quality – Class III Cumulative Impact; Project Contribution – Not Considerable (Class III).**

There are 11 cumulative projects located within 5 miles of the proposed MRF/AD Facility site. These projects do not include any major sources of air pollutants, primarily a few motor vehicle trips per day per project. Significant cumulative air quality impacts are not anticipated. The County's Environmental Thresholds and Guidelines Manual indicates projects that would exceed the long-term threshold for NO<sub>x</sub> or ROC (55 pounds per day) would have significant cumulative impacts. Since the project operation emissions would not exceed the long-term threshold, the project's incremental contribution to cumulative impacts would not be considerable.

**Impact TRRP AQ-CUM-3: Odors generated by project operation could contribute to odors generated by the cumulative projects and result in a less than significant nuisance at local land uses – Class III Cumulative Impact; Project Contribution – Not Considerable (Class III).**

There are 11 cumulative projects located within 5 miles of the proposed MRF/AD Facility site. These projects do not include any activities or processes that may generate substantial odors. Only the Shell Hercules Remediation project is located in close proximity that odors may be additive with the proposed project. Due to the lack of odor-generating potential, cumulative odors associated with the Shell Hercules Remediation project in combination with the proposed project would be virtually the same as project-specific impacts. Therefore, cumulative odor-related nuisance is considered less than significant, and the project's contribution would not be cumulatively considerable.

**Impact TRRP BIO-CUM-3: Implementation of the project combined with other cumulative projects could result in a significant loss of foraging habitat for special-status birds – Class II Cumulative Impact; Project Contribution – Not Considerable (Class III).**

Project-related habitat removal may adversely affect foraging opportunities for sharp-shinned hawk, ferruginous hawk, northern harrier, white-tailed kite and loggerhead shrike. Several other proposed or pending projects may also adversely affect these species including:

- San Jose Creek Bikeway: loss of riparian foraging habitat for special-status birds;
- El Capitan Canyon campground expansion: loss of potential foraging habitat for special-status birds;
- Las Varas/Edwards Ranch: habitat loss and indirect impacts associated with development;
- Paradiso del Mar: loss of about 30 acres of vegetation, mostly suitable for foraging by special-status bird species;
- Santa Barbara Ranch: loss of 146 acres of grassland foraging habitat for sensitive raptors;
- Zacara Ranch Development: loss of native vegetation potentially suitable for special-status birds; and
- Baron Ranch Trail extension: loss of native vegetation potentially suitable for special-status birds.

Therefore, the cumulative impact would be potentially significant and would be subject to project specific mitigation measures implemented for each of the cumulative projects. Loss of foraging habitat associated with the Resource Recovery Project would be minimal, and the incremental contribution to the cumulative impact would not be considerable.

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**Table Ex-2. Continued****DESCRIPTION OF IMPACT****Class III Impacts (Less than Significant, Project Contribution)**

**Impact TRRP N-CUM-1: Future (2036) traffic on U.S. Highway 101 associated with forecast growth combined with project-related vehicle traffic could contribute to an adverse but less than significant cumulative increase in noise levels along the highway corridor - Class III Cumulative Impact; Project Contribution – Not Considerable (Class III).**

By 2036, noise levels along U.S. Highway 101 are expected to increase by about 0.6 dBA at most locations. Project-related traffic increases would be minimal as compared to year 2036 traffic (forecasted growth) on U.S. Highway 101, and result in noise increases at nearby residential land uses of less than 0.1 dBA CNEL. Forecasted growth combined with project-related noise would not result in new exceedances of the 65 dBA CNEL threshold, or cause noise increases of 1.5 dBA or more. Therefore, cumulative U.S. Highway 101 traffic noise impacts would be less than significant and the project's incremental contribution would not be cumulatively considerable. The very small amount of additional vehicle traffic associated with the *CSSR Option* would not increase cumulative noise levels and would also not be cumulatively considerable.

**Impact TRRP N-CUM-2: Noise associated with construction and operation of project facilities combined with noise generated by other cumulative projects would result in adverse but less than significant noise levels at noise-sensitive land uses near the landfill property – Class III Cumulative Impact; Project Contribution – Not Considerable (Class III).**

Only three of the cumulative projects are located within 2 miles of the landfill site: Bean Blossom residences – Lot H and Lot X, Shell/Hercules Remediation and Slope Stabilization, and Simon Residence. Construction-related noise from these other projects may adversely affect the ambient noise environment of the area. However, construction noise would be temporary in nature, and would be virtually undetectable over the dominant noise source in the area (U.S. Highway 101).

Operational noise (vehicles, landscape maintenance, music, etc.) generated by the three residences may adversely affect the ambient noise environment of the area, but would be virtually undetectable over the dominant noise source in the area (U.S. Highway 101). The Shell/Hercules Remediation project, for which a Remedial Action Plan is under review and due to be amended in 2014, may involve ongoing construction-like activity and may adversely affect the ambient noise environment of the area. However, details regarding the remediation activities are not known at this time. Given the dominance of U.S. Highway 101 noise and the fact that the remediation site and the landfill site are both within canyons separated by a ridge, noise levels would not be additive and significant cumulative noise impacts to residences in the area are not expected.

Overall, cumulative noise levels are unlikely to exceed the 65 dBA CNEL threshold at noise-sensitive receivers and therefore noise impacts would not be significant. The incremental contribution of the proposed project to cumulative noise impacts would not be cumulatively considerable.

**Impact TRRP T-CUM-1: Traffic generated as a result of implementation of the proposed project combined with traffic generated by the cumulative projects and background growth could result in an adverse but less than significant impact on U.S. Highway 101 traffic operations (level of service) - Class III Cumulative Impact; Project Contribution – Not Considerable (Class III).**

LOS was calculated for U.S. Highway 101 using the Cumulative and Cumulative + Project peak period traffic volumes with and without the *CSSR Option*, along with the significance of project-added traffic based on Caltrans and County criteria. U.S. Highway 101 is forecast to operate at LOS A to B adjacent to the project site during the a.m. and p.m. peak periods under Cumulative and Cumulative + Project conditions (with and without the *CSSR Option*), which meets both Caltrans and County standards. The cumulative impact on U.S. Highway 101 roadway operations would be less than significant and the incremental contribution of the Resource Recovery Project to cumulative traffic impacts on U.S. Highway 101 roadway operations would not be considerable.

**Impact TRRP T-CUM-2: Traffic generated as a result of implementation of the proposed project combined with traffic generated by the cumulative projects and background growth could result in an adverse but less than significant impact on the landfill access road/U.S. Highway 101 intersection - Class III Cumulative Impact; Project Contribution – Not Considerable (Class III).**

LOS was calculated for the U.S. Highway 101/landfill access road intersection using the Cumulative and Cumulative + Project peak hour volumes for the a.m. and p.m. peak periods, along with the significance of project-added traffic based on Caltrans and County criteria. The cumulative impact on the landfill access road/U.S. Highway 101 intersection would be less than significant and the incremental contribution of the Resource Recovery Project to cumulative traffic impacts at the landfill access road/U.S. Highway 101 intersection would not be considerable.

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## Table Ex-2. Continued

### DESCRIPTION OF IMPACT

#### **Class III Impacts (Less than Significant, Project Contribution)**

**Impact TRRP T-CUM-3: Traffic generated as a result of implementation of the proposed project combined with traffic generated by long-term growth (2036) could result in an adverse but less than significant impact on U.S. Highway 101 traffic operations (roadway level of service) - Class III Cumulative Impact; Project Contribution – Not Considerable (Class III).**

LOS forecasts for Year 2036 + Project conditions (with and without the CSSR Option) were developed, and the significance of project-added traffic identified based on Caltrans and County criteria. U.S. Highway 101 is forecast to operate at LOS A to B adjacent to the project site during the a.m. and p.m. peak periods under Year 2036 and Year 2036 + Project conditions (with or without the CSSR Option), which meets both Caltrans and County standards. The cumulative impact on the U.S. Highway 101 operations would be less than significant and the incremental contribution of the Resource Recovery Project to cumulative traffic impacts on U.S. Highway 101 roadway operations would not be considerable.

**Impact TRRP T-CUM-4: Traffic generated as a result of implementation of the proposed project combined with traffic generated by long-term growth (2036) could result in an adverse but less than significant impact on the landfill access road/U.S. Highway 101 intersection - Class III Cumulative Impact; Project Contribution – Not Considerable (Class III).**

LOS was calculated for U.S. Highway 101/landfill access road intersection using the Year 2036 and Year 2036 + Project peak volumes. In addition, the significance of project-added traffic was identified based on Caltrans and County criteria. Year 2036 and Year 2036 + Project delays for traffic entering and exiting the landfill access road during the a.m. peak period equate to LOS A to B, which meets both Caltrans and County standards (with or without the CSSR Option). Delays for inbound traffic during the p.m. peak period equate to LOS A-C and delays for outbound traffic during the p.m. peak period equate to LOS D. While LOS D exceeds the Caltrans and County LOS C standard, the impact is considered less than significant because the project's traffic additions would not exceed the adopted significance thresholds. The County's Environmental Thresholds and Guidelines Manual defines a significant cumulative impact as one that uses a substantial portion of an intersection's capacity for intersections that are forecast to operate at LOS D or worse. The impact of project traffic for intersections forecast to operate at LOS D is a change in the V/C ratio of 0.02 (or more). The Resource Recovery Project would add 0 trips to the intersection during the p.m. peak period and therefore would not contribute to significant impacts at the intersection in Year 2036. The Project + CSSR Option would also not exceed the County Threshold. The Project + CSSR Option would add 1 outbound trip from the landfill access road during the p.m. peak period, which would change the V/C ratio by less than 0.02.

It is also noted that the delays for outbound movements would be experienced predominately by landfill traffic (note that there is a proposed residence on the Hart parcel and access to Canada de la Huerta) and that traffic would not impede other flows at the intersection. The average delay of 29.9 seconds per vehicle (31.8 seconds per vehicle with the CSSR Option) is not significant given the intersection's configuration and environment (adequate gaps, provision of turn lanes and good sight distances). Therefore, the cumulative impact to the landfill access road/U.S. Highway 101 intersection would be less than significant and the incremental contribution of the Resource Recovery Project to cumulative traffic impacts on the landfill access road/U.S. Highway 101 intersection would not be considerable.

**Impact TRRP WR-CUM-1: The proposed project combined with other cumulative projects could increase impermeable surfaces, resulting in a less than significant increase in runoff and less than significant increase in drainage/flooding impacts – Class III Cumulative Impact; Project Contribution – Not Considerable (Class III).**

The Cañada de la Pila watershed is a small, isolated coastal watershed which is largely occupied by the existing Tajiguas Landfill. The proposed project would increase the amount of impermeable surfaces within the watershed, increasing runoff; however, with existing and proposed drainage management at the landfill, project-specific drainage impacts would not be significant. With the exception, of the proposed Hart Single Family Dwelling, none of the cumulative projects are located within the Pila Creek watershed and would therefore not contribute to cumulative drainage impacts. Considering the small amount of additional impervious surfaces and the large parcel area associated with the proposed Hart residence, cumulative drainage/flooding impacts would not be significant. The Resource Recovery Project's project-specific impact would not be significant and contribution to cumulative impacts would not be considerable.

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## Table Ex-2. Continued

### DESCRIPTION OF IMPACT

#### **Class III Impacts (Less than Significant, Project Contribution)**

**Impact TRRP WR-CUM-2: Increased groundwater production from the proposed project combined with groundwater demands associated with the cumulative projects would result in an adverse but less than significant impact on regional groundwater supplies - Class III Cumulative Impact; Project Contribution – Not Considerable (Class III).**

The proposed project would require additional process and domestic water, to be supplied by groundwater from the Sespe-Alegria Formation. Groundwater in the Sespe-Alegria Formation is not considered to be an important regional groundwater supply source, and there are no cumulative projects that are located in the Pila Creek watershed where Well no. 6 is proposed to be located or within an approximate three mile radius. Therefore, no cumulative impacts to this groundwater source are expected.

A small amount of groundwater would be used at the composting area from the Vaqueros Formation. Implementation of some of the cumulative projects would require increased groundwater production, most likely from the Monterey Formation or Vaqueros Formation. As the project would not exceed the safe yield of the Vaqueros Formation or significantly impact other local wells completed in this formation, the cumulative impact would not be significant and the proposed project's incremental contribution to Vaqueros Formation groundwater impacts would not be cumulatively considerable.

**Impact TRRP NUI-CUM-1: Implementation of the proposed project combined with other cumulative projects in the region could generate adverse but less than significant cumulative nuisance litter impacts – Class III Cumulative Impact; Project Contribution – Not Considerable (Class III).**

With the exception of the potential construction of individual septic systems, the cumulative projects do not involve waste management or other activities that may generate vectors or pathogens that could impact public health. However, many of these projects may generate litter, at least during construction. Given the dispersed nature of project and the limited scope of most of the projects (single family dwellings), cumulative nuisance impacts would be less than significant for vectors, pathogens and litter.

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1 **Table Ex-3. Summary of Environmental Impacts and Mitigation Measures Associated**  
 2 **with Project-related Extension of the Life of the Landfill**

**DESCRIPTION OF IMPACT**

**MITIGATION MEASURES  
 and RESIDUAL IMPACTS**

**Class I Impacts (Significant and Unavoidable)**

**Impact TRRP AQ-11: Project-related extension of life of the Tajiguas Landfill would extend the duration of air quality emissions associated with landfill operations and associated NO<sub>x</sub>, NO<sub>2</sub> and 24-hour PM<sub>10</sub> air quality impacts – Class I Impact.**

Project-related diversion of recyclable material and organic waste is anticipated to extend the life of the Tajiguas Landfill by about 10 years. Without implementation of the project, waste disposal would continue to approximately 2026. At that time, emissions associated with landfill employee trips would be substantially reduced and emissions associated with active waste disposal activities at the site would end. Upon reaching final capacity, the landfill would be closed and the final cover system installed in the remaining landfill areas. Emissions would occur in association with final closure activities, and following closure, in association with ongoing landfill monitoring and maintenance activities. Although the landfill gas collection system would continue to operate, fugitive landfill gas would be emitted for decades after closure, including greenhouse gases and ROC.

Air quality impacts associated with the approved and ongoing landfill operations were determined to be significant and unavoidable in the prior Environmental Documents. Extension of landfill life would extend the period during which significant air quality impacts would occur. Project-related solid waste diversion would reduce disposal activity levels at the Tajiguas Landfill, and would reduce associated air quality impacts. However, peak day emissions and associated impacts could be similar to that identified in the prior Environmental Documents. Therefore, it is conservatively assumed that air quality impacts (off-site mobile NO<sub>x</sub>, 1-hour NO<sub>2</sub> air quality standard exceedances, 24-hour PM<sub>10</sub> air quality standard exceedances) would likely remain significant and unavoidable.

**Impact TRRP BIO-16: Project-related extension of life of the Tajiguas Landfill would extend biological impacts further in time – Class I Impact (delay in the landfill cover revegetation and for continued abandonment and avoidance of foraging and breeding habitat by sensitive wildlife), Class II (indirect impacts to ringtail and mountain lion due to human activity), and Class III (invasive plants, nuisance birds and common wildlife).**

The project-related increase in diversion of MSW would result in extending the active life of the landfill by approximately 10 years and delaying full closure and revegetation of the landfill. Although phased closure activities including restoration of areas to native habitat would occur during this time, landfill operational activities would continue to occur in areas analyzed in the prior Environmental Documents. No new disturbance or direct biological impacts (i.e., vegetation, habitat or sensitive plant species removal) would occur due to the potential extension of the landfill life and operations. However, indirect biological impacts associated with ongoing landfill operations (noise, dust, equipment operations and human activity) including impacts to habitat from introduction of invasive plants (Class II), abandonment or avoidance of foraging and breeding habitat by sensitive birds and mammals due to landfill operations and human activity (Class I), increased attraction of nuisance birds (Class II) and impacts to mountain lion and ringtail due to increased human presence (Class II) would be extended.

In addition, disturbance and mortality to common wildlife species (Class III) would continue further in time as compared to closure of landfill in approximately 2026 in the absence of the proposed project.

Mitigation measures identified for the Tajiguas Landfill Expansion Project would continue to be implemented; however, residual impacts would remain significant and unavoidable.

Mitigation measures identified for the Tajiguas Landfill Expansion Project (erosion control, nighttime lighting control, litter control, creek setback) would continue to be implemented; however, residual impacts would remain significant and unavoidable.

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**Table Ex-3. Continued**

**DESCRIPTION OF IMPACT**

**MITIGATION MEASURES and RESIDUAL IMPACTS**

**Class II Impacts (Significant but Mitigable)**

**Impact TRRP HAZ-8: Project-related extension of the life of the Tajiguas Landfill would extend landfill-related hazards (e.g., storage and use of hazardous materials, subsurface landfill fire, risk of fire due to petroleum product storage and unauthorized dumping) further in time – Class II Impact.**

Under the proposed project, small quantities of hazardous waste may continue to enter the site as a part of the MSW. Screening processes that currently occur at the scale house would continue and screening processes that currently occur at the landfill working face would now occur in MRF. Due to the project-related increase in diversion of MSW, the active life of the landfill would be extended approximately 10 years. The current use of hazardous materials and infrequent generation of hazardous waste (oil waste, oily debris, batteries, etc.) at the landfill would continue at rates equal or less than current operations. These activities have not resulted in significant hazards in the past and are not expected to increase due to the extension of landfill life.

The landfill would receive the same overall volume of waste and the generation of the LFG would continue, as the waste currently disposed of in the landfill continues to degrade. However, waste entering the landfill after implementation of the proposed project would have greatly reduced organic fraction which would, over the long term, generate less LFG. Federal and State LFG regulations would continue to apply to landfill operations and the LFG collection system would continue to operate (collect and control LFG). However, hazards associated with operation of the landfill (wildland fire, petroleum product fire, landfill subsurface fire, unauthorized dumping, landfill gas explosion, worker safety) would continue further in time as compared to earlier closure of landfill in the absence of the proposed project.

**Impact TRRP NUI-4: Project-related extension of life of the Tajiguas Landfill would extend significant public health/nuisance impacts (potential for illegal dumping and dust) further in time – Class II Impact.**

Due to the project-related increase in diversion of MSW, the active life of the landfill would be extended approximately 10 years and full closure of the landfill would be delayed by approximately 10 years. Phased closure of areas of the landfill that have reached final waste fill elevations would continue during its extended life. The proposed project would involve processing MSW that is currently buried at the landfill. As such, with implementation of the project the nuisance impacts associated with handling this waste would largely occur in the proposed enclosed MRF, enclosed AD Facility and at the composting area (as described and analyzed above) rather than at the landfill working face. Residual material disposed of in the landfill would be largely inert and free of material that would create/contribute to nuisance conditions.

Operation of the MRF is expected to reduce the amount of windblown litter. In addition, indoor tipping of the MSW at the MRF would also reduce the attractiveness of the site to scavenging birds such as seagulls, which under current landfill operations, are controlled through the landfill's Bird Management Program. Nuisance odors at the landfill working face would be reduced because of the reduced fraction of organic and putrescible waste that would be delivered for disposal but replaced by odors that may occur in association with the MRF and composting area. Landfill operations would continue with the same nuisance controls in place, no additional introduction or generation of vectors, pathogens, litter, dust and odors would occur. Class II nuisance impacts associated with landfill operations such as the potential for illegal dumping, dust from landfill grading and equipment operations would continue further in time as compared to earlier closure of landfill in the absence of the proposed project.

Compliance with Federal and State hazardous materials regulations, Title 27 regulations and mitigation measures identified for the Tajiguas Landfill Expansion Project (fire prevention and suppression, improved site security, landfill gas monitoring, on-site traffic control) would continue to be implemented to avoid or offset significant impacts associated with hazards and hazardous materials.

Mitigation measures identified for the Tajiguas Landfill Expansion Project would continue to be implemented, including good housekeeping practices, bird management, litter control, and odor control.

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**Table Ex-3. Continued**

**DESCRIPTION OF IMPACT**

**MITIGATION MEASURES and  
RESIDUAL IMPACTS**

**Class II Impacts (Significant but Mitigable)**

**Impact TRRP CR-2: Project-related extension of the life of the Tajiguas Landfill would extend indirect impacts to archeological sites further in time – Class II Impact.**

Project-related diversion of recyclable material and organic waste is anticipated to extend the life of the Tajiguas Landfill by about 10 years. This effect would not involve any ground disturbance at the landfill site beyond what was been previously analyzed and permitted. The majority of the ground disturbance associated with construction of the remaining landfill disposal cells will occur prior to implementation of the proposed Resource Recovery Project, but with implementation, the rate of disposal in these constructed cells would be significantly reduced and delay overall closure of the landfill site. Therefore, CA-SBa-1990 and SBA-iso-645 may continue to be indirectly impacted through landfill operation (continued presence of landfill staff) and landfill closure activities. These impacts were considered significant, but mitigable.

Mitigation measures identified for the Tajiguas Landfill Expansion Project would continue to be implemented, including cultural resource training program for landfill staff, additional archeological investigation if these sites are impacted by closure or post-closure activities, and stopping or redirecting work if resource are discovered.

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**Table Ex-3. Continued****DESCRIPTION OF IMPACT****Class III (Less than Significant)**

**Impact TRRP VIS-6: Project-related extension of life of the Tajiguas Landfill would delay final closure of the back canyon area of the landfill site and result in an adverse but less than significant extension of the landfill aesthetic impacts further in time – Class III Impact.**

Project-related diversion of recyclable material and organic waste is anticipated to extend the life of the Tajiguas Landfill by about 10 years. Aesthetics impacts associated with the approved and ongoing landfill project are considered significant and unavoidable primarily as seen from U.S. Highway 101. The proposed project would delay landfill closure, including final contouring and revegetation. However, landfilling will primarily be focused in the back canyon area of the landfill, which is not visible from U.S. Highway 101 and phased closure (including final contouring and placement of final cover systems) is proposed to begin in the front canyon portion of the landfill, where final fill elevations have been reached.

The affected population is very limited as the landfill is visible for only a few seconds to motorists on U.S. Highway 101, an eligible scenic highway or by limited recreational users of Upper Outlaw Trail on the Arroyo Hondo property. In addition, the landfill has been in operation since 1967 and the public has become accustomed to the current visual condition. Overall, the aesthetic impacts of the landfill development remain significant but the extension of the landfill's aesthetic impacts by delaying landfill closure is considered less than significant.

**Impact TRRP G-9: Project-related extension of the life of the Tajiguas Landfill would extend the duration of less than significant erosion and sedimentation impacts – Class III Impact.**

Project-related diversion of recyclable material and organic waste is anticipated to extend the life of the Tajiguas Landfill by about 10 years. This would delay final closure of the landfill, although phased closure would continue to occur. Construction of new waste cells and installation of the associated liner systems occurs well in advance of the waste placement due to the need to have disposal space available. Therefore, grading and construction of the final permitted waste cells and installation of the landfill liner systems will be completed within the current life of the landfill (prior to 2026). Therefore, no geologic processes impacts associated with project-related extension of these activities would occur. Because closure and placement of a final cover system over the entire landfill area would be delayed, there may be some extension of less than significant (Class III) landfill-related erosion and sedimentation impacts. These impacts would continue to be minimized by the landfill storm water management systems, interim erosion control measures during construction and operations, and phased closure of areas of the landfill where waste placement has been completed.

**Impact TRRP N-5: Project-related extension of the life of the Tajiguas Landfill would extend adverse but less than significant landfill operational noise impacts further in time – Class III Impact.**

Project-related diversion of recyclable material and organic waste is anticipated to extend the life of the Tajiguas Landfill by about 10 years. Prior environmental documents prepared for the Tajiguas Landfill determined that noise impacts associated with landfill operations were less than significant. These analyses were based on presumed operation of equipment simultaneously along the entire landfill perimeter. However, by the time the proposed project is operational, residual waste disposal activities would occur in the back canyon area of the landfill property, which would increase the distance from this existing noise source to surrounding noise-sensitive receptors. In addition, diversion of MSW associated with the proposed project would reduce the volume of waste and associated equipment required for disposal. Therefore, with implementation of the proposed project, less than significant noise impacts associated with landfill operations could continue further in time as compared to earlier closure of the landfill in the absence of the proposed project.

**Impact TRRP LU-2: Project-related extension of the life of the Tajiguas Landfill would extend land use conflicts further in time – Class III Impact.**

Project-related diversion of recyclable materials and organic waste is anticipated to extend the life of the Tajiguas Landfill by about 10 years. Therefore, with implementation of the proposed project, less than significant land use conflicts associated with landfill operations (geology, water resources, nuisance, visual, noise, recreation, agriculture) would continue further in time as compared to current closure plans.

**Impact TRRP T-5: Project-related extension of the life of the Tajiguas Landfill would extend the duration of less than significant traffic level of service and safety impacts at the U.S. Highway 101/landfill access road intersection associated with landfill operations – Class III Impact.**

The proposed Tajiguas Resource Recovery Project is expected to extend the life of the landfill by approximately 10 years. Impacts associated with extension of life do not represent new impacts, but represent impacts that would be extended further in time. The proposed Tajiguas Resource Recovery Project would not significantly impact the project-area street network in the Year 2036 cumulative scenario. Therefore, the proposed Tajiguas Resource Recovery Project would extend the duration of time over which the insignificant traffic impacts would occur.

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### Table Ex-3. Continued

#### DESCRIPTION OF IMPACT

##### **Class III (Less than Significant)**

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##### **Impact TRRP WR-10: Project-related extension of life of the Tajiguas Landfill would extend less than significant landfill drainage impacts further in time - Class III Impact.**

Storm drain systems would be extended as needed as new disposal cells are constructed, and connected to the existing storm drain system. The north sedimentation basin (or equivalent) would be maintained over the life of the landfill to minimize siltation of Pila Creek. Based on hydraulic modeling conducted for landfill expansion and reconfiguration, as revised for the proposed project, drainage structures within and downstream of the landfill are adequately sized for future landfill + project conditions. No new impacts would occur as a result of the extension of the life of the landfill; however, previously identified less than significant flooding and drainage impacts associated with landfill operations would be extended further in time.

##### **Impact TRRP WR-11: Project-related extension of life of the Tajiguas Landfill would extend less than significant groundwater and water supply impacts further in time - Class III Impact.**

With implementation of the project, groundwater extractions necessary to meet landfill operations (construction, dust control, domestic use) would continue for approximately 10 additional years. However, because most of the landfill liner construction projects would be completed in the current landfill life (approximately 2026) and because phased closure of landfill would occur (which would reduce water demand for dust control), landfill water demand would begin to decline and would likely be lower than analyzed in this Subsequent EIR. In addition, other non-potable landfill water sources would continue to be available to meet landfill operational demand. As discussed above, water supply and groundwater protection impacts associated with operation of the Tajiguas Resource Recovery Project would be less than significant and the extended duration of ground pumping water pumping due to the extension of the landfill life would continue to be less than significant.

##### **Impact TRRP WR-12: Project-related extension of life of the Tajiguas Landfill would extend less than significant surface water quality impacts further in time - Class III Impact.**

Exposed areas of the landfill would continue to be a source of sediment and water coming in contact with residual waste could also be source of other storm water contaminants. However, the landfill working face would be reduced in size due to lower disposal rates, and the residual waste would be largely inert due to the removal of the recyclables and the organic matter. Storm water would continue to be diverted away from the active working face, landfill closure would continue as areas of the landfill reach final fill elevations and existing erosion/sedimentation BMPs (storm drain inlet protection, hydroseeding, soil cement, sedimentation basins, etc.) would continue to be implemented.

The landfill would continue to be covered under the General Industrial Storm Water Program, which requires continued implementation of BMPs, and monitoring and reporting. In addition, the paper and light plastics that are currently subject to being windblown would be removed from the waste stream by the MRF and either digested or recycled. Therefore, storm water quality impacts associated with the extended landfill operational life would be less than significant.

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