



County of Santa Barbara - Solid Waste System
Consultant's Report and Feasibility Study
Related to the 2017 Solid Waste
Installment Purchase Revenue COPs



HF&H Consultants, LLC

November 30, 2016

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November 30, 2016

Mr. Mark Schleich
Deputy Director
Resource Recovery and Waste Management Division
130 E. Victoria Street. Suite 100
Santa Barbara, CA 93101

Dear Mr. Schleich:

This draft of the Consultant's Report and Feasibility Study Related to the 2017 Solid Waste Installment Purchase Revenue COP's, is not a final report. The final report is expected to be issued in late December 2016 or January 2017.

This draft reflects conditions and our understanding as of November 30, 2016. The final report is expected to reflect changes including but not limited to:

- Execution of the Waste Services and Disposal Agreements by the County and Public Participants.
- Execution of the delivery agreement of Buellton and self-haul materials by the County and MarBorg.
- Execution of the revised Material Services Contract by the County and MSB.
- Receipt of permit approvals and adjustments to the County's Projections for any unanticipated expenses.
- Any changes to the principal, interest and term of the COPs that may occur.
- Changes requested by the financing team to meet disclosure requirements or anticipated rating agency or bond market concerns.
- Any events occurring after November 30, 2016 that may affect the County's projections.

We want to acknowledge and thank the County RR&WMD staff for their responsiveness in providing necessary information and documents to assess the County's projected financial results of operations.

Sincerely,

HF&H CONSULTANTS, LLC



Robert D. Hilton, CMC
President

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TABLE OF CONTENTS

SECTION 1.0: INTRODUCTION..... 1

- 1.1 Background..... 1
- 1.2 The Project..... 2
- 1.3 Purpose of Report..... 2
- 1.4 Scope of Report..... 3
- 1.5 General Methodology and Scope of Work..... 3
- 1.6 Limitations..... 4
- 1.7 Conclusions..... 4
 - 1.7.1 Reasonableness of Construction Costs and Schedule..... 4
 - 1.7.2 Reasonableness of Assumptions Regarding Permitting..... 6
 - 1.7.3 Efficacy of Technologies..... 6
 - 1.7.4 Reasonableness of Waste Delivery Projections..... 7
 - 1.7.5 Reasonableness of the Projected Financial Results of Operations..... 7

SECTION 2.0 OVERVIEW OF EXISTING SOLID WASTE SYSTEM..... 8

- 2.1 County of Santa Barbara..... 8
- 2.2 County Population and Economic Conditions and Projections..... 8
- 2.3 Existing Collection, Processing and Disposal Arrangements..... 9
 - 2.3.1 Existing County Collection and Processing Arrangements..... 9
 - 2.3.2 South County Cities Collection and Processing Arrangements..... 10
 - 2.3.3 North County Cities Collection and Processing Arrangements..... 11
- 2.4 County Facilities..... 11
 - 2.4.1 Recycling and Transfer Stations..... 13
 - 2.4.2 Landfills..... 13
 - 2.4.3 Hazardous Waste Collection Centers..... 15
- 2.5 Other Facilities..... 16
 - 2.5.1 Non-County Owned Recyclables Processing Facilities..... 16
 - 2.5.2 Non-County Owned Green Waste Processing Facilities..... 16
 - 2.5.3 Non-County Owned Landfills..... 16
- 2.6 Historical Solid Waste Quantities and Composition..... 17

SECTION 3.0 THE PROJECT..... 20

- 3.1 Need for Changes to System..... 22
 - 3.1.1 Extension of Landfill Life..... 22
 - 3.1.2 Development of Processing Infrastructure..... 22
 - 3.1.3 Diversion of Materials..... 22
 - 3.1.4 Greenhouse Gas Reduction..... 23
- 3.2 TRRP Facility and Technology Description..... 23
 - 3.2.1 Contractor..... 23
 - 3.2.2 Construction Contractor and Schedule..... 24
 - 3.2.3 Material Recovery Facility..... 26
 - 3.2.4 Dry Fermentation Anaerobic Digestion Facility..... 29
 - 3.2.5 Compost Management Unit..... 31
- 3.3 TRRP Contractual Descriptions..... 33
 - 3.3.1 County/Public Participants Material Delivery Commitment and Services Agreement..... 33
 - 3.3.2 County/MSB Waste Service Contract description (and MSB subcontracts)..... 34
- 3.4 Permitting..... 38
 - 3.4.1 County of Santa Barbara Approval..... 39

3.4.2 Santa Barbara County Air Pollution Control District..... 39

3.4.3 California Central Coast Regional Water Quality Control Board 39

3.4.4 CalRecycle Administered by County Environmental Health Services Department..... 40

3.4.5 California Energy Commission..... 40

3.4.6 California Public Utilities Commission..... 41

3.4.7 Southern California Edison..... 41

3.4.8 Contractor’s Representation Regarding Permits Required for Construction..... 41

3.5 Alternative Facilities 41

3.5.1 Summary of Alternatives..... 41

3.5.2 Description..... 43

3.5.3 Contractual Waste Flow Control..... 43

3.5.4 Economic Competitiveness 44

SECTION 4.0 PROJECTED FINANCIAL RESULTS OF OPERATIONS 45

4.1 Projected Financial Results of Operations (Base Case) 45

4.2 Key Assumptions and Support..... 45

4.2.1 Projected Material Volumes and Composition..... 45

4.2.2 Historical Operating Revenues and Expenses 47

4.2.3 Projected Operating Revenues and Expenses and Debt Service Coverage Ratios..... 48

4.2.4 Summary of Other Significant Assumptions and Support 48

4.3 Sensitivity Analyses 49

4.3.1 Sensitivity Analysis: 20% Reduced Recyclable Prices..... 50

4.3.2 Sensitivity Analysis: Elimination of Recycling Commodity Revenue, Except CRV 51

4.3.3 Sensitivity Analysis: 25,000 TPY Reduced Self-Haul Tonnage 52

4.3.4 Sensitivity Analysis: 16,000 TPY Reduced Volume Through ADF..... 53

SECTION 5.0 CONCLUSION 55

5.1 Consultant’s Conclusions..... 55

TABLE OF FIGURES

Figure 1-1: Debt Service Coverage Ratios..... 7

Figure 2-1: California Economic Forecast Projections 8

Figure 2-2: Summary of Public Participants Collection Contract Terms 10

Figure 2-3: Solid Waste Facilities in County..... 12

Figure 2-4: Location of Tajiguas Landfill 14

Figure 2-5: Pre Subtitle D Landfills 15

Figure 2-6: Post Subtitle D Landfills 15

Figure 2-7: Historical MSW Tonnage by Source Fiscal Year Ended June 30 17

Figure 2-8: Historical Source Separated Recyclables Tonnage by Agency Fiscal Year Ended June 30 18

Figure 2-9: Historical Organics Tonnage by Agency Fiscal Year Ended June 30 18

Figure 2-10: Historical Total Tonnage by Agency Fiscal Year Ended June 30 19

Figure 3-1: The Project Site..... 21

Figure 3-2: TRRP Organizational & Contract Structure..... 24

Figure 3-3: Summary of Selected Van Dyk Facilities..... 27

Figure 3-4: Summary of Bekon AD Facilities 30

Figure 3-5: TRRP Permit Requirements 38

Figure 3-6: Location of Alternative Facilities 42

Figure 3-7: Comparison of Competing Facility Cost Per Ton 44

Figure 4-1: Summary of Base Case Financial Results of Operations..... 45

Figure 4-2: Projected TRRP Material Volumes and Rates 46
Figure 4-3: Summary Historical Franchised Vs. Non-Franchised Material 47
Figure 4-4: Historical Operating Revenues and Expenses 48
Figure 4-5: Comparison of Historical Commodity Averages 50
Figure 4-6: Sensitivity Analysis: Comparison of 20% Reduced Recyclable Prices to Base Case..... 51
Figure 4-7: Comparison of Reduced Recycling Prices to Base Case..... 51
Figure 4-8: Sensitivity Analysis Eliminating Non-CRV Commodity Revenue..... 52
Figure 4-9: Comparison of Eliminating Non-CRV Recycling Revenue to Base Case..... 52
Figure 4-10: Sensitivity Analyses Reflecting 25,000 Fewer Tons per Year of Self Haul Material..... 53
Figure 4-11: Comparison of Reduced Self-Haul to Base Case..... 53
Figure 4-12: Sensitivity Analysis Reducing 16,000 TPY Through ADF 54
Figure 4-13: Comparison of Reducing ADF Volume to Base Case 54
Figure 5-1: Reasonable Debt Service Coverage Ratios 55
Figure 5-2: Change in Coverage Ratio and Rate with All Sensitivity Scenarios..... 56

ATTACHMENTS

- A. Comprehensive Financial Projections for Revenue Bonds (Base Case)
- B. Reduced Recycling Commodity Prices Sensitivity Analysis (Scenario 1)
- C. Elimination of Commodity Revenue, Except CRV Sensitivity Analysis (Scenario 2)
- D. Reduced Self-Haul Tonnage Sensitivity Analysis (Scenario 3)
- E. Reduced Value Through ADF Sensitivity Analysis (Scenario 4)

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SECTION 1.0: INTRODUCTION

1.1 Background

The County of Santa Barbara (County) covers approximately 2,735 square miles and has a population of approximately 435,700 including the incorporated communities (cities) of Buellton, Carpinteria, Goleta, Guadalupe, Lompoc, Santa Barbara, Santa Maria, and Solvang. The County of Santa Barbara Department of Public Works, Resource Recovery and Waste Management Division (RRWMD) is responsible for the management of the County's solid waste facilities and programs. RRWMD is also responsible for administering the franchise agreements for the collection of solid waste materials from residents and businesses in the unincorporated areas of the County by private solid waste collection firms, as well as the enforcement of local solid waste management ordinances.

RRWMD's mission is to protect the public health by providing County residents with cost effective, innovative, and environmentally sound solutions in waste management. RRWMD provides an integrated waste management system consisting of: recycling programs for commingled recyclables and green-waste collection, programs for residential and small business hazardous waste, sharps and pharmaceutical collection, electronic waste collection and recycling, public education, the operation of four recycling and transfer stations, the operation of one household hazardous waste collection center, operation of the Tajiguas Landfill, and management of nine closed landfills (System). Municipal solid waste (MSW) currently delivered to the Tajiguas Landfill is generated by residents and businesses in the cities of Santa Barbara, Goleta, Buellton and Solvang (Public Participants), the unincorporated areas of southern Santa Barbara County, and the Santa Ynez and Cuyama Valleys.

The County, in cooperation with Public Participants, has been developing the Tajiguas Resource Recovery Project (TRRP) since 2009, in order to extend the useful life of the Tajiguas Landfill, recover material from the solid waste stream for recycling and composting, and reduce greenhouse gas emissions.

- In 2009, the County prepared and released a Request for Proposal for a Waste Conversion Facility capable of diverting 60% of the material that was being buried at the Tajiguas Landfill generated by the cities of Buellton, Goleta, Santa Barbara, Solvang and the Southern, Santa Ynez and New Cuyama unincorporated areas.
- In 2012, the project proposed by Mustang Renewable Power Ventures LLC (an affiliate of MSB Investors LLC also referred to as MSB) was selected as the most advantageous proposal for the County. Public Participants approved resolutions indicating their continued interest in the project. At that time, the County Board of Supervisors (Board) directed staff to fund the preparation of the Final Subsequent Environmental Impact Report for the TRRP.
- In July 2015, the Board directed staff to consider publicly financing the facility to potentially reduce TRRP costs by 30% from MSB Investors' private financing proposal.
- In April 2016, staff returned to the Board of Supervisors with the results of studies to evaluate the financial and technical feasibility of the TRRP, the financial impact of public financing on the County Public Works Department as well as the overall cost to the ratepayers, and a negotiated set of Deal Points with the selected vendor. At that time, the Board instructed staff to develop and negotiate a full contract between the County of Santa Barbara and MSB Investors, LLC (MSB) for Development and Operation of the TRRP (Waste Service Contract). In addition, staff was directed to return with recommendations from the County's Debt Advisory Committee related to

public financing for the TRRP.

- In July, 2016, the Board:
 - Made the required California Environmental Quality Act (CEQA) findings for approval of the proposed project including the processing of comingled source separated recyclable materials (CSSRM);
 - Certified the Final Subsequent Environmental Impact Report and adopted the mitigation measures, with their corresponding monitoring requirements, as the Mitigation Monitoring and Reporting Program for this project;
 - Received the Debt Advisory Committee's recommendation concerning the potential use of public financing for this project;
 - Approved the Waste Service Contract; and
 - Directed the Public Works Department to:
 - Negotiate Material Delivery Commitment and Services Agreements (MD&SAs) with the Public Participants;
 - Work with the Treasurer Tax Collector, Auditor- Controller, County Counsel, and County Executive Office to pursue public financing to construct the facility;
 - Seek grant funding, if available;
 - Obtain local, state and federal permits to the extent required by law;
 - Relocate existing operations facilities at the Tajiguas Landfill as identified in the project description to accommodate construction of the project; and,
 - Return to the Board for final approval of items (i) and (ii).

1.2 The Project

The County is seeking to finance approximately \$122,320,000 for four major projects ("Projects"):

1. **The Tajiguas Resource Recovery Project (TRRP)**– The cost to construct the facility including the Material Recovery Facility (MRF), Anaerobic Digestion Facility (ADF) and composting area is \$110,820,000 including obtaining permits and entitlements, design and engineering, and constructing and equipping the facilities.
2. **Landfill Closure Costs** – The Tajiguas landfill is completing regulatory closure of about 50% of the active landfill (60 acres). The cost for closure is \$7,300,000.
3. **Storm Water Improvements** - To comply with new regulations, storm water improvements are needed at the South Coast and Santa Ynez Transfer Stations at a cost of \$1,400,000.
4. **Land Purchases** – The estimated cost of purchasing land adjacent to the Tajiguas Landfill as buffer properties is \$2,500,000.

1.3 Purpose of Report

The purpose of this Consultant's Report is to render a professional opinion on whether it is reasonable to believe the System will be able to repay the proposed 2017 Solid Waste Installment Purchase Revenue COPs (COPs) intended to finance facility improvements. We understand that this report will be included in the offering documents to be prepared in connection with the offering of certificates of participation to finance the project costs.

1.4 Scope of Report

The report provides:

- An overview of the existing System;
- A description of the Projects;
- A description of competing facilities; and,
- Historical and projected financial results of operations of the System (including sensitivities regarding waste volumes and composition, revenues from the sale of recovered materials, and facility operations).

1.5 General Methodology and Scope of Work

HF&H Consultants, LLC (HF&H) prepared this report. Founded in 1989, HF&H has conducted more than 1,700 solid waste planning, procurement and financial studies for more than 260 California counties, cities and districts in the past 27 years. Since 1995, HF&H has performed 20 engagements for the County. These engagements all directly contribute to our understanding of the issues that must be addressed in this study. They include alternative funding strategies as well as negotiating the Contract for the Development and Operation of the TRRP (Material Services Contract) and the Materials Delivery and Services Agreements, which are directly related to the County's future facility plans. HF&H has advised the County related to its negotiations with MSB on the Material Services Contract and the Public Participants on the MD&SAs.

HF&H collected information and documents from the County staff, its accountants (Brown Armstrong Accountancy Corporation), architectural and engineering firm (D. Edwards, Inc. (DEI), legal counsel, financial advisor KNN Public Finance, LLC (KNN), and other sources.

Among the documents reviewed are: County's Solid Waste System Comprehensive Annual Financial Report; historical and projected information on System tonnage (incoming and out-going); procurement and proposal documents for the TRRP; the Proposed Final Subsequent EIR for the TRRP, solid waste collection franchise agreements with the cities of Santa Barbara, Goleta, Solvang, and Buellton as well as the County of Santa Barbara for collection of material in the unincorporated area, the Contract between the County of Santa Barbara and MSB Investors for Development and Operation of the Tajiguas Resource Recovery Project and the MD&SAs between the County and the Public Participants. We have relied on this information and the data in these documents and have assumed they were accurate.

The scope of our analysis was limited to those tasks necessary to determine the reasonableness of the projected financial results of operations for the County as prepared by County Staff with assistance from KNN (Projections). The specific tasks we performed included:

1. Reviewing the mathematical accuracy, logical consistency and reasonableness of the waste volume and financial Projections.
2. Reconciling the reported historical financial data contained in the Projections to the County's audited financial statements.
3. Reconciling the reported historical tonnage data contained in the Projections to the County's reports.

4. Identifying assumed values for key variables that affect the Projections.
5. Reviewing the underlying source documents to ensure they support the assumed value of the key variables contained in the Projections.
6. Reviewing the reasonableness of the County staff's analysis of alternatives to the TRRP.
7. Performing sensitivity analyses using different assumed values for key variables.
8. Reviewing the financing costs and debt service requirements as provided by the County's financing team.

1.6 Limitations

Every engagement includes certain limitations. The major limitations related to this engagement are:

1. Our analysis relied in part on documents prepared by other independent accountants, consultants and engineers as well as County staff whom we believe to be knowledgeable as well as professionally and technically qualified to perform the work.
2. While County staff have reviewed the MSB contracts, we have not but assume nothing in them materially differs from what is anticipated in the Material Services Contract.
3. We have not audited any financial statements nor have we performed an independent review of the plans and operations of the TRRP.
4. Forecasted results are based on reasonable assumptions about future events, as described in Section 4.0 Projected Results of Operations. However, actual results are often different than anticipated and that difference can be material.
5. The County's projection is assumed to be in compliance with legislation and regulations currently in effect. If future legislation or regulations related to solid waste management are enacted, such legislation or regulations could have a material impact on future operations.
6. We assume no responsibility to update the report for events and circumstances occurring after the date of the report.

1.7 Conclusions

1.7.1 Reasonableness of Construction Costs and Schedule

General

The Material Services Contract (Sections 10.2.A.B and C) states that the Pre-Construction, Development and Construction Equipment costs are agreed sums (which were determined by MSB and reviewed by the County and its independent consultant) negotiated between the County and MSB. Payment of such sums shall constitute the full and complete payment from the County for such Facility costs and MSB relinquishes any and all claims against the County for such costs.

The Material Services Contract (Exhibit C) provides a Project Development Schedule prepared by MSB and reviewed by the County and its independent consultant against which MSB's progress will be monitored by the County. Section 4.2.A.1 includes an obligation of MSB to achieve full operations at the Site no later than 24 months from the sale of the bonds (financial close).

Section 13.2 B of the Contract for the Development and Operation of the TRRP states that MSB and/or its Primary Subcontractors shall provide one or more performance bond(s), or other surety device as may be reasonably required by the County in the aggregate amount of \$97,606,000 (the estimated full cost of Construction of the Project of \$99,890,000 exclusive of the costs of the SoCal Edison Interconnection, Construction & Start-up Insurance, Start-up & Acceptance and Contract Administration \$2,284,000 in the aggregate), securing the Construction of the Project. Such bond shall be in standard AIA form, and shall be issued by a surety company or companies rated "A" or better pursuant to current Best Company ratings and listed in the United States Treasury Department's Circular 570. Such surety shall be an admitted surety in California. MSB may discontinue maintaining this performance bond upon written County approval, which shall be provided within ten (10) Week Days of issuance of the Notice to Proceed with Full Operations as provided in Section 4.9.B.

While the contracts and insurance policies may be subject to interpretation, the intent of the provisions are to make MSB and its Primary Subcontractors responsible for the construction costs and scheduled completion of the TRRP and that their contractual and financial obligations are to be supported by certain performance bonds ensuring construction of the project.

Material Recovery Facility

Based on our review of the draft Materials Service Agreement, we believe the assumed MRF construction costs and schedule reflected in the projected financial results of operations have been committed to by MSB.

The County's independent MRF technical consultant (D. Edwards, Incorporated a project management and environmental services firm), found that the construction and equipping costs and schedule proposed by MSB and used in the MRF projections are reasonable. We believe that the approach and scope of the DEI review was consistent with providing an opinion about the adequacy of the proposed project construction and equipping costs and schedule, the work was performed by qualified consultants, and the conclusions are reasonable in light of their findings. Therefore, we believe that assumptions related to MRF construction and equipping costs and schedule included in the projections are reasonable.

Anaerobic Digestion Facility and Composting

The County did not commission an independent ADF technical consultant to perform a review of MSB's construction and equipping costs and schedule and issue an opinion and we have not performed such a review. While more common in Europe, dry anaerobic digestion facilities are only recently being constructed in California and three are in operation of which one, in San Jose, is of comparable size.. The County has determined, based on similar equipment used in anaerobic digestion of organic material, as described above, that it is reasonable to proceed with a project based on MSB's proposed construction and equipping costs and schedule.

If the ADF construction costs needed to be increased by 10%, the increase in the cost of construction of the AD Facility would equal \$3,871,600 on a \$38,716,000 construction budget.

Based on our review of the draft Materials Service Agreement as described above, we believe the assumed ADF construction costs and schedule reflected in the projected financial results of operations have been committed to by MSB and would not be the responsibility of the County.

However, a one-year delay in the operation of the ADF, for example, due to an extension of the

construction period, would have a small net impact on the County's projections of expense and well within the approximately \$3 million contingency included in the projections for the transfer of operations from landfilling to TRRP operations. If the 25,000 tons of organic material assumed to be delivered to the ADF were delivered to the landfill, it would reduce disposal capacity by approximately 4 months.

1.7.2 Reasonableness of Assumptions Regarding Permitting

The County and MSB have been working with numerous local and state permitting agencies throughout the project. The County certified the Subsequent Environmental Impact Report on July 12, 2016 and filed the Notice of Determination on the same day. The period in which a lawsuit can be filed challenging the EIR for the County's approval of the project has expired. The Authority to Construct (ATC) has been acquired from the Santa Barbara County Air Pollution Control District (APCD). Temporary office and storage relocation and project grading has been authorized by the Local Enforcement Agency (LEA). Approval of the amended Joint Technical Document (JTD) was received on September 21, 2016. Other permit applications are being prepared and/or have been submitted and are undergoing review. MSB represents that all of the permitting agencies have been consulted throughout the project development and CEQA review period to ensure that the facilities can be permitted. Prior to issuance of the 2017 COPs, MSB will be required to represent that any and all permits required for construction and necessary for the County's issuance of a Notice to Proceed with Construction in accordance with Section 4.7.B of the Contract between the County of Santa Barbara and MSB Investors, LLC for the Development and Operation of the Tajiguas Resource Recovery Project (Contract), are in effect. Therefore, we have no reason to believe the permits necessary for construction and operation of the facility, will not be issued.

1.7.3 Efficacy of Technologies

MRF Facility

DEI found that the MRF system design and equipment components proposed by MSB were, similar to other MRFs that recently have been developed in California, based on relevant waste composition data, appropriate for the application, and the throughput projections appeared reasonable. We believe that the approach and scope of the DEI review was consistent with providing an opinion about the efficacy of MSB's proposed MRF technology, the work was performed by qualified consultants, and the conclusions are reasonable in light of their findings. Therefore, we believe that assumptions related to the efficacy of the MRF to perform in accordance with the projections are reasonable.

ADF

The primary subcontractor for the ADF, Bekon designs and operates ADFs in Europe, where these facilities are more common. A similar dry fermentation anaerobic digestion technology facility is in operation in San José, California. The County did not commission an independent ADF technical consultant to perform an engineering review of whether the Bekon designed equipment will perform as projected and issue an opinion and we have not performed such a review. The County has determined, based on similar equipment used in anaerobic digestion of organic material primarily outside of the United States including one anaerobic digestion facility in the United States being applied to municipal solid waste, that it is reasonable to proceed with a project based on the Bekon designs as applied to MSW within the County. We note, however, that the while similar equipment has been used to process MSW, use of the Bekon equipment has been limited so far to source separated organic waste in Europe and not used on a commercial basis on organic material derived from mixed MSW in the United States.

1.7.4 Reasonableness of Waste Delivery Projections

Based on our review of the historical waste information provided by the County, its assumption of no increase in tonnage, the terms of the draft MD&SA dated October 25, 2016 between the County and the Public Participants, and the County's reported consensus of the committees of elected officials of the Public Participants supporting the MD&SAs (the last of which is currently scheduled to be formally approved by December 13, 2016), we have no reason to believe the projected waste delivery projections are not reasonable.

However, while the materials collected by the Public Participants' franchised collection companies are subject to the MD&SA, the self-haul material (which comprises 36% of the total projected post-TRRP material stream) is not. As a result, the County is negotiating a disposal agreement with MarBorg Industries (MarBorg) to deliver its self-haul tons at a lower tip fee and the Public Participants staff have agreed in concept to the terms of the MD&SA to charge a lower tip fee to these self-haul customers. These lower fees are intended to be economically advantageous to these generators, relative to the other options available; therefore, we have no reason to believe the assumed volume of the self-haul materials contained in the projections are not reasonable.

1.7.5 Reasonableness of the Projected Financial Results of Operations

Based on our review, as expressed more fully in Section 5, we have no reason to believe the Base Case Projected Operating Results (Base Case) as prepared by the County and presented in this report are not reasonable. The Base Case Projected Operating Results are estimated to be adequate to pay annual operating expenses and achieve the debt service coverage ratios shown in Figure 1-1 during the term of the financing and assume no additional debt, consistent with the County's capital plans.

These projections are based on certain assumptions regarding future events. Actual results may be different and the differences may be material. For this reason, we have prepared certain sensitivity analyses to present possible results from changes in the value of key assumptions. These sensitivity analyses are presented in Section 5. Conclusion.

Figure 1-1: Debt Service Coverage Ratios

Year	Revenue	Net Expense	Net Revenue	Debt Service Coverage	Tip Fee
2019	\$ 37,751	\$ 25,708	\$ 12,043	2.36 X	\$ 118.00
2023	\$ 42,722	\$ 27,344	\$ 15,378	1.54 X	\$ 137.23
2028	\$ 48,614	\$ 33,213	\$ 15,401	1.60 X	\$ 160.64
2033	\$ 55,572	\$ 39,871	\$ 15,701	1.71 X	\$ 188.04
2038	\$ 63,763	\$ 47,758	\$ 16,005	1.82 X	\$ 220.12

SECTION 2.0 OVERVIEW OF EXISTING SOLID WASTE SYSTEM

2.1 County of Santa Barbara

The County of Santa Barbara was established by an act of the Legislature of the State of California (the "State") on February 18, 1850 and encompasses approximately 2,735 square miles of which approximately one-third is located in the Los Padres National Forest. The County is a general law county and political subdivision of the State of California and its rights, powers, privileges, authority, functions and duties are established by the Constitution and laws of the State.

2.2 County Population and Economic Conditions and Projections

The Economic Analysis Branch, Office of State Planning, California Department of Transportation issued its California County-Level Economic Forecast 2015-2040 in September 2015 (Forecast). Actual information for the state, the nation and the region was used through June of 2013 to conduct the Forecast which spans the 2015 to 2040 period. The Forecast's highlights for Santa Barbara County projecting the annual increases or population, taxable sales, per capita income, and inflation from 2019 through 2038, corresponding to the bond repayment period are included in Figure 2-1.

Figure 2-1: California Economic Forecast Projections

Year	Population	Taxable Sales	Per Capita Income	Inflation
2019	0.7%	4.0%	1.8%	2.7%
2020	0.6%	4.4%	1.9%	2.8%
2021	0.7%	4.1%	1.7%	2.9%
2022	0.6%	4.4%	1.7%	2.9%
2023	0.6%	3.6%	1.4%	2.5%
2024	0.6%	3.1%	1.1%	2.4%
2025	0.6%	3.1%	0.8%	2.6%
2026	0.6%	2.9%	0.5%	2.7%
2027	0.6%	2.8%	0.4%	2.7%
2028	0.6%	3.0%	0.5%	2.5%
2029	0.6%	2.8%	0.7%	2.3%
2030	0.6%	2.9%	0.8%	2.2%
2031	0.6%	2.7%	0.9%	2.1%
2032	0.6%	2.8%	0.6%	2.3%
2033	0.5%	2.6%	0.9%	1.9%
2034	0.5%	2.7%	0.8%	2.1%
2035	0.5%	2.8%	0.8%	2.2%
2036	0.5%	3.0%	0.5%	2.6%
2037	0.5%	3.0%	0.3%	2.7%
2038	0.5%	2.8%	0.5%	2.5%

2.3 Existing Collection, Processing and Disposal Arrangements

2.3.1 Existing County Collection and Processing Arrangements

The County administers two waste collection permitting systems in the County unincorporated area.

1. The County has entered exclusive franchise agreements with private hauling companies to provide the regular collection of waste, commingled recyclables, and green waste from residents and businesses in the unincorporated area of the County. (Food waste is being collected from businesses on a pilot basis in the South County.)

Each service provider is required to recover or divert from landfilling a specific percentage of material collected in each service area. These requirements are part of the County's overall program for meeting the State's goal of diverting 75% of the waste generated in the County from landfill disposal by 2020. The franchise agreements direct the service providers to deliver materials to designated processing and disposal facilities.

- Waste collected in the south coast of Santa Barbara, Santa Ynez and New Cuyama service areas is required to be delivered to the Tajiguas Landfill. In the future, it is anticipated that this material will continue to be delivered to the TRRP.
- Waste collected in the Northern service areas around the cities of Lompoc and Santa Maria is delivered to the City of Lompoc and City of Santa Maria landfills. Green waste and commingled source separated recyclables collected from the Santa Ynez and North County unincorporated areas and the City of Solvang is processed in the North County, currently by Waste Management. This material is not now delivered to County facilities. (In the future, it is anticipated that this material will continue to be managed in the North County and outside of the County's facilities, although the material is not contractually committed to be delivered to these sites.)

RR&WMD staff is responsible for managing these agreements. Management responsibilities include identification of services to be provided, negotiation of service agreements, development of rates, mediation of customer complaints/service issues, and performance tracking.

2. For the collection of bulky, construction related, or large quantities of organic refuse, the County has designed a collection system by issuing permits to a limited number of businesses (referred to as unscheduled haulers) who are allowed to collect this irregularly generated material with roll-off containers from customers in the unincorporated area of the County.

The RR&WMD manages the permit program and permittees are required to divert from landfill disposal 50% of the material collected on an annual basis. The permits do not designate processing or disposal facilities to be used to manage the collected materials.

To support these programs, the County has adopted ordinances including:

- The County's solid waste management ordinance that mirrors State regulations requiring removal of putrescible solid waste from premises but a resident or business in the unincorporated area has the option to subscribe to trash collection service or self-haul their waste material.
- In 2003, the County Board of Supervisors approved an ordinance banning the disposal of recyclables by commercial customers.

- In 2008, the Board of Supervisors approved a program that requires proposed construction projects that exceed 350 tons of waste material to prepare a waste management plan prior to the initiation of the project; and, the requirement of unscheduled permit holders to divert from disposal 50% of all material collected annually.

2.3.2 South County Cities Collection and Processing Arrangements

The South County cities all have exclusive franchise agreements for the hauling of solid waste, recyclables and green waste. Currently, MarBorg serves as the hauler for all of the jurisdictions, except for Solvang, where Waste Management (dba – Health Sanitation Services) is the provider. All of the agreements contain specific provisions regarding the ability of each jurisdiction to control and direct the flow of material.

Almost all residents of these communities are a part of a three bin curbside collection system that includes:

- MSW in a brown bin;
- Commingled Recyclables in a blue bin; and
- Green-waste in a green bin.

Figure 2-2: Summary of Public Participants Collection Contract Terms

City	Hauler	Current Termination Date	City Authority to Direct Flow to County	Billings Agent
City of Buellton	MarBorg	June 30, 2027	Contract Between City of Buellton and MarBorg Industries, Article 5	Hauler
City of Goleta	MarBorg	June 30, 2019	Franchise Agreement between City of Goleta and MarBorg Industries, Article 7	Hauler
City of Santa Barbara	MarBorg	June 7, 2023	Contract Between City of Santa Barbara and MarBorg Industries, Article 3	City
City of Solvang	Waste Management (dba Health Sanitation Service)	June 30, 2018	Agreement Between City of Solvang and Health Sanitation Service Article 5	Hauler

All brown bin trash (MSW) is collected and then brought to the Tajiguas Landfill for disposal. In some cases, MSW collected by MarBorg is consolidated at their MRF/Transfer Station in the City of Santa Barbara and brought to the Tajiguas Landfill in larger capacity trailer trucks.

Green Waste collected in green bins in the unincorporated area and the cities of Goleta and Santa Barbara is delivered to the Tajiguas landfill for processing and marketing as a mulch product. In the future, this

franchise green waste will continue to be processed at the Tajiguas Landfill.

Commingled source separated recyclables is collected in blue carts and delivered to the South County Recycling and Transfer Station (SCRTS) where the materials are consolidated and transferred to Gold Coast Recycling in Ventura. Commingled source separated recyclables collected in bins are delivered to MarBorg's sorting facility. In the future, all these commingled source separated recyclables will be processed at the TRRP.

Green waste and commingled source separated recyclables collected from Buellton are currently managed by MarBorg and will be processed at the Tajiguas landfill and TRRP in the future.

Green waste and commingled source separated recyclables collected from the Santa Ynez Valley and North County unincorporated areas and the City of Solvang is processed in the North County, currently by Waste Management. In the future, it is anticipated that this material will continue to be managed in the North County and will not be processed at the Tajiguas Landfill and TRRP.

2.3.3 North County Cities Collection and Processing Arrangements

The North County cities of Lompoc and Santa Maria each have city operated collection operations. Both have three container collection systems: Trash; Commingled Recycling; and, Green Waste Recycling.

Recyclables and Green Waste are processed by Waste Management.

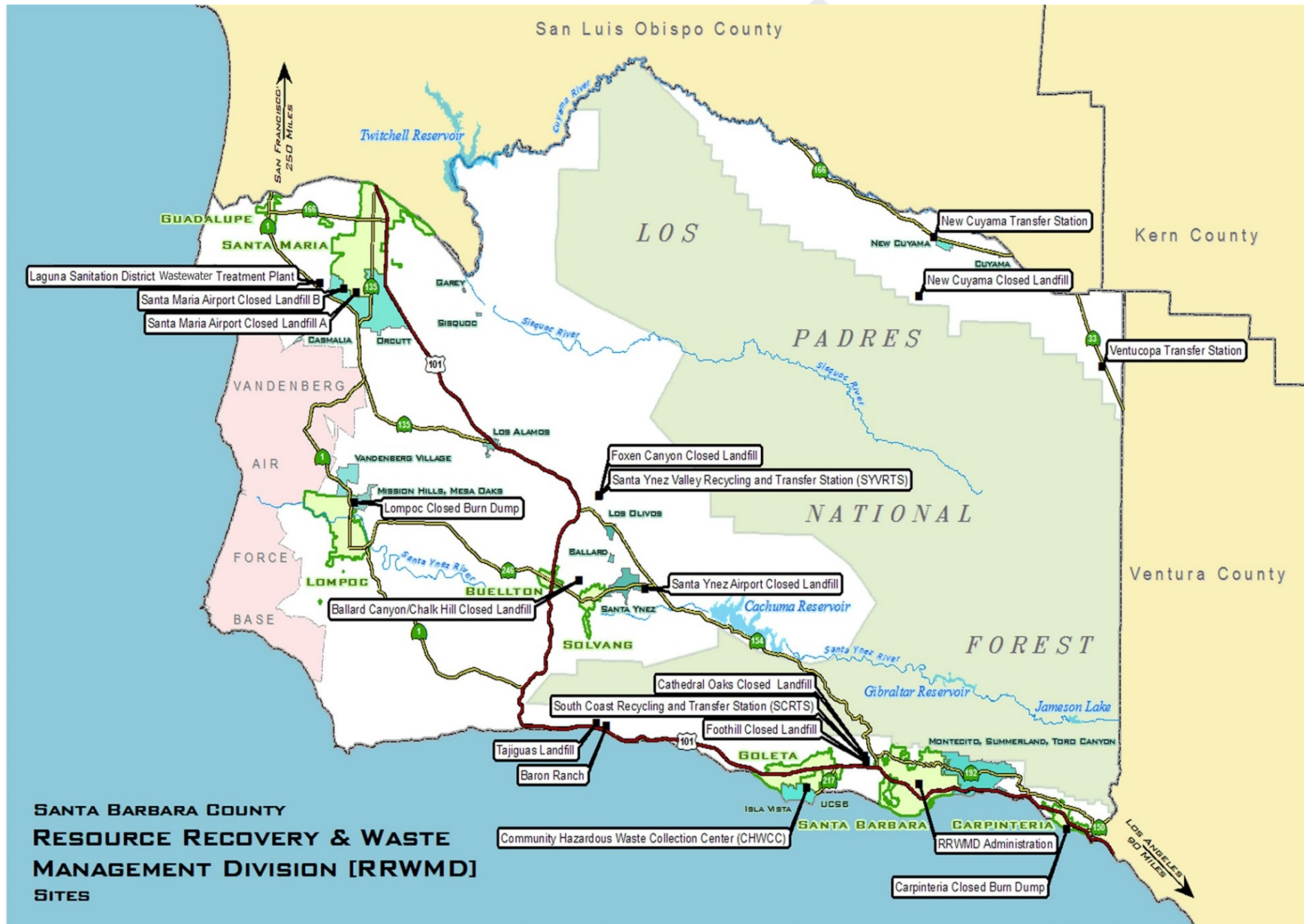
Trash is disposed at each city's own landfill (the City of Lompoc Landfill and the Santa Maria Regional Landfill) and this material will not be processed at the Tajiguas Landfill and TRRP.

2.4 County Facilities

The County of Santa Barbara Public Works Resource Recovery and Waste Management Division (RR&WMD) is responsible for the management of solid waste processing and disposal throughout many parts of the County and for solid waste collection (in the unincorporated area). The RR&WMD's solid waste program includes the collection of solid waste in the unincorporated area, recycling and disposal of solid waste.

The System includes several different types of solid waste facilities which are owned by the County. Their location is presented in Figure 2-3.

Figure 2-3: Solid Waste Facilities in County



2.4.1 Recycling and Transfer Stations

The RR&WMD operates four recycling and waste transfer stations in the County. The County owned and operated facilities work to remove items from the waste stream that can be reused, recycled and, in addition, act as revenue streams.

- The South Coast Recycling & Transfer Station received 72,231 tons of material in FY 2015-16. Of that material:
 - 24,251 tons were transferred to the Tajiguas Landfill for disposal,
 - 21,473 tons of commingled recyclables were transferred to Gold Coast Recycling for processing,
 - 24,515 tons of green waste were either processed on-site or transferred to another County facility for processing and marketing, and
 - The remaining 1,992 tons were recovered for recycling.
- The Santa Ynez Valley Recycling & Transfer Station received 27,659 tons of material in FY 2015-16. Of that material:
 - 13,757 tons were transferred to the Tajiguas Landfill for disposal,
 - 13,212 tons of green waste were either processed on-site or transferred to another County facility for processing and marketing, and
 - The remaining 690 tons were recovered for recycling.
- The New Cuyama and Ventucopa transfer stations are located in remote areas of Northeastern Santa Barbara County. The material collected at these facilities is hauled to the Tajiguas Landfill for disposal and to MarBorg's sorting facility to recover recyclables. In FY 2015-16, 499 tons of material were received at New Cuyama and 46 tons of waste was received at the Ventucopa facility.

2.4.2 Landfills

Tajiguas Landfill

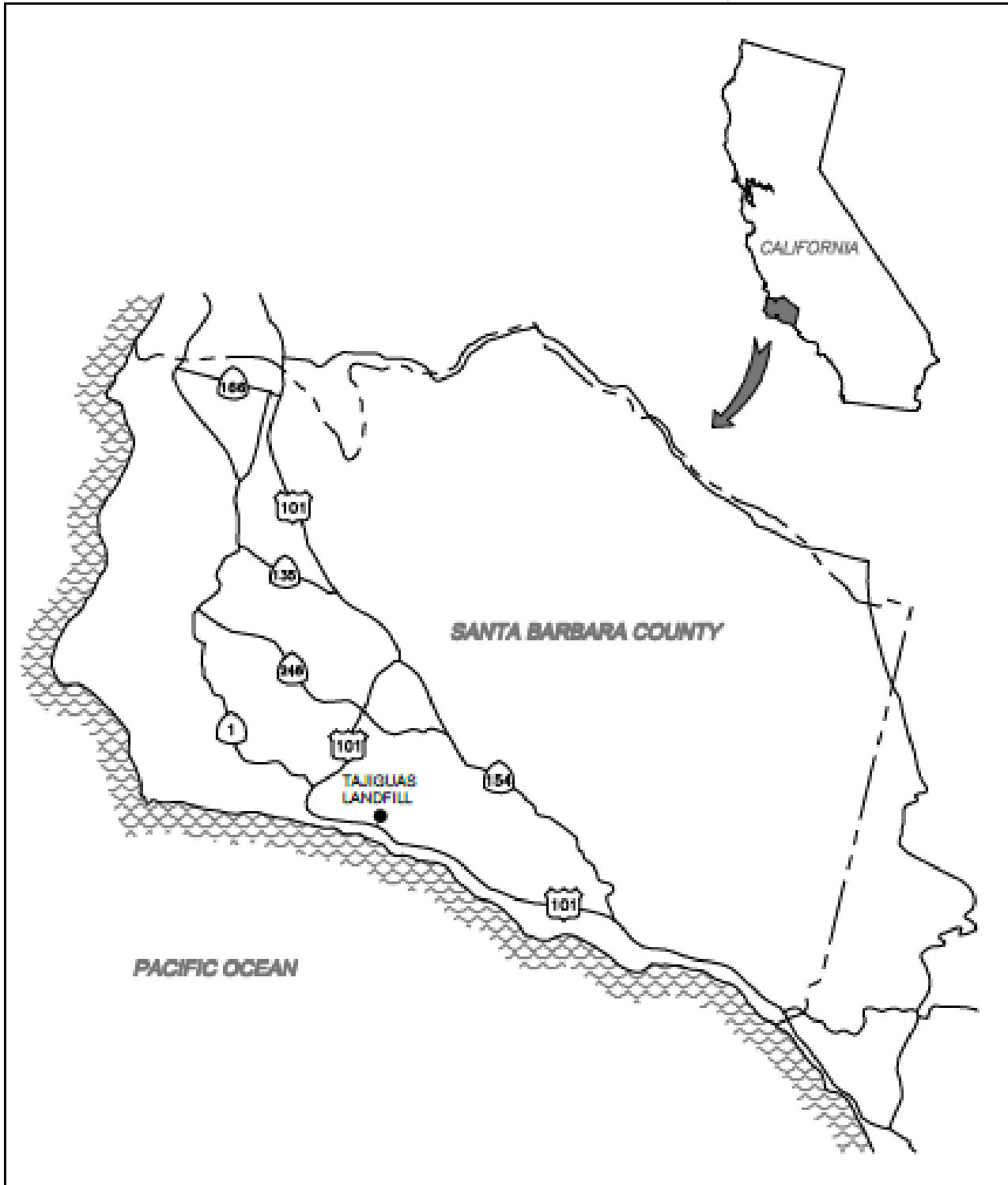
The Tajiguas Landfill is a Class III non-hazardous solid waste disposal facility located in Santa Barbara County, California approximately 26 miles west of the City of Santa Barbara, as shown in Figure 2-4.

The Santa Barbara County Public Works Department, RRWMD is the owner and permitted operator of the landfill. The total landfill project site area is 497 acres, with a permitted operational area of 357 acres, a total permitted waste footprint of 118 acres, and a permitted capacity of 22.3 million cubic yards. At current rates of disposal, the landfill is expected to close in 2026. The TRRP project is expected by County staff to extend this date to 2036.

MSW currently delivered to the Tajiguas Landfill is generated by the cities of Santa Barbara, Goleta, Buellton and Solvang, the unincorporated areas of southern Santa Barbara County, and the Santa Ynez and Cuyama Valleys. MSW is transported to the landfill from the South Coast Recycling and Transfer Station, the Santa Ynez Valley Recycling and Transfer Station, the New Cuyama Transfer Station, and the Ventucopa Transfer Station, all operated by RRWMD.

For fiscal year ending 2016, the landfill disposed of 200,281 tons of material, ground 36,855 tons of green waste which was used as mulch, and used as alternative daily cover 25,796 tons of material from a construction and demolition debris facility operated by MarBorg. Over the past 15 years, methane gas has been collected and used as fuel to power an engine driven turbine to produce 2.8 megawatts of electricity that is sold to Southern California Edison.

Figure 2-4: Location of Tajiguas Landfill



Closed Landfills

The County has several closed landfills throughout the County. Seven were closed prior to the enactment of Subtitle D and two after the enactment. Subtitle D requires funds be set aside for completing closure of the landfill and for post closure maintenance for 30 years after final closure certification. Annually, the County must report to the State the status of these accounts. Landfills prior to Subtitle D do not have these fiscal requirements, but the County instead purchases Pollution Liability Insurance. Funding for these facilities is currently provided from other revenues available to the Enterprise Fund. Of the pre-subtitle D landfills, Ballard Canyon is the most active. A down gradient plume exists that require on-going monitoring. The monitoring reports which are on file with the RWQCB (GeoTracker) indicate the pollutants of concern continue to degrade and attenuate.

Figure 2-5: Pre Subtitle D Landfills

Landfill	Closure Date
Ballard Canyon/Chalk Hill Landfill	1969
Foothill Landfill	1967
Santa Maria Airport Landfill	Cell A in 1960, Cell B in 1973
Santa Ynez Airport Landfill	1970
Lompoc Burn Dump	1960
Cathedral Oaks Landfill	1956
Carpinteria Burn Dump	1956

As of June 2016, the total closure and post closure care expense for post Subtitle D Landfills is projected to be \$32,248,485. The County has a recognized liability of \$27,395,316 with \$18,177,250, as shown in Figure 2-6, held in investments as required by State and Federal laws. The remaining \$4,853,169 in estimated closure and post closure cost is expected to be funded through future tip fees at the Tajiguas Landfill.

Figure 2-6: Post Subtitle D Landfills

Landfill	Closure Date	Restricted Cash for Closure and Post Closure	Restricted Cash for Corrective Action	Total
Foxen Canyon	2007	\$ 528,640	\$ 288,886	\$ 817,526
New Cuyama	1998	\$ 115,361	\$ 697,629	\$ 812,989
Tajiguas Landfill	2036 with TRRP, 2026 without TRRP	\$ 15,873,692	\$ 673,043	\$ 16,546,735
Total Restricted Cash ⁽¹⁾		\$ 16,517,693	\$ 1,659,557	\$ 18,177,250

⁽¹⁾ Note 17 from FY 2015/2016 Comprehensive Annual Financial Report

2.4.3 Hazardous Waste Collection Centers

Community Hazardous Waste Collection Center. The Community Hazardous Waste Collection Center (CHWCC) is managed by the County of Santa Barbara's Resource Recovery & Waste Management Division of the Public Works Department and is jointly sponsored by the County of Santa Barbara and the Cities of

Goleta and Santa Barbara. Households in the cities of Goleta, Santa Barbara, as well as the unincorporated areas may dispose of household hazardous waste (HHW) for free on Saturdays and on Sundays. Businesses in the cities of Goleta, and Santa Barbara, as well as the unincorporated areas that qualify as a Conditionally Exempt Small Quantity Generator (CESQG) are eligible to use the CWHCC on Fridays. Businesses are charged a user fee of for processing and administration costs, plus a disposal fee based on the types and quantities of waste being disposed.

The Santa Ynez Valley Recycling and Transfer Station collects antifreeze, vehicular batteries, motor oil, oil filters, and latex paint from households (no businesses) on Saturdays.

2.5 Other Facilities

2.5.1 Non-County Owned Recyclables Processing Facilities

In the Santa Ynez Valley, blue bin recyclables are collected by MarBorg in the City of Buellton and processed and shipped out for sale. With the commencement of TRRP project operations these materials will be processed at the TRRP, according to the Material Delivery and Services Agreements being negotiated by the County and Public Participants.

In the City of Solvang and the unincorporated area of the Santa Ynez Valley, blue bin recyclables are collected by Waste Management Incorporated and are taken to Waste Management's Materials Recovery Facility near Santa Maria, where the material is processed and shipped out for sale. This material averages about 11,000 tons per year and is currently not planned to be processed at the TRRP.

On the South Coast (including the cities of Santa Barbara and Goleta), residential curbside recyclables are collected by MarBorg and brought to the South Coast Recycling and Transfer Station where the material is consolidated and taken to the Gold Coast Materials Recycling Facility (Gold Coast) in Ventura. Gold Coast is currently contracted to separate, bale and sell the recovered recyclables. About 10 to 15 percent of the material brought to Gold Coast is non-recyclable which is back-hauled by the County and disposed at the Tajiguas Landfill. A small portion of mixed recyclables collected from commercial customers serviced by MarBorg are brought back to MarBorg's MRF/Transfer Station in the City of Santa Barbara where recovered materials are separated, baled and sold, and the non-recyclable residual is delivered to the Tajiguas Landfill for burial. This material averages about 23,000 tons per year or 67% of the CSSRM and will be processed at the TRRP starting in 2019, according to the Disposal Agreement being negotiated by the County and Marborg.

2.5.2 Non-County Owned Green Waste Processing Facilities

In the city of Buellton, green bin green-waste is collected by MarBorg and processed at their facility in the City of Santa Barbara. In the City of Solvang and in the unincorporated area of the Santa Ynez Valley green bin green-waste is collected by Waste Management and is taken to Waste Management's yard in Santa Maria where it is processed and delivered to the Engel & Gray facility for composting.

2.5.3 Non-County Owned Landfills

The Santa Maria Regional Landfill is a Class III non-hazardous solid waste disposal facility located in and owned by the City of Santa Maria. It is approximately 63 miles north of Santa Barbara and has a maximum capacity of 858 tons per day. It is expected to close in the next 10 years. The landfill receives waste primarily from the City of Santa Maria and the unincorporated service areas nearby. The City is developing the City of Santa Maria Integrated Waste Management Facility as a replacement for the existing Regional

Landfill.

The City of Lompoc Sanitary Landfill is a Class III non-hazardous solid waste disposal facility located in and owned by the City of Lompoc. It is approximately 54 miles north of Santa Barbara and has a maximum capacity of 400 tons per day. The landfill receives waste primarily from the City of Santa Maria and the unincorporated service areas nearby. According to the County staff, it currently does not accept waste from outside the Lompoc Valley area.

2.6 Historical Solid Waste Quantities and Composition

Figures 2-7 through 2-10 provide a summary of the tonnage of material by type accepted at the Tajiguas Landfill delivered by the County and the cities' franchised haulers (both franchised and non-franchised tons), by the general public, and from sources outside the jurisdiction of the County. With the implementation of the TRRP, these materials are anticipated to be delivered to the Tajiguas Landfill to be processed at the TRRP, grinded to make mulch, or disposed in the landfill.

Figure 2-7 presents five year historical municipal solid waste tonnage classified as franchised and non-franchised and by jurisdiction of origin.

**Figure 2-7: Historical MSW Tonnage by Source
Fiscal Year Ended June 30**

MSW Franchised	FY 11-12	% of Total	FY 12-13	% of Total	FY 13-14	% of Total	FY 14-15	% of Total	FY 15-16	% of Total
County	31,501	21%	31,598	20%	30,423	19%	30,458	19%	31,508	18%
Santa Barbara	48,391	33%	50,848	32%	50,562	31%	50,674	31%	51,124	29%
Goleta	19,201	13%	19,300	12%	19,001	12%	19,567	12%	20,229	11%
Buelton	3,786	3%	3,542	2%	3,584	2%	3,651	2%	3,837	2%
Solvang	4,014	3%	4,332	3%	4,168	3%	4,291	3%	4,344	2%
Other	3,894	3%	3,926	2%	4,019	2%	2,876	2%	3,006	2%
Subtotal	110,788	75%	113,547	72%	111,757	69%	111,517	68%	114,048	64%
MSW Self-Haul										
County	12,334	8%	13,352	8%	14,821	9%	15,736	10%	18,807	11%
Santa Barbara	16,600	11%	19,910	13%	22,709	14%	23,821	15%	29,196	16%
Goleta	6,030	4%	7,144	5%	8,170	5%	8,767	5%	10,955	6%
Buelton	978	1%	1,140	1%	1,369	1%	1,469	1%	1,868	1%
Solvang	779	1%	746	0%	702	0%	701	0%	848	0%
Other	1,021	1%	1,258	1%	1,527	1%	1,225	1%	1,547	1%
Subtotal	37,742	25%	43,550	28%	49,299	31%	51,718	32%	63,220	36%
MSW Total	148,529	100%	157,097	100%	161,056	100%	163,235	100%	177,268	100%

Figure 2-8 presents five year historical source separated recyclable material tonnage by jurisdiction of origin.

Figure 2-8: Historical Source Separated Recyclables Tonnage by Agency Fiscal Year Ended June 30

Recyclables	FY 11-12	% of Total	FY 12-13	% of Total	FY 13-14	% of Total	FY 14-15	% of Total	FY 15-16	% of Total
County	9,057	28%	9,068	28%	9,215	27%	9,352	27%	9,290	27%
Santa Barbara	15,657	49%	16,359	50%	16,687	50%	17,088	50%	17,522	50%
Goleta	5,466	17%	5,606	17%	5,715	17%	5,744	17%	5,971	17%
Buelton	915	3%	913	3%	951	3%	991	3%	980	3%
Solvang	-	0%	-	0%	-	0%	-	0%	-	0%
Other	741	2%	783	2%	1,008	3%	941	3%	1,031	3%
Recyclables Total	31,835	100%	32,729	100%	33,576	100%	34,115	100%	34,794	100%

Figure 2-9 presents five-year historical source separated organic material tonnage by jurisdiction of origin.

Figure 2-9: Historical Organics Tonnage by Agency Fiscal Year Ended June 30

Greenwaste Franchised	FY 11-12	% of Total	FY 12-13	% of Total	FY 13-14	% of Total	FY 14-15	% of Total	FY 15-16	% of Total
County	17,499	35%	17,697	34%	16,515	33%	15,554	32%	15,691	31%
Santa Barbara	13,838	28%	14,834	28%	14,392	29%	13,831	29%	13,698	27%
Goleta	5,020	10%	5,449	10%	4,929	10%	4,784	10%	5,243	10%
Buelton	625	1%	577	1%	557	1%	501	1%	499	1%
Solvang	-	0%	-	0%	-	0%	-	0%	-	0%
Other	598	1%	697	1%	622	1%	689	1%	697	1%
Subtotal	37,580	76%	39,254	74%	37,016	73%	35,360	73%	35,828	72%
Greenwaste Self-Haul										
County	4,262	9%	3,830	7%	3,680	7%	3,397	7%	3,758	8%
Santa Barbara	3,370	7%	3,211	6%	3,207	6%	3,021	6%	3,281	7%
Goleta	1,223	2%	1,179	2%	1,098	2%	1,045	2%	1,256	3%
Buelton	327	1%	277	1%	278	1%	249	1%	273	1%
Solvang	-	0%	-	0%	-	0%	-	0%	-	0%
Other	1,090	2%	1,087	2%	1,041	2%	1,112	2%	1,140	2%
Subtotal	10,271	21%	9,585	18%	9,304	18%	8,823	18%	9,708	19%
Total Greenwaste	47,851	97%	48,839	92%	46,320	92%	44,183	91%	45,535	91%
Food Waste										
County	5	0%	14	0%	16	0%	38	0%	45	0%
Santa Barbara	1,222	2%	3,003	6%	3,151	6%	3,211	7%	3,207	6%
Goleta	13	0%	-	0%	1	0%	23	0%	40	0%
Buelton	11	0%	25	0%	29	0%	16	0%	11	0%
Solvang	-	0%	-	0%	-	0%	-	0%	-	0%
Other	374	1%	941	2%	950	2%	1,002	2%	1,258	3%
Subtotal	1,625	3%	3,984	8%	4,148	8%	4,290	9%	4,561	9%
Total Organics	49,476	100%	52,823	100%	50,467	100%	48,473	100%	50,097	100%

Figure 2-10 shows the combined five year historical summary of tonnage presented in Figures 2-7 through 2-9 by type and origin of material. Data presented in Section 4.0, Figure 4-2 shows County projected volumes after commencement of TRRP operations and includes additional volume from MarBorg that was historically disposed outside the County system.

**Figure 2-10: Historical Total Tonnage by Agency
Fiscal Year Ended June 30**

Summary by Type and Origin	FY 11-12	% of Total	FY 12-13	% of Total	FY 13-14	% of Total	FY 14-15	% of Total	FY 15-16	% of Total
County										
Municipal Solid Waste	43,835	19%	44,950	20%	45,243	20%	46,194	20%	50,315	22%
Recyclables	9,057	4%	9,068	4%	9,215	4%	9,352	4%	9,290	4%
Organic Materials	21,766	9%	21,542	9%	20,211	9%	18,989	8%	19,494	8%
Subtotal	74,657	32%	75,560	33%	74,670	32%	74,535	32%	79,099	34%
Santa Barbara										
Municipal Solid Waste	64,991	28%	70,758	31%	73,272	32%	74,495	32%	80,321	35%
Recyclables	15,657	7%	16,359	7%	16,687	7%	17,088	7%	17,522	8%
Organic Materials	18,430	8%	21,047	9%	20,750	9%	20,063	9%	20,186	9%
Subtotal	99,078	43%	108,165	47%	110,708	48%	111,645	49%	118,028	51%
Goleta										
Municipal Solid Waste	25,231	11%	26,444	12%	27,171	12%	28,334	12%	31,184	14%
Recyclables	5,466	2%	5,606	2%	5,715	2%	5,744	2%	5,971	3%
Organic Materials	6,256	3%	6,629	3%	6,029	3%	5,852	3%	6,539	3%
Subtotal	36,953	16%	38,679	17%	38,915	17%	39,930	17%	43,694	19%
Buelton										
Municipal Solid Waste	4,765	2%	4,682	2%	4,953	2%	5,120	2%	5,704	2%
Recyclables	915	0%	913	0%	951	0%	991	0%	980	0%
Organic Materials	962	0%	879	0%	864	0%	766	0%	783	0%
Subtotal	6,642	3%	6,474	3%	6,768	3%	6,877	3%	7,467	3%
Solvang										
Municipal Solid Waste	4,792	2%	5,078	2%	4,871	2%	4,992	2%	5,191	2%
Recyclables	-	0%	-	0%	-	0%	-	0%	-	0%
Organic Materials	0	0%	0	0%	0	0%	0	0%	0	0%
Subtotal	4,792	2%	5,078	2%	4,871	2%	4,992	2%	5,191	2%
Other										
Municipal Solid Waste	4,915	2%	5,185	2%	5,546	2%	4,100	2%	4,553	2%
Recyclables	741	0%	783	0%	1,008	0%	941	0%	1,031	0%
Organic Materials	2,062	1%	2,726	1%	2,613	1%	2,803	1%	3,095	1%
Subtotal	7,717	3%	8,694	4%	9,168	4%	7,844	3%	8,679	4%
Total	229,840	100%	242,650	100%	245,099	100%	245,823	100%	262,159	100%

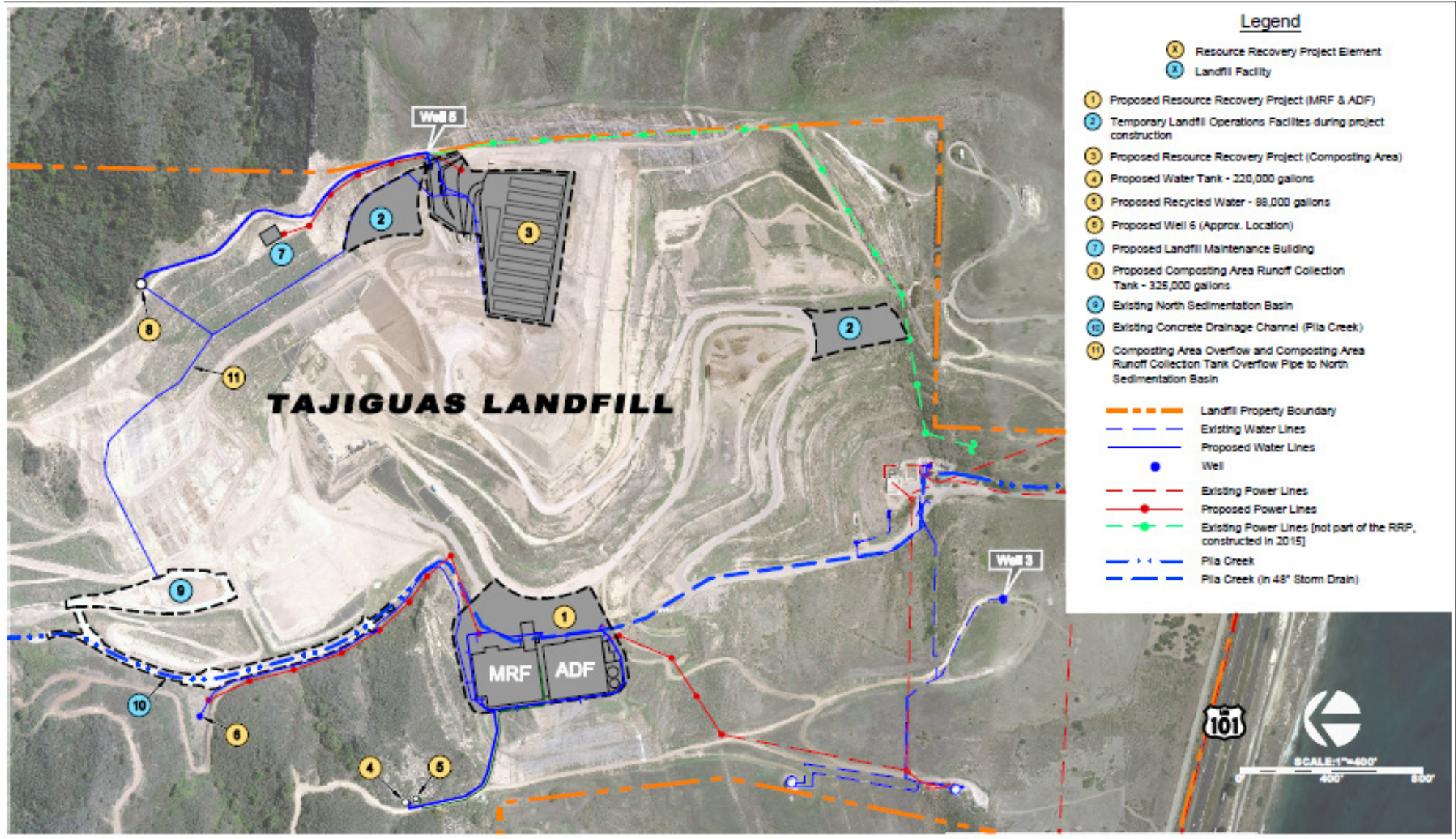
SECTION 3.0 THE PROJECT

The County proposes to add to the current Tajiguas Landfill disposal and green waste processing operations expanded resource recovery operations with a material recovery facility (MRF), a dry fermentation anaerobic digestion facility (ADF), and a compost management unit (CMU), as shown in Figure 3-1 on the following page.

These facilities are designed to process MSW that is currently delivered to the landfill for disposal and CSSRM as well as source separated organic materials (SSOM) from un-incorporated 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 MRF operations are designed to be enclosed in a 66,500 square foot building. The ADF operations are designed to be enclosed in a 63,600 square foot building. The composting operations will require a five acre area on the landfill's permitted footprint.

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Figure 3-1: The Project Site



3.1 Need for Changes to System

The TRRP is intended by the County and the Public Participants to address:

- Several local needs and State requirements for the increased diversion of discarded materials from landfill disposal;
- Greenhouse gas reduction goals;
- State mandates including: State Assembly Bill 32; State-wide Anaerobic Digestion Initiative; State Assembly Bill 341; Public Resources Code Division 30, Part 2, Chapter 4, Section 41701; State Assembly Bill 1826; State Assembly Bill 876; State Assembly Bill 1045; and,
- Federal Initiatives.

Generally, these requirements impose an obligation on the County and Public Participants to create certain programs to address certain goals. Failure to establish such programs can result in fines of up to \$10,000 per day. However, while the TRRP is intended to fulfill the obligations of the County and Public Participants, failure to implement the TRRP does not mean that such fines would necessarily be imposed. Instead, other programs would have to be adopted.

3.1.1 Extension of Landfill Life

Based on current waste diversion programs and disposal rates, the Tajiguas Landfill is currently projected to reach its permitted disposal capacity (23.3 million cubic yards) in approximately 2026. With the diversion projected to be provided by the TRRP, the permitted disposal capacity is not projected to be reached until approximately 2036. Thereafter, the County will need to transfer residual material to be disposed of at another landfill site or evaluate the potential of expanding the existing landfill. The TRRP is anticipated to provide a ten year extension. As a result, it is anticipated that the region will meet the State of California CalRecycle's 15 year disposal capacity requirement.

3.1.2 Development of Processing Infrastructure

The TRRP provides the infrastructure necessary to support existing and future waste management programs for processing recyclables and organic materials. As a result, it is expected that the region will meet AB 1826's organics processing infrastructure requirement as well as the state's requirement for 15 years of organics processing capability.

3.1.3 Diversion of Materials

Implementation of the TRRP, which is expected to divert 60% of the tons currently disposed at the Tajiguas Landfill, is projected by the County to increase the region's diversion rate, as reported to CalRecycle by 16% from 73% to more than 85% without any changes to current collection programs.

The County currently reports a diversion rate of approximately 73% based on its 2015 per-capita disposal rate of 4.1 pounds per day per resident compared to the CalRecycle target of 7.4 pounds per day per resident. Projections to achieve the additional 16% diversion are based on the assumption that 60% of the remaining 27% of volume (that was actually disposed in fiscal year 2015) will be diverted from disposal through processing at the TRRP.

As a result, the TRRP is expected to allow the region to meet AB 341's 75% recycling goal in 2020. In addition, the project is expected to process both source separated organics as well as organics sorted

from mixed waste. This will allow the jurisdictions using the facility to meet AB 1383, which requires there to be a 50% reduction in statewide disposal of organics by 2020 and a 75% reduction in the disposal of organics by 2025. As a result of this diversion, fewer tons of solid waste will need to be provided for at the end of the useful life of the Tajiguas Landfill.

3.1.4 Greenhouse Gas Reduction

As compared to landfill disposal, recycling activities associated with the TRRP are expected to eliminate greenhouse gas levels equivalent to annual emissions from approximately 13,270 vehicles per year. The reduction in landfill disposal of organic materials would result in a decrease of nearly one million metric tons of carbon dioxide equivalent (CO₂e) during the first 50 years following project implementation (annual equivalent of 4,217 vehicles/year). In addition, the TRRP is a significant component of several of the South Coast jurisdictions' Climate Action Plans which demonstrate how each community plans to comply with greenhouse gas emission reduction requirements of AB 32.

3.2 TRRP Facility and Technology Description

The TRRP is comprised of three processing elements: The MRF (approximately \$61.8 million in development, construction and equipping costs); and, the ADF (including energy facility) with the Compost Management Unit (CMU), (which total approximately \$47.4 million in development, construction and equipping costs) that will be located on the Tajiguas Landfill property.

3.2.1 Contractor

In 2009, the County released a Request for Proposal for a Waste Conversion Facility capable of diverting from disposal 60% of the material that was being disposed of at the Tajiguas Landfill from the cities of Buellton, Goleta, Santa Barbara, Solvang and Southern Santa Ynez and New Cuyama unincorporated areas. An advisory group evaluated the various proposals and interviewed the different proponents. In 2012, the proposal by Mustang Renewable Power Ventures, LLC (Mustang) was selected as the most advantageous and all participating jurisdictions adopted a Project Term Sheet with Mustang. In July 2015, the Board of Supervisors directed staff to consider a publicly financed facility to reduce costs from Mustang's proposed private financing approach. In April 2016, the Board of Supervisors reviewed the analyses of the public financing approach and directed staff to negotiate a Waste Service Contract (including design, construction, equipping and operations) with Mustang. In July 2016, the Board approved the Waste Service Contract with MSB Investors, LLC (MSB), a single purpose limited liability company created by Mustang.

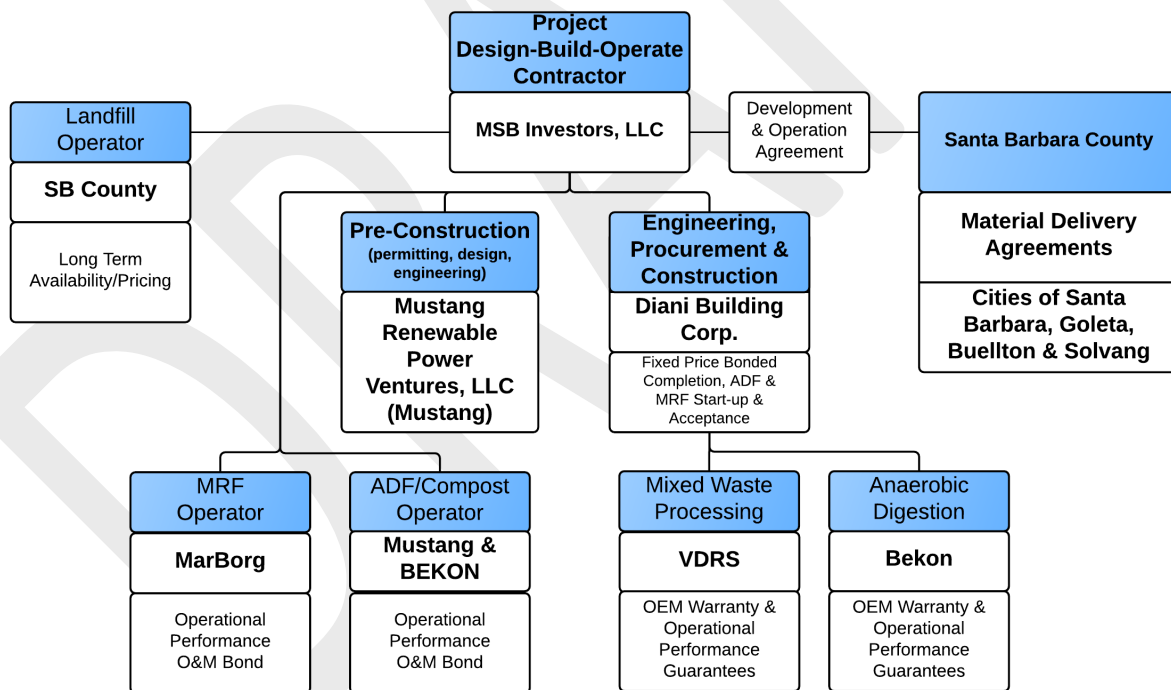
Mustang is a Brownfields and industrial developer who has worked with environmental regulatory agencies (California Departments of Toxic Substances Control, Resource Recycling and Recovery, Regional Water Quality Control Boards, Air Quality Management Districts and County Health Departments) in obtaining permit approvals for projects.

MSB is a limited liability corporation organized and operating under the laws of the State of California. It was created in 2012 by Mustang Renewable Power Ventures, LLC for the purpose of developing, constructing and operating the Santa Barbara TRRP. MSB's independent accountants (HBLA Certified Public Accountants, Inc.) state that as of October 2016, MSB has approximately \$4.5 million in equity with approximately \$9 million in assets (comprised largely of the CHP Engines and Predevelopment costs for the TRRP). MSB management represents that it has the capability of performing all of its obligations under the Waste Service Contract and management is not aware of any facts, circumstances or conditions that could reasonably be expected to render MSB financially incapable of performing its obligations under the Waste Service Contract.

Mustang and the County have attempted to manage project construction and operating risks through performance bonds and insurance policies that were determined by the County’s and Public Participants’ Risk Managers. A package of protection has been compiled including performance bonds for construction (\$97,500,000) and operations (\$12,000,000), equipment warranties, and a variety of insurance policies (Builders Risk, Commercial, Professional & General Liability, Property/ Hazard, and Pollution Legal Liability) to protect MSB and the County during the construction and operational periods. Such bonds shall be in standard AIA form, and shall be issued by a surety company or companies rated “A” or better pursuant to current AM. Best Company ratings and listed in the United States Treasury Department’s Circular 570. Such surety shall be an admitted surety in California. MSB may discontinue maintaining this performance bond upon written County approval, which shall be provided within ten (10) Week Days of issuance of the Notice to Proceed with Full Operations as provided in Section 4.9.B. As the owner of the facility, the County plans to procure property insurance when the TRRP is operational.

As has been the case with other ADF developers in California, MSB has no experience constructing, equipping or operating MRFs or ADFs but has subcontracted these functions to Diani Construction, Van Dyk Recycling Solutions Corporation (VDRS), Bekon, and MarBorg, all of whom have significant experience and expertise in their respective fields. A description of the organization and contract structure of the TRRP is presented in Figure 3-2 below.

Figure 3-2: TRRP Organizational & Contract Structure



3.2.2 Construction Contractor and Schedule

Description

The TRRP will be located at the Tajiguas Landfill. The landfill property totals approximately 497 acres. The MRF and ADF will be located on approximately 6 acres. The composting area will occupy approximately

an additional 5 acres. Supporting facilities and infrastructure (wells, tanks, piping, etc.) will be located on the landfill property outside of these areas. Construction of the facilities will require approximately 143,645 cubic yards of cut and 167,595 cubic yards of fill material.

The TRRP is designed to process MSW currently delivered to the Tajiguas Landfill for disposal as well as to process source separated recyclables and organic waste from the Public Participants' existing and future recycling programs.

The MRF processing area would be comprised of an approximate 66,500 square foot (sf) facility that would sort MSW into three streams:

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

The ADF would be housed within an approximate 63,600 sf building, and associated energy facility and percolate storage tanks that would convert all organics recovered from the MSW and SSOM into:

- **Bio-gas** (primarily composed of methane and CO₂) – that would be used to power two (2) 157,337 horsepower onsite combined heat and power (CHP) engines driving electric power generators that would generate approximately 1+ net megawatts (MW) of renewable power continuously to power the MRF and to sell to Socal Edison. The Energy Facility would be located on the south side of the ADF; and
- **Digestate** – that can then be cured into compost and/or soil amendments. The curing would require an approximately 5 acre area (located at one or more sites on the landfill's permitted operations and/or waste disposal footprint). The compost and/or soil amendments would be marketed for agricultural or landscape use or used for reclamation projects. No net revenue is anticipated from the sale of the compost, but the disposal expense that would otherwise be incurred is avoided and landfill capacity is increased.

Construction of the MRF is projected to take approximately twelve months to complete following 4 months of grading and site preparation. Construction of the ADF is projected to take approximately 12 months to complete and would be completed concurrently with the MRF, in January 2019.

Primary Subcontractor

Diani Building Corp (DBC) is a 60+ year old construction firm and is able to provide experienced Project Manager/Superintendent, Principals and the support staff of Project Engineers, Estimators, Safety and Quality staff.

DBC's team of professional managers and constructors has supplied planning, design and construction services to the private and public market sectors. Construction services shall be provided through DBC's Santa Maria corporate office.

DBC has worked on a number of projects throughout the Santa Barbara County area including projects for military, public works and educational market sectors. A few of its projects include:

- Hearst Castle Visitor Center in San Simeon, CA for the State of California.
- Hazardous Waste Facility, Santa Maria, CA for the City of Santa Maria
- US Army Community and Family Support Center and Youth Center at the Lemoore Naval Air Station, in Lemoore, CA.
- Ground-Base Midcourse Missile Defense, Vandenberg Air Force Base, CA and Fort Greely, AK
- The Arts and Music Building and High Technology Learning Center at Cuesta Community College in San Luis Obispo, CA.

3.2.3 Material Recovery Facility

Description

The MRF is comprised of a 66,500 square foot facility to be located on the existing landfill operations deck. It is expected to process commingled source separated recyclables and MSW. As designed, the MRF will include a tipping floor and load out waste transfer area (24,800 square feet), and a waste processing and recyclables storage area (41,700 square feet). Additionally, there would be office space and a visitor viewing area.

The MRF has a design capacity of up to 290,000 tons per year of MSW and CSSRM and is designed to recover up to 126,000 tons per year of recyclables. The MSW processing line will sort MSW into three streams: recyclables for sale; organics for processing in the ADF; and, residue that will be disposed in the existing landfill.

The MRF waste processing equipment includes a size reducer, bag openers, shredders, trommel screens, conveyors, air separators, and a rolling bed dryer. All processing equipment will be electrically powered. Mobile equipment will be used to load material into the MRF equipment and into trucks to export material from the site.

Primary Subcontractors

Van Dyk Recycling – MRF Equipment Contractor

Mustang has selected Van Dyk Recycling Solutions Corp. (VDRS) as its Materials Recovery Facility equipment partner. VDRS was selected primarily because of their mixed municipal solid waste material recovery experience. VDRS proposes installation of a Bollegraaf sorting system. Van Dyk Recycling Solutions is the exclusive representative of Bollegraaf recycling equipment in North and Latin America. Bollegraaf reports having installed 2,400 recycling systems and built 17 MRFS, each of which process 50+ tons per hour.

Figure 3-3 presents a summary of Van Dyk reference projects. We have not listed numerous smaller and older projects.

Figure 3-3: Summary of Selected Van Dyk Facilities

Location (Owner)	Feedstock/ Tons Per Day	Product	Status
City of Industry, CA (Grand Central Recycling)	Commercial Mixed MSW/200	Recyclables and Pelletized Fuel	In operation since 2012
Brooklyn, New York (SIMS Metal)	Mixed MSW and Commingled/350	Recyclables	In operation since 2013
Johnston, RI (Rhode Island Resource Recovery Corporation)	Single Stream /350	Recyclables	In operation since 2012
Los Angeles, CA (Crown Disposal)	Mixed MSW and C&D/1000	Recyclables	In operation since 2000
San Diego, CA (EDCO)	Source Separated Recyclables, 700	Recyclables	In operation since 2004
San Antonio (Waste Management)	Mixed MSW/400	Recyclables and Pelletized Fuel	In operation since 2011
Toronto, Canada (Dongara)	Single Stream and Mixed Commercial MSW/600	Recyclables and Pelletized Fuel	In operation since 2013
Bridgeport, CT (USA Recycling)	Single Stream/150	Recyclables	In operation since 2014

MarBorg – Operations Contractor

MSB will enter into a subcontract with MarBorg to operate the MRF. MarBorg is a family owned business with approximately 300 employees. MarBorg and its related businesses have served Santa Barbara County as a waste hauler and recycler for over 80 years. It serves over 40,000 individual residential and business accounts. Currently, MarBorg also processes over 250,000 tons of material every year from Santa Barbara County residents and business through several local recycling facilities.

In the early 1990's MarBorg began recycling Construction and Demolition (C&D) material at its corporate yard located at 136 N. Quarantina Street. As those operations grew, MarBorg built and equipped a 80,000 square foot recycling facility across the street from its corporate yard to process larger volumes of waste. At this Downtown Recycling Facility, it currently processes and markets annually 77,000 tons of mixed C&D Material, 35,000 tons of source separated C&D material, 76,000 tons of self-haul Mixed Waste, 6,000 tons of franchise commercial Waste and a portion of the 15,000 tons of Commercial Source Separated Recyclables that it collects. It also accepts and processes electronics and household hazardous wastes at this facility.

MarBorg also operates a Commercial Recycling Facility located at 20 David Love Place. For over a decade it has processed and marketed the commercial source separated recyclables from its franchise contracts in the County of Santa Barbara, City of Santa Barbara, City of Goleta and the University of California, Santa Barbara. It also processes all residential and commercial source separated recyclables from the City of Buellton. In total, this facility processes up to 15,000 tons of source separated recyclables per year.

In addition to these two local processing facilities, MarBorg also collects and markets source separated recyclables from two Buy Back Centers. One facility is located at its Commercial Recycling Operation at 20 David Love Place, Goleta, CA. The second location is in the City of Santa Barbara at 725 Cacique Street. Both of these operations also serve as drop-off locations for Universal Waste and Household Hazardous Waste for all of its franchise customers.

D. Edwards Incorporated – Evaluation Contractor

The County engaged DEI (a project management and environmental services firm based in Brea, California) to review the technical, contractual, scheduling and cost components for the Material Recovery Facility (MRF) portion of the TRRP. The DEI team reviewed a wide variety of technical, contractual, financial, environmental and other documentation provided by Mustang and its team and the County. The DEI team also conducted interviews with the equipment manufacturer and project developer, as well as toured facilities (in person and via video) that utilize comparable equipment and system components to those proposed for the TRRP. The review of this documentation formed the foundation of its findings, analysis and recommendations presented in its report dated August 20, 2015. MSB represents that it is not aware of any changes to the MRF design or operating plan since August 2015 other than minor revisions by permitting agencies and the MRF and ADF operating subcontractors.

DEI reviewed the proposed performance of equipment and system components based on the project requirements for an overall design capacity to process a minimum of 210,000 tons per year (TPY), up to 250,000 of mixed Municipal Solid Waste (MSW) with a targeted diversion rate of 60% from the MSW stream. DEI concluded:

- DEI's review of the information available, along with interviews with the Project Developer (Mustang) and Equipment Vendor (VDRS) indicates that the design of the MRF equipment has been based on relevant waste composition data.
- As a general observation, the proposed MRF system design approach incorporates a high degree of automated separation equipment with the role of human sorters focused primarily on providing quality control functions by being stationed at various key points along the process. While other less automated approaches could also be considered, DEI finds this approach to be technically appropriate for this application. They are also consistent with project requirements to process a minimum of 210,000 and up to 250,000 TPY of mixed MSW with a targeted diversion rate of 60% from the MSW stream, in addition to processing approximately 35,000 TPY of comingled source separated recyclables.
- The proposed recycling equipment is uniquely designed to achieve the desired material recovery rate based on the anticipated composition of the infeed material. While the design is unique to the project and is somewhat complex due to its emphasis on automation, the individual pieces of equipment that make up the system are not unique and with only one exception (the paper dryer) are common and used routinely in systems throughout California, the U.S. and Europe.
- The overall design and equipment selected for the proposed facility is similar to other MRF's that recently have been developed in California and across the U.S.
- While all the equipment appears to fit and routine maintenance can be accomplished, major maintenance and any replacement of equipment could be a challenge. Additional discussion with Mustang and VDRS should occur and they should demonstrate how major service and replacement of equipment can be accomplished.

- DEI believes that the system as currently designed can achieve the availability and reliability required to meet the project objectives, if properly maintained, through a robust maintenance program.

Operations and Maintenance Cost

- MRF staffing levels and allocations appear reasonable and should facilitate required uptime, maintenance cost control and effective operation of automated systems.
- DEI finds the high level of system automation to be an appropriate approach for this project and finds the balance of proposed staffing in conjunction with automation to also be reasonable.

Routine Maintenance and Replacement Schedule and Cost

- Generally, first year annual cost allocations appear reasonable.
- 2% annual inflation factor applied to MRF maintenance cost is at the low end of acceptability for this category. (Subsequently, maintenance expense was increased to meet VDRS' request.)

Specific Components

- In the aggregate, DEI finds the projected budgets for specific components, including spare parts, utilities, administrative and management costs and consumables to be reasonable and in line with comparable facility operating experience.

HF&H Conclusions

DEI found that the MRF system design and equipment components proposed by MSB were: similar to other MRFs that recently have been developed in California; based on relevant waste composition data; appropriate for the application; and, the throughput projections appeared reasonable. We believe that the approach and scope of the DEI review was consistent with providing an opinion about the design, construction, and schedule of MSB's proposed MRF technology, the work was performed by qualified consultants, and the conclusions are reasonable in light of their findings. Therefore, we believe that assumptions related to the efficacy of the MRF to perform in accordance with the projections are reasonable.

3.2.4 Dry Fermentation Anaerobic Digestion Facility

Description

The ADF is comprised of a 63,600 square foot facility that includes an energy facility and percolate storage tanks. The ADF includes: Sixteen digesters (38,000 square feet); Mixing area (16,600 square feet); Delivery area (2,300 square feet); Compost load out area (7,000 square feet); Engine room (1,800 square feet); and, Control room (1,500 square feet) The ADF includes two percolate storage tanks (one for organic waste recovered from MSW and one for source separated organic waste).

The ADF has a design capacity of up to 73,600 tons per year to process organics recovered from the MRF and source separated organic waste. As designed, the Biogas collected from the digesters will be converted into energy using a turbine engine and is expected to generate approximately 1+ net megawatts of renewable power to provide for the MRF's electric needs and sell to Southern California Edison; and, Digestate will be composted with open windrows in the CMU.

This ADF is similar to the dry fermentation anaerobic digestion facility in San José, California. That facility

can process up to 90,000 tons per year of food scraps, yard waste and other compostable materials from the City's businesses. The San José facility generates approximately 1.6 megawatts of power. Two smaller dry anaerobic digestion facilities are operating in the areas of South San Francisco and Marina, California.

Primary Subcontractor

Bekon – AD Equipment Contractor

Mustang has selected Bekon as its ADF equipment contractor for the TRRP. Bekon was selected primarily because of its experience with dry fermentation anaerobic digestion technology. Since 1999, Bekon has installed its equipment in commercial scale facilities in Germany, Italy and Switzerland.

Bekon was founded in Munich, Germany in 1992. It represents itself as a worldwide technology leader in the construction of dry fermentation biogas and composting facilities. Since 2016, Bekon is part of the Eggersmann Group, a family owned business with 680 employees. In 2015 the Eggersmann Group reported sales of 140M€. It is headquartered in Marienfeld in Northern Germany and offers recycling technologies as well as construction and plant operation services.

Bekon references numerous operating projects (Figure 3-4) of greater than 30,000 tons per year. We have not listed numerous smaller projects. It should be noted that no facilities are in the United States where waste composition and regulations differ from Europe. Further, none of these facilities use the highly contaminated organic residue remaining after the processing of municipal solid waste as feedstock. Such materials may affect the ability to use compost byproduct for certain purposes. (Mustang represents that the Steinfurt, Germany facility has consistently operated with 20-30% inert contaminants, which may be consistent with the contamination level of the organic fraction of municipal solid waste residue.) Finally, none of these facilities are of equal size to the nearly 75,000 tons per year proposed for this project.

Figure 3-4: Summary of Bekon AD Facilities

Location	Feed Stock (000's Tons per Year)	Power Output	Status
Steinfurt, Germany	Source Separated Organic Waste, 45	1,054 KW	In operation since November 2013
Pohlsche Heide, Germany	Source Separate Organic Waste, 40	1,000 KW	In operation since November 2009
Rimini, Italy	Source Separated Organic Waste, 35	1,000 KW	In operation since December 2012
Voltanta, Italy	Source Separated Organic Waste, 35	1,000 KW	In operation since December 2012
Naples, Italy	Source Separated Organic Waste, 35	1,052 KW	In operation since August 2011
Cesena, Italy	Source Separated Organic Waste, 35	1,000 KW	In operation since December 2009
Rendsburg, Germany	Source Separated Organic Waste, 30	1,050 KW	In operation since November 2008

Bekon - Operations Contractor

MSB has selected Bekon to manage the ADF operations under a subcontract with MSB. Mustang plans to assist Bekon with all regulatory compliance, human resources, accounting, and financial reporting. In addition to the construction of biogas plants, Bekon also operates four plants and has been selected by MSB to operate this facility. Among them are two combined biogas and composting plants in Nieheim, Germany and Gütersloh, Germany. For some other plants such as Hille, Germany, it has operation service agreements in place. Its experience in operating dry fermentation biogas and composting plants dates back to 2001.

HF&H Conclusion

ADFs are common in Europe. A recent publication *Anaerobic Digestion of the Organic Fraction of Municipal Solid Waste in Europe* by De Baere and Mattheeuws, reported AD processing of municipal solid waste is a common practice in Europe with over 200 plants operating in 17 countries.

Based on a partial list of anaerobic digestion projects available on the CalRecycle website, there are 12 operational projects in California, one in commissioning, one in construction and nine in the permitting phase. We are not aware that any of these California projects use the Bekon technology. Also, we are not aware of any installation where the Bekon technology accepts Residue from a MRF's processing of municipal solid waste, although other waste streams may have similarly high levels of contamination. However, a similar dry fermentation anaerobic digester currently operating in the City of San Jose, California is processing the organic residue from a MRF on a similar scale to the ADF proposed to be used in Santa Barbara.

Neither we nor the County have done an engineering review of whether the Bekon designed equipment will perform as projected. The County has determined, based on similar equipment used in anaerobic digestion of organic material primarily outside of the United States, and the San José ADF, that it is reasonable to proceed with a project based on the Bekon designs as applied to MSW within the County. We note, however, that while similar equipment has been used to process MSW, use of the Bekon equipment has been limited so far to source separated organic waste in Europe and not used on a commercial basis on organic material derived from mixed MSW in the United States.

3.2.5 Compost Management Unit

Description

The CMU will be located on five acres on the landfill's waste disposal footprint. The Digestate (organic material remaining after the anaerobic digestion process) will be transferred from the ADF to the CMU by truck.

It is anticipated that the CMU would operate, up to six days a week, using a six to eight week aerobic curing phase to produce up to 25,000 tons of compost and/or soil amendments per year. Organics starting from MSW could be processed separately to avoid contamination of the SSOM by the contaminants found in organics from MSW that is not suitable for all compost end users.

MSB has proposed an extensive processing and screening process to remove contaminants from the digested and composted organic material which it believes will meet the state's composting regulations. Less than 10% of the total amount of material to be processed is assumed to result as a soil amendment and the County's projections has assumed no value for this material. As such, MSB is confident with its

ability to find a beneficial use for this product without the pressure to receive revenue for its end use. In addition, MSB may be assessed a liquidated damage if the required diversion guarantee (including beneficial use of the soil amendment) is not achieved, thereby creating an incentive to meet the performance specifications.

Primary Subcontractor

Bekon – Operations Contractor

MSB has selected Bekon to manage the CMU operations under a subcontract with MSB. Bekon is expected to send an operational specialist to the CMU from Germany to be the ADF/Composting supervisor/manager. He is expected to hire, train and supervise all staff.

Bekon has operated plants under the brand name KompoTech since 1992. Bekon represents that around 160,000 tons per year are processed in these facilities collecting 1,500,000 habitants' organic waste.

- In Gütersloh, Germany around 65,000 tons per year have been processed, since 1992.
- The plant in Nieheim has been operational since 1999 with an annual throughput of 85,000 tons per year.
- An additional combined dry anaerobic digestion and composting plant in Dresden is in construction with commissioning scheduled for January 2017 with a maximum capacity of 46,500 tons per year.
- In Enger, a Bekon mini system is expected to be installed in 2017.
- Furthermore there are two transfer stations operated by KompoTech, one in Bielefeld and the other one in Alte Schanze.
- For some other plants such as Hille/Pohlsche Heide, Germany, Bekon has operation service agreements in place.

All the compost marketing and sales activities of the self-operated plants are managed under the brand BioTerra. Bekon represents around 180 farmers are compost customers of Bekon's facilities with an agricultural application area of 4,500 acres. Finally, the compost is also marketed in private gardens, greenhouses and in the landscaping industry. Besides the product marketing, BioTerra also provides soil sampling and analysis for their customers.

MSB reports that Bekon has reviewed the current CalRecycle compost regulations and US Composting Council standards and has confirmed they are comparable to German/European Union compost quality standards.

As to compost marketing, MSB reports that Bekon has estimated that the finished compost of approximately 22,000 TPY (of which 25% is estimated to be from clean Source-Separated Organics and 75% is estimated to be from organics from mixed waste) is identical to that produced and marketed by Zbest in Gilroy, California. MSB/Bekon estimate that this amount of compost is expected to require approximately 100-200 acres of land application (hay, alfalfa, beans) to wholesale markets in north Santa Barbara County. MSB states that the 2015 Santa Barbara County Agricultural Committee Crop Report estimates there are 12,807 acres field crops requiring compost. Santa Maria based Diani (the Primary Subcontractor for construction), has offered to assist with compost marketing and trucking logistics as they have relationships with farmers in the County. (Diani represents it has previously hauled agricultural

plastic from more than 3 dozen of the largest farmers for more than ten years in North Santa Barbara County to landfill and recycling markets.)

HF&H Conclusion

There are approximately 67 active composting operations in California, and there are many such operations composting green waste from municipal collection operations. There are some operations in California that are composting digestate from ADF operations.

Santa Barbara County has a large agricultural industry. Engel and Gray have marketed compost to this market from its Santa Maria facility. However, developing the market to accept additional material may take time.

Bekon, the operator, appears to be qualified to direct such operations.

The projections assume that the CMU will generate 22,278 tons of fair quality compost expected to be suitable for the field crop and non-irrigated rangeland markets. MSB projects 34% (7,647 tons per year) of the compost from the TRRP will be collected from the facility by customers at no charge and that 66% (14,631 tons per year) of the compost will have to be transported by the compost facility operator to non-food crop agricultural customers who will not be charged for the product at a cost to the operator for transportation expense of \$6 per ton.

Because composting municipal green waste is a common practice in California, Santa Barbara has a large potential market, the operator has experience, and no revenues are anticipated to be received from the sale of such compost, we have no reason to believe the assumptions contained in the County's Projections are not reasonable.

3.3 TRRP Contractual Descriptions

3.3.1 County/Public Participants Material Delivery Commitment and Services Agreement

The County and Public Participants are negotiating MD&SAs that:

- Have a term that extends twenty years past the construction and acceptance of the TRRP.
- Obligate the Public Participants to direct their franchised waste haulers to direct the flow of all acceptable material collected to the County designated facilities.
- Obligate the County to receive and process and dispose of the materials delivered by the Public Participants.
- Establish the County's right to set and collect charges for the material delivered sufficient to provide net revenue equal to 150% of the debt service, as required by the Bond documents.

It is anticipated by the County that the cities will approve the MD&SA on the following dates:

- City of Goleta, November 1, 2016
- City of Solvang, November 28, 2016
- City of Santa Barbara, December 13, 2016
- City of Buellton has requested that its franchised collection contractor (MarBorg) contract for

delivery of material from the City of Buellton with the County and these negotiations are in process.

3.3.2 County/MSB Waste Service Contract description (and MSB subcontracts)

The Waste Services Contract was approved by the Board of Supervisors on July 12, 2016. It was effective on its execution subject to the satisfaction within 180 days of certain conditions precedent to its effectiveness. The Waste Services Contract has a twelve year term (a 2-year construction period and a 10-year operating period) with an exclusive right by the County to extend the contract up to 5 years.

Development and Construction

MSB is responsible for:

- Obtaining and maintaining conformance with all permits and terms of approvals (including licenses or agreements for use of equipment and/or software) necessary for the development and operation of the TRRP.
- Designing the TRRP to meet agreed upon plans and specifications attached to the Waste Services Contract and conditions related to all permits and approvals (including the mitigation measures required by the environmental impact report).
- Constructing and Equipping the TRRP at an agreed upon amount of \$110,820,000 or such lesser amount as the parties may agree, using the agreed upon Construction Company (Diani Construction) and Equipment Suppliers (Van Dyke Recycling Systems for the MRF technology and Bekon for the AD technology). Such construction is to occur in accordance with an approved construction schedule. TRRP is to operate in accordance with agreed-upon performance requirements described in the Waste Services Contract. MSB has assumed industry-standard risks of construction and the payment of liquidated damages for failure to perform.
- Acquiring, financing and maintaining all rolling stock, maintenance equipment, furnishings and office equipment (ownership of which shall be transferred to the County, at no cost, upon the end of their depreciable lives, except for such equipment which shall have remaining depreciable lives which the County has unilateral option (but is not obligated) to acquire, at net book value or outstanding debt balance whichever is greater, upon termination or expiration of the Waste Services Contract) to meet agreed upon performance requirements described in the Waste Services Contract.
- Performing acceptance tests and obtaining acceptance of the TRRP by the County in accordance with testing procedures (including schedule) agreed to by the Parties and described in the Waste Services Contract. MSB will assume industry standard risks of performance (including, but not limited to, MSB expending any sums required to achieve the acceptance of the TRRP without compensation from the County, and the payment by the MSB to the County of liquidated damages for delay and failure to perform).
- Providing construction bonds, equipment guarantees, performance bonds and insurance related to the construction and operation of the TRRP as described in the Waste Services Contract.

The County is responsible for:

- Financing the TRRP secured largely through MD&SAs with the Public Participants; however, the County shall have no obligation to use general obligation bonds or other non-enterprise funding

to do so.

- Performing as lead agency for the Environmental Impact Report.
- Completing, prior to MSB beginning construction, any necessary site remediation related to past County activities.
- Providing MSB notices to proceed with construction, acceptance testing, and operations in accordance with the conditions described in the Waste Services Contract.

Operation

MSB and its Operating Subcontractors (MarBorg to operate the MRF and Bekon to operate the ADF) are responsible for:

- Receiving, processing and marketing acceptable materials, in accordance with agreed upon performance requirements described in the Waste Services Contract (including but not limited to days and hours of operations, minimum throughput and recovery guarantees, marketing standards, maximum disposal guarantees, vehicle turnaround times, safety and security standards, environmental standards as well as maintenance of a humane work environment).
- Using agreed upon primary subcontractors, and assuming industry standard risks of performance including the payment of liquidated damages for failure to perform.
- Marketing available capacity at the TRRP to companies and agencies who are not already delivering Acceptable Material under an MD&SA with the County, subject to County approval.
- Paying for the disposal of residue from processing that exceeds 35.2% of materials delivered to the TRRP (subject to periodic waste composition verification in accordance with procedures mutually agreed upon and described in the Waste Services Contract).
- Complying with additional guarantees (including but not limited to development, construction, equipment, throughput, electric output, environmental and vehicle turnaround, etc.) described in the Waste Services Contract.
- Delivering residue from the processing of materials to the County for transport to the Landfill.
- Maintaining and repairing the TRRP in accordance with the agreed-upon maintenance manual and practices described in the Waste Services Contract and MSB will assume industry standard risks of performance including the payment of liquidated damages for failure to perform.
- Providing qualified, experienced and trained management, supervisorial, technical and line staff.
- Making payments described in the Waste Services Contract to the County (including a share of revenues from the sale of recyclable materials and products developed at the TRRP if such revenues exceed a baseline level as described in 6.b.vi).
- Keeping records (including those related to tonnages received and processed, billing, development, operations, marketing (including broker inspection reports), and financial transactions), providing County access to such records and providing monthly and annual reports (including adverse reports) as well as timely notices (e.g., 24 hour notice of non-compliance with performance guarantees), described in the Waste Services Contract.
- Paying all fines and penalties (including liquidated damages) related to non-compliance with permits, approvals and Waste Services Contract terms.

- Indemnifying the County and providing insurance, indemnities, bonds and further assurances in accordance with County standards described in the Waste Services Contract.

The County is responsible for:

- Receiving, inspecting, accepting, weighing, directing and charging customers for materials delivered to the Landfill in accordance with MD&SAs between the Public Participants (including the County as franchisor of solid waste services in the unincorporated area of the County) and the County.
- Making payments to MSB calculated in accordance with County- approved rates, and tonnage delivered to the TRRP.
- Disposing of residue from the TRRP at the Landfill.
- Indemnifying the MSB with regard to the TRRP site and providing insurance and bonds in accordance with terms described in the Waste Services Contract.
- Participating with MSB in marketing available capacity at the TRRP to companies and agencies who are not already delivering acceptable material under an MD&SA with the County.

Contractor Compensation

Pre-Construction, Development, and Construction and Equipping Compensation

- Compensation for Pre-Construction (Permits and Entitlements of \$4,000,000 and Design and Engineering of \$3,840,000) totaling \$7,840,000 or such lesser amount as the parties may agree as of the financial close.
- County shall pay MSB a Development Fee totaling \$3,090,000 for construction and equipping management.
- Construction and Equipment Costs – \$99,890,000 or such lesser amount as the parties may agree based on MSB's actual expenses necessarily incurred. MSB shall be compensated for constructing and equipping the TRRP in accordance with the Waste Services Contract.

Operation Compensation

- MSB's annual compensation for all costs of and profits for providing service shall be exclusively from:
 - A per ton rate, which is calculated based on the MSB receiving the revenues from the sale of recyclable materials up to a baseline;
 - A share of revenues received from the sale of recyclable materials and products produced at the TRRP as well as energy sales above a baseline; and,
 - Per ton rates applied to tons received at the Landfill as spot market materials based on terms mutually agreed to at the time the spot market materials are committed to including the sharing of any net benefits) and directed by the County to the TRRP;
- The Initial per ton rate paid MSB by County shall be \$15.15 per ton as identified in the MSB's pro-forma financial results of operations;
- The initial per ton rate shall be adjusted annually in accordance with certain cost indices, as agreed to by the Parties and described in the Waste Services Contract;

- County shall make payment to the MSB monthly for materials delivered to TRRP;
- County shall make payment (unless such lesser revenues results from MSB's failure to perform) to the MSB annually for annual revenues received, less than projected, from:
 - Recyclable material sales (\$7,942,680 projected);
 - Energy sales to the public utility less than \$1,281,750. County shall not make payment to the MSB for the first \$427,250 in annual energy sales revenue less than the \$1,709,000 projected; and,
 - Compost sales revenues less than projected (a projected cost of \$87,784).
- MSB shall make payment to the County annually, as follows:
 - Additional revenue received greater than projected from the sale of recyclables(\$7,942,680) will be shared :
 - with 75% being received by the County and 25% by MSB and MarBorg up to the point that MSB and MarBorg receive an additional \$500,000 in income (i.e., total additional revenue of \$2 million); and,
 - Thereafter the County will receive 90% and MSB and MarBorg will receive 10% of incremental additional revenues above \$11,464,000.
 - Additional revenue received greater than projected from the sale of compost (a cost of \$87,784) will be shared with:
 - 75% being received by the County and 25% by MSB and Bekon up to the point that MSB and Bekon receive an additional \$250,000 in income (i.e., total additional revenue of \$1 million); and,
 - Thereafter the County will receive 90% and MSB and Bekon will receive 10% of incremental additional revenues above revenue of \$836,040.
 - Additional revenue received greater than projected from the sale of electricity (\$1,709,000) will be shared with:
 - 75% being received by the County and 25% by MSB up to the point that MSB receives an additional \$500,000 in income (i.e., total additional revenue of \$2 million); and,
 - Thereafter the County will receive 90% and MSB will receive 10% of incremental additional revenues above the \$3,709,000.
- MSB shall ensure that throughout the term of the Waste Services Contract, the County receives "most-favored" rates, unless specifically waived by the County;
- The Acceptable Material Charge shall be adjusted in accordance with the change in the Consumer Price Index, for material changes directed by the County, force majeure events, and changes in law (including labor law); and, in accordance with procedures described in the Contract. Rates shall not be adjusted for increased costs of TRRP development, construction or operations; MSB's failure to perform; or changes in tonnage or composition of material delivered. Notwithstanding the foregoing, the \$15.15/ton tip fee paid to the TRRP for not less than 143,038 tons per year (based on 75% of the 190,717 franchised tons assumed to be delivered) is to be paid irrespective of whether the delivered tonnage is less than 143,038. The Rates will be adjusted to satisfy the bond covenants.

3.4 Permitting

The development of the proposed Project in California requires approval/permits from a number of regulatory authorities. Figure 3-5 provides a brief summary prepared by the County of those permits and approvals and their status.

Figure 3-5: TRRP Permit Requirements

Permit/Approval	Issuing Agency	Status	Actual/Expected Completion Date
Discretionary Permits/Approvals			
General Plan Consistency GC 65402a determination (L)	Santa Barbara County Planning and Development	Complete	1/6/2016
Project Approval/EIR Certification (L)	Santa Barbara County Board of Supervisors	Complete	7/12/2016
Approval of MD&SAs (L)	Cities of Santa Barbara*, Goleta*, Solvang* and Buellton*	In progress Complete In progress In progress	12/06/2016 11/01/2016 11/28/2016 12/8/2016
Authority to Construct (L)	Santa Barbara County Air Pollution Control District (staff issued)*	Complete	8/19/2016
Approval of MD&SAs and release Funding Package (L)	Santa Barbara County Board of Supervisors	In progress	12/13/2016
Solid Waste Facility Permit (SWFP) Revision (S)	Santa Barbara County Environmental Health Services/Local Enforcement Agency*, CalRecycle concurrence*	In progress	1/10/2017 but not later than 3/06/2017
Ministerial Permits/Approvals			
Revised Industrial Storm Water Permit (S)	Central Coast Regional Water Quality Control Board	In progress	2/2017
Construction Storm Water Permit (S)	Central Coast Regional Water Quality Control Board	In progress	2/2017

Permit/Approval	Issuing Agency	Status	Actual/Expected Completion Date
On-site Sewage Disposal System Permit (L)	Santa Barbara County Environmental Health Services	In progress	2/2017
Non-transient, Non-community Water System Permit (L)	Santa Barbara County Environmental Health Services	In progress	2/2017
Amended Joint Technical Document (Permits relocation of onsite office trailer and other infrastructure and grading necessary for the project)	Santa Barbara County Environmental Health Services/Local Enforcement Agency	Completed	9/21/2016
Building Permit (L)	Santa Barbara County P&D Building and Safety	In progress	4/2017
Interconnection agreement (L)	Southern California Edison	In progress	6/01/2017
Permit To Operate (L)	Santa Barbara County Air Pollution Control District (staff issued)*	Issued after construction of the permitted facility and the passing of acceptance testing.	9/2018

*CEQA Responsible Agency (is expected to use county's certified EIR in their permitting/approval process).

L- Local Permits, S- State Permits, F- No Federal Permits are required

3.4.1 County of Santa Barbara Approval

The County of Santa Barbara Board of Supervisors has the overall authority to approve the project (including implementing agreements) and certify the EIR. RRWMD is the CEQA Lead Agency and the Applicant for the Project. The County released the Draft Subsequent Environmental Impact Report (SEIR) on August 11, 2014. Public comments on the Draft SEIR closed on October 9, 2014. The project was approved and the Final SEIR was certified by the Board of Supervisors on July 12, 2016.

3.4.2 Santa Barbara County Air Pollution Control District

Air emission permits are required by the Santa Barbara County Air Pollution Control District ("SBCAPCD"). The TRRP will require an Authority to Construct ("ATC") and a Permit to Operate ("PTO") from the SBCAPCD. The ATC was issued on August 19, 2016.

3.4.3 California Central Coast Regional Water Quality Control Board

The California Central Coast Regional Water Quality Control Board ("CCRWQCB") issued Waste Discharge Requirements (WDRs) R3-2010-0006 on February 4, 2010 for the Tajiguas Landfill. The CCRWQCB also regulates construction and industrial stormwater discharge requirements under the National Pollution

Discharge Elimination System (NPDES). The Tajiguas Landfill currently operates under WDID 34S000451. Mustang and County staff have met with the CCRWQCB staff on numerous occasions since 2012. CCRWQCB staff have given their concurrence and preliminary acceptance of the CMU Report prepared by Mustang's engineers detailing the stormwater design & engineering and operational procedures to be followed by the Mustang team in the development and operations of the CMU. The CCRWQCB is not requiring updated landfill WDR's, but a revised Stormwater Pollution Prevention Plan pursuant to the Industrial General Stormwater Permit must be submitted that includes the TRRP facilities and the landfill. Additionally, County RRWMD staff are preparing a revision to the landfill's Joint Technical Document that will reflect the MRF and ADF/CMU. The JTD is required for the Tajiguas Landfill's Solid Waste Facilities Permit issued by CalRecycle and the LEA and the landfill's WDRs issued by the CCRWQCB. A construction SWPPP is needed and is expected by County staff to be submitted / approved no later than 1/10/17.

3.4.4 CalRecycle Administered by County Environmental Health Services Department

The State of California Department of Resources, Recycling and Recovery ("CalRecycle") has lead agency authority in California for permitting all waste disposal and processing facilities.

The Tajiguas Landfill operates pursuant to a Solid Waste Facility Permit (SWFP) # 42-AA- 0015 which was issued on February 10, 2014 by the Local Enforcement Agency (LEA) with concurrence of CalRecycle. RRWMD filed an amendment to the Joint Technical Document (JTD) on August 22, 2016 that was approved on September 21, 2016, for the relocation of the landfill operations facilities off of the operations deck and authorizing the grading required for the project. A Revision to the SWFP is also required for the operation of TRRP facilities. Mustang is preparing a Transfer Processing Report (TPR) and a combined In-vessel Digestion Report (IVDR) and Report of Composting Site Information (RCSI) to support the application to revise the Solid Waste Facility Permit for the Tajiguas Landfill to include the TRRP facilities. The TPR, IVDR and RCSI will be included as appendices to the revised JTD. The Revised SWFP was submitted on October 31, 2016 and deemed to be complete by the LEA on November 7, 2016. It is anticipated that the permit will be issued in mid-January of 2017, but no later than March 6, 2017

John Kular PE of John Kular Consulting has issued an opinion representing that the TRRP described in Santa Barbara County's Solid Waste Facility Permit (SWFP) as amended complies with and conforms to all applicable CalRecycle regulations and design requirements of the California Code of Regulations, Title 14, Natural Resources-Division 7.

The Revised SWFP was submitted on October 31, 2016 and deemed to be complete by the LEA on November 7, 2016. It is anticipated that the permit will be issued in mid-January of 2017, but no later than March 6, 2017.

3.4.5 California Energy Commission

The California Energy Commission ("CEC") is required to certify the ADF as a qualified renewable power generator. CEC renewable certification is required in order for California based utilities to purchase renewable energy from the ADF to meet their State of California mandated Renewable Portfolio Standards ("RPS") (20% by 2012 and 33% by 2020).

The CEC issued a Pre-Certification approval determining the TRRP ADF as an RPS eligible facility as of March 13, 2014. The facility is anticipated to receive its Final RPS eligibility certification upon commencement of operations anticipated for 3rd quarter of 2018.

3.4.6 California Public Utilities Commission

The California Public Utilities Commission (CPUC) is not required to approve the Project's renewable Power Purchase Agreement (PPA) executed between the investor owned utilities (e.g., SCE) under the contemplated Bioenergy Market Adjusting Tariff (i.e., BioMAT) as BioMAT was approved by the CPUC Decision (D.) 14-12-081 and D. 15-09-004.

3.4.7 Southern California Edison

Southern California Edison (SCE) and MSB are expected to execute an Interconnection Agreement and Power Purchase Agreement (PPA), allowing the electricity produced by the ADF to be sold into the SCE power grid. MSB estimates the SCE Interconnection Agreement and PPA will be completed prior to January 31, 2017 and the Interconnection Agreement will be completed prior to June 1, 2017.

3.4.8 Contractor's Representation Regarding Permits Required for Construction

Prior to issuance of the 2017 COPs, MSB will be required to represent that any and all permits required for construction and necessary for the County's issuance of a Notice to Proceed with Construction in accordance with the Waste Services Contract), will be in effect, at the time of issuance of the 2017 Solid Waste Installment Purchase Revenue COPs intended to finance TRRP improvements.

3.5 Alternative Facilities

3.5.1 Summary of Alternatives

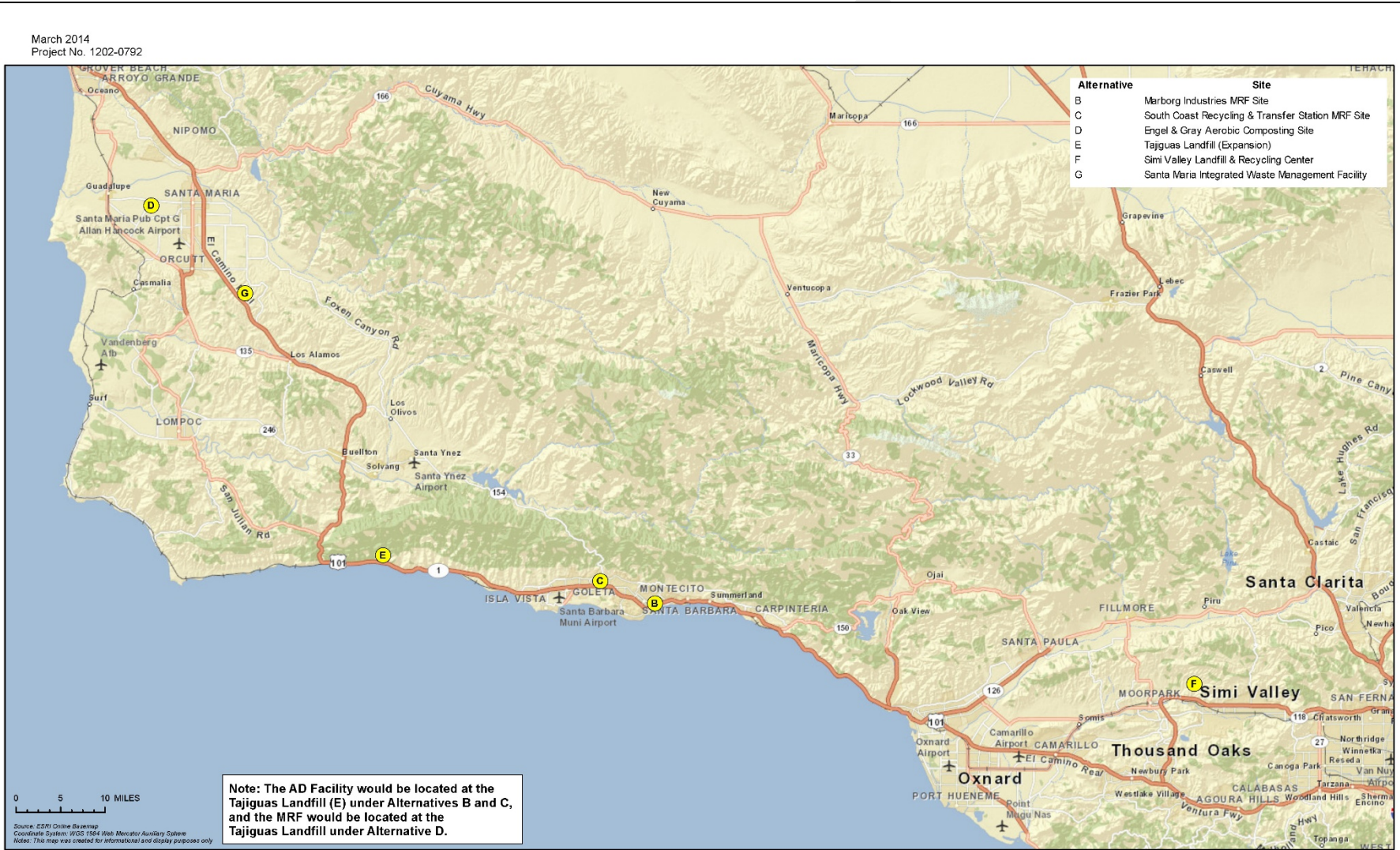
Alternative facilities for the processing and disposal of this material include:

- Processing
 - Gold Coast MRF in Ventura
 - Engel and Gray Composting Facility in Santa Maria
- Disposal
 - Simi Valley Landfill
 - Santa Maria Integrated Waste Management Facility

As shown in Figure 3-6 on the following page, these facilities are located at significant distance from the Tajiguas Landfill site.

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Figure 3-6: Location of Alternative Facilities



padre
 associates, inc.
 ENGINEERS, GEOLOGISTS &
 ENVIRONMENTAL SCIENTISTS
 Tajiguas Resource Recovery Project

ALTERNATIVE SITE LOCATION MAP
 FIGURE 5-1

3.5.2 Description

The EIR alternative analysis for the Project identified exporting waste for disposal to the Simi Valley Landfill and Recycling Center and the future Santa Maria Integrated Waste Management Facility. These are described below and an economic comparison is presented in Figure 3-7.

Simi Valley Landfill

The County could continue to dispose of waste at the Tajiguas Landfill through approximately 2026. It could then transfer all MSW at South Coast Recycling and Transfer Center and the MarBorg Construction and Demolition Recycling and Transfer Facility for transport to the Simi Valley Landfill and Recycling Center (SVLRC), owned by Waste Management approximately 60 miles from Santa Barbara. Upgrades to the SCRSTS would be required under this alternative. Comingled source separated recyclables would be processed at the Gold Coast MRF in Ventura. Source separated green waste collected on the south coast would be processed at the Tajiguas Landfill.

The SVLRC has permitted tonnage of 6,000 tons per day of MSW with an estimated closure date of 2052, based on the maximum permitted disposal rate. Current tonnage is 2,521 tons per day. The TRRP EIR reported that 2.7 million tons of MSW from Tajiguas could be accommodated over the 2026-2036 period, although this could be reduced by tonnage from other regional landfills.

Santa Maria Landfill

The County could continue to dispose of waste at the Tajiguas Landfill through to approximately 2026. It would then transfer all MSW at SCRSTS and the MarBorg C&D RTF for transport to the proposed Santa Maria Integrated Waste Management Facility, approximately 70 miles from the City of Santa Barbara. Comingled source separated recyclables would be processed at the Gold Coast MRF in Ventura. Source separated green waste collected on the south coast would be processed at the Tajiguas Landfill.

The City of Santa Maria plans to construct a new solid waste landfill with permitted tonnage of 1,600 tons per day with an estimated closure date of 2105, based on the maximum permitted disposal rate. A Final EIR was completed in 2010, the project was approved by the City Council and CalRecycle has issued a Solid Waste Facility Permit. Permits from other regulatory agencies are pending. The TRRP EIR reported that the City anticipates the Santa Maria IWMF would be operational in approximately 2020 depending on the remaining capacity of the existing Santa Maria Regional Landfill. The TRRP EIR reports that the Santa Maria IWMF EIR assumed it would receive 500 tons/day of MSW from Tajiguas Landfill, therefore, the overall volume of waste from Tajiguas Landfill could be accommodated.

3.5.3 Contractual Waste Flow Control

The County and the Public Participants are entering Waste Delivery and Material Services Agreements to contractually obligate the Public Participants to direct their material streams to the County. The Public Participants represent that they have the right to direct materials collected through franchise agreements between the Public Participants and Waste Management and MarBorg to the County.

The potential for the non-franchised waste to be taken to a disposal site other than County facilities is primarily a function of local policies, available capacity, transportation costs and time, and tipping fees. The primary existing landfill that might compete with Tajiguas for non-franchised waste is the Simi Valley Landfill. It has a lower cost of disposal but a higher cost of transportation. In the future, the Santa Maria Integrated Waste Management Facility may have a lower tip fee but would also have a higher cost of

transportation.

3.5.4 Economic Competitiveness

County staff prepared an estimate of comparative costs per ton for alternative disposal facilities as shown in Figure 3-7. In order to secure the self-haul fraction of the waste stream, two strategies have been adopted by the County. First, an agreement is anticipated to be entered with MarBorg, expected in December 2016, which controls approximately 75% of the self-haul stream to deliver its processed self-haul material to the Tajiguas Landfill at a price competitive with the alternatives at approximately \$95 per ton. Second, the rate is expected to be \$93 per ton for the remaining self-haul stream in order to maintain an economic advantage over the alternatives.

Figure 3-7: Comparison of Competing Facility Cost Per Ton

Rate Per Ton	Tajiguas Resource Recovery Project	Santa Maria Landfill	Simi Valley Landfill
Facility Disposal Cost ⁽¹⁾	\$ 70.00	\$ 71.00	\$ 66.25
Fixed County Cost ⁽²⁾	25.00	25.00	25.00
Disposal Rate <i>Difference to TRRP</i>	95.00	96.00 1.1%	91.25 -3.9%
Transportation Cost ^(3,4)	N/A	23.75	28.29
Total Disposal Cost <i>Difference to TRRP</i>	\$ 95.00	\$ 119.75 26.1%	\$ 119.54 25.8%

⁽¹⁾ The future cost of landfills is not known and the Santa Maria landfill replacement has not been built.

⁽²⁾ County fees and surcharges.

⁽³⁾ Does not include the cost for any necessary expansion of transfer facilities.

⁽⁴⁾ Incremental roundtrip distance to landfills is 122.4 miles to Santa Maria Landfill and 145.8 miles to Simi Valley Landfill using SCRSTS as staging area.

These costs reflect only the cost to dispose of material and do not reflect additional future costs that would be necessary to meet state mandates related to enhanced diversion of organics and recyclables. These mandates are met through the enhanced processing capabilities of the proposed TRRP.

As shown in in Figure 3-7, the County costs compare favorably to the alternative landfills with less than a 5% difference in each competing facility to the TRRP. With the additional cost of transportation, the competing facilities compare less favorably with more than a 25% difference to the TRRP.

The transportation portion of the rate was based on an assumed 17.5 tons per load delivered, which is the County's experience with existing equipment (This is in the low range if the transfer equipment has unused capacity that could be utilized to reduce the cost per ton). An average payload size of 20 tons (which is achieved with other equipment) could reduce the transportation cost about by about 13% per ton or \$3 per ton and the Tajiguas rate would still be competitive.

SECTION 4.0 PROJECTED FINANCIAL RESULTS OF OPERATIONS

4.1 Projected Financial Results of Operations (Base Case)

The County staff assisted by KNN prepared the County's Projections that include historical operating results for the five years ending 2016; budgeted projections for the two years ending 2018; and, projected financial results through the bond repayment period ending 2038

For the initial year of TRRP operations (2019), the County has eliminated approximately \$4.0 million of County operating expenses and another \$3.0 million in 2020. These costs were either one-time, will no longer be necessary, or will be transferred to MSB and are therefore already included in the TRRP costs.

Figure 4-1 summarizes in 5-year increments presents the Base Case projected financial information for the years 2019 through 2038. The projected results are presented in Attachment A.

Figure 4-1: Summary of Base Case Financial Results of Operations

Year	Revenue	Net Expense	Net Revenue	Debt Service Coverage	Tip Fee
2019	\$ 37,751	\$ 25,708	\$ 12,043	2.36 X	\$ 118.00
2023	\$ 42,722	\$ 27,344	\$ 15,378	1.54 X	\$ 137.23
2028	\$ 48,614	\$ 33,213	\$ 15,401	1.60 X	\$ 160.64
2033	\$ 55,572	\$ 39,871	\$ 15,701	1.71 X	\$ 188.04
2038	\$ 63,763	\$ 47,758	\$ 16,005	1.82 X	\$ 220.12

4.2 Key Assumptions and Support

4.2.1 Projected Material Volumes and Composition

The County projects material volumes to be delivered to the system as shown in Figure 4-2. Once the TRRP commences operations (Post-TRRP), franchised volumes are projected to be 64% of the total material stream while self-haul and other sources are projected to be 36%.

Figure 4-2: Projected TRRP Material Volumes and Rates

POST TRRP - MSW	SOUTH COAST RECYCLE & TRANSFER STATION TONS	SANTA YNEZ RECYCLE & TRANSFER STATION TONS	TAJIGUAS LANDFILL TONS	TOTAL TONS	% of TOTAL TONS	RATE	TOTAL 2019 REVENUE	% of TOTAL REVENUE
MSW - Franchised (Flow Agreement)								
City of Santa Barbara Franchise			60,463	60,463	19%	\$ 118.00	\$ 7,134,634	23%
City of Goleta Franchise			22,074	22,074	7%	\$ 118.00	\$ 2,604,732	8%
Unincorporated Franchise			36,933	36,933	12%	\$ 118.00	\$ 4,358,094	14%
City of Buellton Franchise			4,064	4,064	1%	\$ 118.00	\$ 479,552	2%
City of Solvang Franchise			3,632	3,632	1%	\$ 118.00	\$ 428,576	1%
Subtotal Franchised			* 127,166	127,166	40%		15,005,588	47%
MSW - Non Franchised								
MarBorg Contract - Residual			53,291	53,291	17%	\$ 95.00	\$ 5,062,645	16%
MSW - Self-Haul	* 12,000	6,000		18,000	6%	\$ 93.00	\$ 1,674,000	5%
Franchise Waste	* 7,000	731		7,731	2%	\$ 118.00	\$ 912,258	3%
Hard To Handle	4,698	5,897		10,595	3%	\$ 118.00	\$ 1,250,210	4%
C & D Materials	1,263	328		1,591	0%	\$ 118.00	\$ 187,738	1%
Other Agencies			* 6,000	6,000	2%	\$ 118.00	\$ 708,000	2%
Self Haul Direct			3,126	3,126	1%	\$ 118.00	\$ 368,868	1%
Subtotal Non Franchised	24,961	12,956	62,417	100,334	31%		10,163,719	32%
MSW Total	24,961	12,956	189,583	227,500	71%		25,169,307	79%
Recyclables - Franchised								
Recyclables			* 34,247	34,247	11%	\$ 118.00	\$ 4,041,146	13%
Recyclables Total Franchised	-	-	34,247	34,247	11%		4,041,146	13%
Organics - Franchised								
Green/Wood Waste			37,764	37,764	12%	\$ 45.00	\$ 1,699,380	5%
Food Waste			* 4,304	4,304	1%	\$ 118.00	\$ 507,872	2%
Organics Total Franchised			42,068	42,068	13%		2,207,252	7%
Other Self-Haul - Non Franchised								
C&D Dirt Tailings for ADC			15,000	15,000	5%	\$ 17.00	\$ 255,000	1%
Metal	145	52		197	0%	\$ 10.00	\$ 1,970	0%
Other Total Non Franchised	145	52	15,000	15,197	5%		256,970	1%
Grand Total	25,106	13,008	280,898	319,012	100%		31,674,675	100%

* Tonnage to be processed through TRRP = 190,717 total tons

Typically, franchised volumes have historically exceeded 70% of the total material delivered to Tajiguas as shown in Figure 4-3. The Post-TRRP material includes approximately 53,000 of non-franchised tons that are anticipated to be delivered from MarBorg under a separate disposal contract and result in the higher ratio of non-franchised to franchised material volumes.

Figure 4-3: Summary Historical Franchised Vs. Non-Franchised Material

Franchised (MSW, Recycling, Organic)	FY 11-12	% of Total	FY 12-13	% of Total	FY 13-14	% of Total	FY 14-15	% of Total	FY 15-16	% of Total
County	58,062	25%	58,378	24%	56,169	23%	55,402	23%	56,534	22%
Santa Barbara	79,108	34%	85,044	35%	84,792	35%	84,804	34%	85,551	33%
Goleta	29,701	13%	30,356	13%	29,647	12%	30,118	12%	31,483	12%
Buelton	5,337	2%	5,057	2%	5,121	2%	5,160	2%	5,327	2%
Solvang	4,014	2%	4,332	2%	4,168	2%	4,291	2%	4,344	2%
Other	5,607	2%	6,348	3%	6,599	3%	5,507	2%	5,992	2%
Subtotal	181,828	79%	189,515	78%	186,496	76%	185,282	75%	189,231	72%
Non-Franchised (MSW, Recycling, Organic)										
County	16,595	7%	17,182	7%	18,501	8%	19,133	8%	22,565	9%
Santa Barbara	19,970	9%	23,121	10%	25,916	11%	26,841	11%	32,477	12%
Goleta	7,252	3%	8,324	3%	9,268	4%	9,812	4%	12,211	5%
Buelton	1,305	1%	1,417	1%	1,647	1%	1,718	1%	2,141	1%
Solvang	779	0%	746	0%	702	0%	701	0%	848	0%
Other	2,111	1%	2,346	1%	2,568	1%	2,336	1%	2,687	1%
Subtotal	48,012	21%	53,135	22%	58,603	24%	60,541	25%	72,928	28%
MSW Total	229,840	100%	242,650	100%	245,099	100%	245,823	100%	262,159	100%

The County's projections assume no change in material volume or composition for fiscal years 2019 through 2038. Total volumes have changed the last four years by 5.57% in FY 2013 over FY 2012, (1.01%) in FY 2014 over FY 2013, (0.30%) in FY 2015 over FY 2014, and 6.65% in FY 2016 over FY 2015.

Figure 4-2 presents projected Post-TRRP tonnage based on expected contractual agreements with the public participants, MarBorg, and detailed waste stream allocations. Figure 4-3 provides a historical summary to total franchised vs. non-franchised tonnage and by jurisdiction of origin. (Figures 2-7 through 2-10 also presented historical figures in this manner.)

4.2.2 Historical Operating Revenues and Expenses

Historical operating revenues and expenses for fiscal years 2011 through 2016, based on current facility operations, are presented in Figure 4-4. The historical results were obtained from the County's Comprehensive Annual Financial Report (CAFR) that were audited by Brown Armstrong.

The CAFR provides only total revenues (both operating and non-operating revenue). For purposes of the Projections, total revenue was disaggregated. Operating revenues include tip fees from refuse and green waste, and recyclable and energy sales revenue. Non-operating revenues include program fees, household hazardous waste revenue, gain or loss on asset sales and other county programs and fees received.

Figure 4-4: Historical Operating Revenues and Expenses

Fiscal Year Ending June 30, In 000's	Historical ⁽¹⁾					
	2011	2012	2013	2014	2015	2016
Operating Revenue	18,112	18,171	19,152	20,084	19,779	21,163
Non-Operating Revenues	3,445	8,665	4,029	4,020	3,824	4,192
Total Revenues	21,557	26,836	23,181	24,104	23,603	25,355
Operating Expenses						
Salaries & Benefits	7,887	7,686	7,552	8,190	7,870	8,537
Services & Supplies	3,960	4,800	4,044	4,530	4,206	4,216
Contractual Services	5,590	5,010	5,782	5,591	5,067	6,429
Contractual Services MRF/AD						
Depreciation and Amortization	1,998	2,008	2,025	2,243	2,391	2,438
County Overhead Allocation	455	346	258	120	253	317
Other Charges	0	0	0	0	0	0
Closure/Post Closure	798	124	665	(565)	6,126 ⁽²⁾	725
Total Operating Expenses	20,688	19,974	20,326	20,109	25,913	22,662
Operating Income	869	6,862	2,855	3,995	(2,310)	2,693

⁽¹⁾ From County Comprehensive Annual Financial Report. Excludes Interest Income.

⁽²⁾ In 2015, the County recognized charge of \$5,998K for under funded closure liability.

4.2.3 Projected Operating Revenues and Expenses and Debt Service Coverage Ratios

Attachment A shows the County's projected operating results for fiscal years 2019 through 2038. This period includes the 20 year bond repayment beginning in 2019, following the capitalized interest period. Based on the information provided, the County expects to achieve debt service coverage ratios that exceed 1.50 times debt service for each year through 2038.

4.2.4 Summary of Other Significant Assumptions and Support

The County's expected financial results of operations is presented in Attachment A.

The projections in Attachment A were provided by the County and based on:

- The County's Comprehensive Annual Financial Report (CAFR) from fiscal years 2011 through 2016;
- The County's budget projections for fiscal years 2017 and 2018; and,
- Commencement of the new MRF, ADF, and composting operations as of January 1, 2019.

The projection of revenues and expenses is presented in two sections:

- Revenues for current and expected operations.
- Expenses for current and expected operations.

Revenues

The primary source of revenue is expected to be from the tip fees charged on all inbound material to the facility. Tip fee revenue is projected to be approximately 89% of the total revenue in the Base Case (ranging from 84% in 2019 to 93% by 2038). The remaining 11% of revenue is for non-operating revenues. Based on the last 5 years of financial performance, through FY 2016, total revenues increased 3.2%

annually.

Tip Fees

The projections prepared by the County assume a 5.0% increase to refuse tip fees (no increase to volume) in the second year, 4.0% in the third year with the remaining years at an annual rate increase of 3.2%. The higher increase for the first two years is necessary to achieve an acceptable debt service coverage ratio throughout the bond repayment period. The following annual 3.2% increases are consistent with economic forecasts of inflation for the region.

Green Waste Fees

The County is projecting green waste tip fees to increase by 3.2% each year through 2038.

Other Revenues

Other operating revenues are projected to remain flat for all but the year 2019 when energy revenue sales from the ADF are expected to commence.

Other non-operating revenues include an expected IRS interest cost subsidy for Clean Renewable Energy Bonds (CREB) for certain CREB-eligible project costs, consisting primarily of the ADF and components of the MRF. This interest cost subsidy is expected to decrease as the bonds are paid. The subsidy is tied to interest on the Solid Waste Installment Purchase Revenue COP's that declines over time.

Expenses

The County's six year historical growth rate for operating expenses (excluding non-cash charges for depreciation and amortization and closure/post closure charges) was 2.1%. The TRRP's expenses are assumed to grow at an annual rate of 3%.

Following commencement of TRRP operations, the County projects non-TRRP related operating expenses (excluding non-cash charges for depreciation and amortization and closure/post closure charges) to decrease by 19% or \$7.0 million (\$4.0 million in FY 2019 and \$3.0 million in FY 2020) over budgeted FY 2018 expenses. This decrease is attributable to labor, operational, subcontractor expenses and one time capital expenditures that are expected to be eliminated once the TRRP begins operations. This decrease is partially offset by the payment of \$2.9 million to MSB.

4.3 Sensitivity Analyses

The County staff's projected operating information in Attachment A serves as the "Base Case" for the sensitivity analysis. The sensitivity analysis is provided to evaluate how changes in some of the assumed values for the Base Case may affect the facility tipping fee and the associated impacts on self-haul customers and franchised ratepayers.

We have prepared, four "downside" scenarios:

1. Reduction in recycling commodity prices
2. Elimination of all recycling commodity revenue except for California Redemption Value (CRV)
3. Reduced Self Haul Tonnage
4. Reduced Volume Through the ADF

The sensitivity analyses present the effects of the four assumptions to the Base Case projected financial results of operations. Each scenario is evaluated independently to the Base Case projections.

It is important to note that the solid waste collection bill that a residential or commercial customer pays is comprised on average of 50-60% for the collection of material (paid to the franchised service provider), 30-40% on processing and disposal tip fees, and 10% on government fees. Therefore, any change in the tip fee for the TRRP processing and Tajiguas Landfill disposal component of the rate is expected to be diluted due to the majority of the service cost being related to the collection of the material. For example, if the tipping fee for waste accepted at the TRRP increases 20%, the increase to the ratepayer subscribing to waste collection services would increase by approximately 6.6%.

4.3.1 Sensitivity Analysis: 20% Reduced Recyclable Prices

The recyclable prices received by the County were 20% less in FY 2016 compared to FY 2015. Commodity prices in the Base Case are reflective of the 12 month average for the period ending June 2016. The County is projecting recycling commodity revenue to remain flat from 2019 through 2038.

Recyclable materials commodity prices regularly go through periods of fluctuation in pricing supply and demand. Prices also tend to vary based on the quality of material.

Figure 4-5 illustrates the decline in actual commodity prices for the County's South Coast Recycle and Transfer Station for the 12 month average ending in June 2016 used in the Base Case and compared to the 12 month average ending in June 2015, and to the 5 year and 10 year averages ending June 2016. While it would be reasonable to estimate that the market will experience future fluctuations, the current climate has many concerned that the current depressed prices could be a long term shift and a "new normal" in the recycling industry.

Figure 4-5: Comparison of Historical Commodity Averages

Commodity	12-Month Average through June 2016	12-Month Average through June 2015	Percentage Change	5-Year Average through June 2016	Percentage Change	10-Year Average through June 2016	Percentage Change
Cardboard	\$ 133.37	\$ 143.91	-7.3%	\$ 153.85	-13.3%	\$ 146.35	-8.9%
Newspaper	\$ 82.73	\$ 98.18	-15.7%	\$ 111.62	-25.9%	\$ 118.39	-30.1%
Brown	\$ 176.87	\$ 176.87	0.0%	\$ 176.87	0.0%	\$ 183.40	-3.6%
Green Glass	\$ 159.87	\$ 159.87	0.0%	\$ 159.87	0.0%	\$ 166.43	-3.9%
Clear	\$ 190.00	\$ 189.57	0.2%	\$ 188.03	1.0%	\$ 193.05	-1.6%
HDPE Color	\$ 381.81	\$ 480.21	-20.5%	\$ 479.39	-20.4%	\$ 511.79	-25.4%
HDPE Natural	\$ 523.00	\$ 747.74	-30.1%	\$ 679.10	-23.0%	\$ 695.64	-24.8%
PETE	\$ 1,410.69	\$ 1,540.86	-8.4%	\$ 1,673.86	-15.7%	\$ 1,778.23	-20.7%
Tin Cans	\$ 30.83	\$ 84.58	-63.5%	\$ 105.82	-70.9%	\$ 104.53	-70.5%
Aluminum	\$ 3,741.67	\$ 4,015.00	-6.8%	\$ 3,939.23	-5.0%	\$ 4,074.58	-8.2%
Office Pack	\$ -	\$ -	N/A	\$ -	N/A	\$ -	N/A
Mixed Paper	\$ 82.72	\$ 98.18	-15.7%	\$ 107.07	-22.7%	\$ 110.05	-24.8%
Residue	\$ -	\$ -	N/A	\$ -	N/A	\$ -	N/A
Mixed Glass	\$ 76.68	\$ 76.77	-0.1%	\$ 95.52	-19.7%	\$ 127.31	-39.8%
Scrap Plastic	\$ 77.08	\$ 134.17	-42.5%	\$ 105.05	-26.6%	\$ 104.10	-26.0%
Film/Paper Mix	\$ -	\$ -	N/A	\$ -	N/A	\$ -	N/A

Reducing the County's assumed value of the recyclables revenue from the current pricing results in the financial results of operations as summarized in Figure 4-6.

Figure 4-6: Sensitivity Analysis: Comparison of 20% Reduced Recyclable Prices to Base Case

Year	Revenue (000's)	Net Expense (000's)	Net Revenue (000's)	Debt Service Coverage	Tip Fee
2019	\$ 39,192	\$ 27,296	\$ 11,896	2.33 X	\$ 125.40
2023	\$ 44,398	\$ 28,933	\$ 15,465	1.55 X	\$ 145.84
2028	\$ 50,576	\$ 34,802	\$ 15,775	1.64 X	\$ 170.72
2033	\$ 57,869	\$ 41,459	\$ 16,410	1.78 X	\$ 199.84
2038	\$ 66,451	\$ 49,347	\$ 17,105	1.95 X	\$ 233.92

As shown in Figure 4-7 below, the tip fee would increase by 6.3% over the Base Case 3.2% resulting in a 9.5% increase.

Figure 4-7: Comparison of Reduced Recycling Prices to Base Case

Year	Base Case		Decrease in Commodity Revenue		% Change in Tip Fee
	Debt Service Coverage	Tip Fee	Debt Service Coverage	Tip Fee	
2019	2.36 X	\$ 118.00	2.33 X	\$ 125.40	6.3%
2023	1.54 X	\$ 137.23	1.55 X	\$ 145.84	6.3%
2028	1.60 X	\$ 160.64	1.64 X	\$ 170.72	6.3%
2033	1.71 X	\$ 188.04	1.78 X	\$ 199.84	6.3%
2038	1.82 X	\$ 220.12	1.95 X	\$ 233.92	6.3%

4.3.2 Sensitivity Analysis: Elimination of Recycling Commodity Revenue, Except CRV

The Base Case assumes recycling commodity revenue remains the same as the 12 month average ending June 2016, for the 20 year bond repayment schedule. As shown in Figure 4-5 above, commodity prices through June 2016 are lower than the previous 1 year average, 5 year average, and 10 year average.

Given the downward trend in recent years and uncertainties about the world economy and future demand, this sensitivity presents a "worst-case" scenario eliminating all commodity revenue except that covered in the *California Beverage Container Recycling and Litter Reduction Act*, often referred to as the "Bottle Bill". Under this program the State collects a deposit on certain containers and pays redemption and processing fees to processors when the materials are recycled. Figure 4-8 summarizes the impact to the rate, if all Non-CRV revenue is eliminated, resulting in an increased initial tip fee of \$142.25 per ton to the Public Participants.

Figure 4-8: Sensitivity Analysis Eliminating Non-CRV Commodity Revenue

Year	Revenue (000's)	Net Expense (000's)	Net Revenue (000's)	Debt Service Coverage	Tip Fee
2019	\$ 42,474	\$ 30,738	\$ 11,736	2.29 X	\$ 142.25
2023	\$ 48,214	\$ 32,374	\$ 15,840	1.58 X	\$ 165.44
2028	\$ 55,044	\$ 38,243	\$ 16,801	1.75 X	\$ 193.66
2033	\$ 63,099	\$ 44,901	\$ 18,198	1.98 X	\$ 226.69
2038	\$ 72,573	\$ 52,788	\$ 19,785	2.25 X	\$ 265.36

As shown in Figure 4-9 below, the tip fee would increase by 20.6% over the Base Case 3.2%, resulting in a 23.8% increase.

Figure 4-9: Comparison of Eliminating Non-CRV Recycling Revenue to Base Case

Year	Base Case		Eliminate Non-CRV Commodity Revenue		% Change in Tip Fee
	Debt Service Coverage	Tip Fee	Debt Service Coverage	Tip Fee	
2019	2.36 X	\$ 118.00	2.29 X	\$ 142.25	20.6%
2023	1.54 X	\$ 137.23	1.58 X	\$ 165.44	20.6%
2028	1.60 X	\$ 160.64	1.75 X	\$ 193.66	20.6%
2033	1.71 X	\$ 188.04	1.98 X	\$ 226.69	20.6%
2038	1.82 X	\$ 220.12	2.25 X	\$ 265.36	20.6%

4.3.3 Sensitivity Analysis: 25,000 TPY Reduced Self-Haul Tonnage

The County's revenue from tip fees is based on the assumption that self-haul tonnage, not subject to the MD&SAs, or MarBorg's disposal agreement will continue to be delivered to Tajiguas. The total tonnage not subject to the MD&SAs is 78,291 of which 53,291 tons comes from MarBorg and 25,000 tons comes from other customers. MarBorg, as the MRF operator, has an incentive to bring material to the TRRP and is negotiating a disposal commitment with the County but the other self-haulers do not have such a commitment. While current estimates of competitive costs of landfill disposal indicate that it may be more cost effective for customers to go to the Tajiguas facility, those estimates may be incorrect and the actual comparison may be different. Figure 4-10 summarizes the impact of reducing the self-haul tonnage by the 25,000 tons annually that comes from self-haul customers other than MarBorg.

Figure 4-10: Sensitivity Analyses Reflecting 25,000 Fewer Tons per Year of Self Haul Material

Year	Revenue (000's)	Net Expense (000's)	Net Revenue (000's)	Debt Service Coverage	Tip Fee
2019	\$ 37,692	\$ 25,708	\$ 11,984	2.34 X	\$ 131.00
2023	\$ 42,653	\$ 27,344	\$ 15,309	1.53 X	\$ 152.35
2028	\$ 48,534	\$ 33,213	\$ 15,321	1.60 X	\$ 178.34
2033	\$ 55,478	\$ 39,871	\$ 15,607	1.70 X	\$ 208.76
2038	\$ 63,653	\$ 47,758	\$ 15,894	1.81 X	\$ 244.37

As shown in Figure 4-11 below, the tip fee would increase by 11.0% over the Base Case 3.2% resulting in a 14.2% increase.

Figure 4-11: Comparison of Reduced Self-Haul to Base Case

Year	Base Case		Reduce Self-Haul Volume		% Change in Tip Fee
	Debt Service Coverage	Tip Fee	Debt Service Coverage	Tip Fee	
2019	2.36 X	\$ 118.00	2.34 X	\$ 131.00	11.0%
2023	1.54 X	\$ 137.23	1.53 X	\$ 152.35	11.0%
2028	1.60 X	\$ 160.64	1.60 X	\$ 178.34	11.0%
2033	1.71 X	\$ 188.04	1.70 X	\$ 208.76	11.0%
2038	1.82 X	\$ 220.12	1.81 X	\$ 244.37	11.0%

4.3.4 Sensitivity Analysis: 16,000 TPY Reduced Volume Through ADF

The Base Case assumes that annually 15,553 tons of MRF Residue from the processing of mixed municipal solid waste and source separated recyclables will be part of the feedstock of the ADF. The Bekon reference projects identified the material they received as source separated organic materials. The Residue from the MRF has a higher amount of contamination and may result in excessive compost contamination making sale of the compost difficult or more expensive. The impact of reducing the volume of the material processed through the ADF is that revenues from the sale of electricity are reduced. Figure 4-12 summarizes the impact of reducing the throughput to the ADF by this amount.

Figure 4-12: Sensitivity Analysis Reducing 16,000 TPY Through ADF

Year	Revenue (000's)	Net Expense (000's)	Net Revenue (000's)	Debt Service Coverage	Tip Fee
2019	\$ 38,140	\$ 26,225	\$ 11,915	2.33 X	\$ 120.00
2023	\$ 43,175	\$ 27,861	\$ 15,313	1.53 X	\$ 139.56
2028	\$ 49,145	\$ 33,731	\$ 15,414	1.61 X	\$ 163.37
2033	\$ 56,193	\$ 40,388	\$ 15,805	1.72 X	\$ 191.23
2038	\$ 64,490	\$ 48,276	\$ 16,214	1.85 X	\$ 223.85

As shown in Figure 4-13 below, the tip fee would increase by 1.7% over the Base Case 3.2% resulting in a 4.9% increase.

Figure 4-13: Comparison of Reducing ADF Volume to Base Case

Year	Base Case		Eliminate Paper Fines from AD Facility		% Change in Tip Fee
	Debt Service Coverage	Tip Fee	Debt Service Coverage	Tip Fee	
2019	2.36 X	\$ 118.00	2.33 X	\$ 120.00	1.7%
2023	1.54 X	\$ 137.23	1.53 X	\$ 139.56	1.7%
2028	1.60 X	\$ 160.64	1.61 X	\$ 163.37	1.7%
2033	1.71 X	\$ 188.04	1.72 X	\$ 191.23	1.7%
2038	1.82 X	\$ 220.12	1.85 X	\$ 223.85	1.7%

SECTION 5.0 CONCLUSION

5.1 Consultant's Conclusions

On the basis of our review and analysis and the assumptions set forth in this report, we conclude:

1. Based on the current County estimate of the useful remaining life of the Tajiguas Landfill, with the operation of the TRRP, it has sufficient capacity to provide for disposal of the projected waste stream through 2036.
2. The County's estimates of future waste quantities and composition appear reasonable in light of historical quantities and the assumption of no increase in quantity.
3. The County is currently negotiating agreements that will secure the projected waste streams from the Public Participants.
4. The County is currently negotiating a disposal agreement with MarBorg that will secure the projected processed self-haul waste from MarBorg.
5. The County proposes to set the remaining self-haul rates to be competitive with the market.
6. The County's estimates of future operating costs for existing operations appear reasonable in light of historical performance and its assumptions regarding future conditions.
7. The County's estimates of future capital and operating costs and revenues for the TRRP appear reasonable in light of the County's independent consultant's review of the MRF and the estimates of MSB and its subcontractors and a contract has been entered into with MSB for the construction and operation of the facilities based on these estimates
8. The County's assumption that the TRRP will be put in services by 2019 appears reasonable in light of its agreement with MSB.
9. For the Base Case Projected Operating Results, annual inflation-adjusted tip fees, revenues from product sales and miscellaneous income as presented in this report are estimated to be adequate to pay annual operating expenses and achieve the following debt service coverage ratios during the term of the financing (see Figure 5-1).

Figure 5-1: Reasonable Debt Service Coverage Ratios

Year	Revenue	Net Expense	Net Revenue	Debt Service Coverage	Tip Fee	Percentage Change
2019	\$ 37,751	\$ 25,708	\$ 12,043	2.36 X	\$ 118.00	0%
2023	\$ 42,722	\$ 27,344	\$ 15,378	1.54 X	\$ 137.23	16%
2028	\$ 48,614	\$ 33,213	\$ 15,401	1.60 X	\$ 160.64	13%
2033	\$ 55,572	\$ 39,871	\$ 15,701	1.71 X	\$ 188.04	13%
2038	\$ 63,763	\$ 47,758	\$ 16,005	1.82 X	\$ 220.12	13%

While we believe the base model is reasonable, it contains certain assumed values for key variables and alternative values may also be reasonable. For this reason, we performed an analysis to determine the impact on the debt service coverage ratio if assumptions regarding these key variables were to change and its subsequent effect on disposal rates to the public participants.

Figure 5-2 shows the change in debt service coverage and corresponding rate under each scenario individually described in Section 4. The County’s Bond Covenant is to require a debt service coverage ratio of at least 1.5 times operating income.

Figure 5-2: Change in Coverage Ratio and Rate with All Sensitivity Scenarios

Year	Base Case		Decrease in Commodity Revenue		Eliminate Non-CRV Commodity Revenue		Reduced Self-Haul Volume		Eliminate MRF Residue from AD Facility	
	Debt Service Coverage	Tip Fee	Debt Service Coverage	Tip Fee	Debt Service Coverage	Tip Fee	Debt Service Coverage	Tip Fee	Debt Service Coverage	Tip Fee
2019	2.36 X	\$ 118.00	2.33 X	\$ 125.40	2.29 X	\$ 142.25	2.34 X	\$ 131.00	2.33 X	\$ 120.00
2020	1.51 X	\$ 123.90	1.50 X	\$ 131.67	1.50 X	\$ 149.36	1.50 X	\$ 137.55	1.50 X	\$ 126.00
2021	1.52 X	\$ 128.86	1.51 X	\$ 136.94	1.53 X	\$ 155.34	1.51 X	\$ 143.05	1.51 X	\$ 131.04
2022	1.53 X	\$ 132.98	1.53 X	\$ 141.32	1.56 X	\$ 160.31	1.52 X	\$ 147.63	1.52 X	\$ 135.23
2023	1.54 X	\$ 137.23	1.55 X	\$ 145.84	1.58 X	\$ 165.44	1.53 X	\$ 152.35	1.53 X	\$ 139.56
2024	1.55 X	\$ 141.63	1.56 X	\$ 150.51	1.61 X	\$ 170.73	1.54 X	\$ 157.23	1.54 X	\$ 144.03
2025	1.56 X	\$ 146.16	1.58 X	\$ 155.32	1.64 X	\$ 176.20	1.55 X	\$ 162.26	1.56 X	\$ 148.64
2026	1.58 X	\$ 150.84	1.60 X	\$ 160.29	1.68 X	\$ 181.83	1.57 X	\$ 167.45	1.57 X	\$ 153.39
2027	1.59 X	\$ 155.66	1.62 X	\$ 165.42	1.71 X	\$ 187.65	1.58 X	\$ 172.81	1.59 X	\$ 158.30
2028	1.60 X	\$ 160.64	1.64 X	\$ 170.72	1.75 X	\$ 193.66	1.60 X	\$ 178.34	1.61 X	\$ 163.37
2029	1.63 X	\$ 165.78	1.68 X	\$ 176.18	1.80 X	\$ 199.85	1.63 X	\$ 184.05	1.64 X	\$ 168.59
2030	1.65 X	\$ 171.09	1.70 X	\$ 181.82	1.84 X	\$ 206.25	1.64 X	\$ 189.94	1.66 X	\$ 173.99
2031	1.67 X	\$ 176.56	1.73 X	\$ 187.64	1.89 X	\$ 212.85	1.66 X	\$ 196.02	1.68 X	\$ 179.56
2032	1.69 X	\$ 182.21	1.76 X	\$ 193.64	1.93 X	\$ 219.66	1.68 X	\$ 202.29	1.70 X	\$ 185.30
2033	1.71 X	\$ 188.04	1.78 X	\$ 199.84	1.98 X	\$ 226.69	1.70 X	\$ 208.76	1.72 X	\$ 191.23
2034	1.73 X	\$ 194.06	1.81 X	\$ 206.23	2.03 X	\$ 233.94	1.72 X	\$ 215.44	1.74 X	\$ 197.35
2035	1.75 X	\$ 200.27	1.84 X	\$ 212.83	2.08 X	\$ 241.43	1.74 X	\$ 222.34	1.77 X	\$ 203.67
2036	1.77 X	\$ 206.68	1.88 X	\$ 219.64	2.14 X	\$ 249.16	1.76 X	\$ 229.45	1.79 X	\$ 210.18
2037	1.80 X	\$ 213.29	1.91 X	\$ 226.67	2.19 X	\$ 257.13	1.79 X	\$ 236.79	1.82 X	\$ 216.91
2038	1.82 X	\$ 220.12	1.95 X	\$ 233.92	2.25 X	\$ 265.36	1.81 X	\$ 244.37	1.85 X	\$ 223.85

ATTACHMENT A: COMPREHENSIVE FINANCIAL PROJECTIONS FOR REVENUE BONDS (BASE CASE)

County of Santa Barbara - Resource Recovery																
<i>(in thousands of dollars)</i>																
Fiscal Year Ending June 30,	Historical (1)				Budget		Projections==>									
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Projected Tonnage (Public Participants)							190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717
Projected Tip Fee							\$ 118.00	\$ 123.90	\$ 128.86	\$ 132.98	\$ 137.23	\$ 141.63	\$ 146.16	\$ 150.84	\$ 155.66	\$ 160.64
Revenues																
Charges for services	\$ 16,098	\$ 17,208	\$ 17,306	\$ 19,154	\$ 17,982	\$ 25,357	\$ 31,675	\$ 33,228	\$ 34,543	\$ 35,648	\$ 36,789	\$ 37,966	\$ 39,181	\$ 40,435	\$ 41,729	\$ 43,064
Other operating revenues (2)	3,229	3,356	3,405	3,454	2,916	2,917	3,221	3,237	3,240	3,242	3,245	3,248	3,251	3,254	3,257	3,260
Use of money and property	244	590	510	606	135	135	135	135	135	135	135	135	135	135	135	135
Other non-operating revenues (3)	3,610	2,950	2,382	2,141	3,207	3,192	2,720	2,707	2,690	2,633	2,553	2,473	2,394	2,314	2,235	2,155
Total Revenues (4)	23,181	24,104	23,603	25,355	24,239	31,600	37,751	39,306	40,607	41,658	42,722	43,822	44,961	46,138	47,355	48,614
Operating Expenses																
Salaries & Benefits	\$ 7,552	\$ 8,190	\$ 7,870	\$ 8,537	\$ 9,278	\$ 9,637	\$ 8,991	\$ 9,260	\$ 9,538	\$ 9,824	\$ 10,119	\$ 10,423	\$ 10,735	\$ 11,057	\$ 11,389	\$ 11,731
Services & Supplies	3,240	3,743	3,374	3,338	5,176	4,882	7,401	4,533	4,669	4,809	4,953	5,102	5,255	5,413	5,575	5,742
Contractual Services	5,782	5,591	5,067	6,429	6,227	6,475	4,338	4,468	4,602	4,741	4,883	5,029	5,180	5,336	5,496	5,660
Contractual Services MRF/AD							2,889	3,561	4,203	4,614	5,037	5,474	5,923	6,386	6,863	7,354
County Overhead Allocation	258	120	253	317	281	308	317	327	336	347	357	368	379	390	402	414
Other Charges (5)	804	787	832	878	814	835	1,087	1,120	1,153	1,188	1,224	1,260	1,298	1,337	1,377	1,419
Closure/postclosure costs (6)	665	(565)	6,126	725	1,055	1,055	685	706	727	749	771	794	818	842	868	894
Total Operating Expenses	18,301	17,866	23,522	20,224	22,832	23,192	25,708	23,974	25,229	26,271	27,344	28,450	29,588	30,761	31,969	33,213
Net Revenues	4,880	6,238	81	5,131	1,408	8,409	12,043	15,332	15,378	15,387	15,378	15,373	15,372	15,377	15,387	15,401
Solid Waste Revenue COP Debt Service	0	0	0	0	0	0	(5,114)	(10,156)	(10,143)	(10,080)	(10,000)	(9,922)	(9,844)	(9,761)	(9,685)	(9,603)
Solid Waste Revenue COP D/S Coverage (Annual)	N/A	N/A	N/A	N/A	N/A	N/A	2.36x	1.51x	1.52x	1.53x	1.54x	1.55x	1.56x	1.58x	1.59x	1.60x
Solid Waste Revenue COP D/S Coverage (MADS)	N/A	N/A	N/A	N/A	N/A	N/A	1.19x	1.51x	1.51x	1.52x	1.51x	1.51x	1.51x	1.51x	1.52x	1.52x
Notes:																
(1) From County CAFRs and County Public Works Department, excludes interest expense and depreciation																
(2) Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.																
(3) Non-Operating Revenues includes rental income, State revenue, Federal revenue; oil, e-waste, container sales, and CREBS Reimbursement.																
(4) Includes Operating and Non-Operating Revenues excluding interest expense. Includes earnings on cash.																
(5) Other Charges include: County Services, Motor Pool, and Utilities																
(6) Only cash contribution to Closure/Postclosure Fund used to calculate Net Revenues and Debt Service Coverage.																

ATTACHMENT A: COMPREHENSIVE FINANCIAL PROJECTIONS FOR REVENUE BONDS (BASE CASE CONTINUED)

County of Santa Barbara - Resource Recovery										
<i>(in thousands of dollars)</i>										
Fiscal Year Ending June 30,	Projections==>									
	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Projected Tonnage (Public Participants)	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717
Projected Tip Fee	\$ 165.78	\$ 171.09	\$ 176.56	\$ 182.21	\$ 188.04	\$ 194.06	\$ 200.27	\$ 206.68	\$ 213.29	\$ 220.12
Revenues										
Charges for services	\$ 44,442	\$ 45,864	\$ 47,332	\$ 48,847	\$ 50,410	\$ 52,023	\$ 53,688	\$ 55,406	\$ 57,179	\$ 59,008
Other operating revenues (2)	3,263	3,266	3,270	3,273	3,277	3,281	3,284	3,288	3,292	3,297
Use of money and property	135	135	135	135	135	135	135	135	135	0
Other non-operating revenues (3)	2,075	1,995	1,914	1,833	1,750	1,667	1,583	1,497	1,411	1,458
Total Revenues (4)	49,916	51,261	52,651	54,088	55,572	57,106	58,690	60,326	62,017	63,763
Operating Expenses										
Salaries & Benefits	\$ 12,083	\$ 12,445	\$ 12,819	\$ 13,203	\$ 13,599	\$ 14,007	\$ 14,427	\$ 14,860	\$ 15,306	\$ 15,765
Services & Supplies	5,914	6,092	6,275	6,463	6,657	6,856	7,062	7,274	7,492	7,717
Contractual Services	5,830	6,005	6,185	6,371	6,562	6,759	6,962	7,171	7,386	7,607
Contractual Services MRF/AD	7,713	8,234	8,770	9,323	9,892	10,479	11,083	11,705	12,345	13,005
County Overhead Allocation	426	439	452	466	480	494	509	524	540	556
Other Charges (5)	1,461	1,505	1,550	1,597	1,644	1,694	1,745	1,797	1,851	1,906
Closure/postclosure costs (6)	921	948	977	1,006	1,036	1,067	1,099	1,132	1,166	1,201
Total Operating Expenses	34,348	35,668	37,028	38,428	39,871	41,356	42,887	44,463	46,086	47,758
Net Revenues	15,567	15,593	15,623	15,659	15,701	15,749	15,803	15,864	15,931	16,005
Solid Waste Revenue COP Debt Service	(9,522)	(9,444)	(9,362)	(9,281)	(9,199)	(9,117)	(9,031)	(8,941)	(8,858)	(8,775)
Solid Waste Revenue COP D/S Coverage (Annual)	1.63x	1.65x	1.67x	1.69x	1.71x	1.73x	1.75x	1.77x	1.80x	1.82x
Solid Waste Revenue COP D/S Coverage (MADS)	1.53x	1.54x	1.54x	1.54x	1.55x	1.55x	1.56x	1.56x	1.57x	1.58x
Notes:										
(1) From County CAFRs and County Public Works Department, excludes interest expense and depreciation										
(2) Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.										
(3) Non-Operating Revenues includes rental income, State revenue, Federal revenue; oil, e-waste, container sales, and CREBS Reimbursement.										
(4) Includes Operating and Non-Operating Revenues excluding interest expense. Includes earnings on cash.										
(5) Other Charges include: County Services, Motor Pool, and Utilities										
(6) Only cash contribution to Closure/Postclosure Fund used to calculate Net Revenues and Debt Service Coverage.										

ATTACHMENT B: REDUCED RECYCLING COMMODITY PRICES (SCENARIO 1)

County of Santa Barbara - Resource Recovery																
<i>(in thousands of dollars)</i>																
Fiscal Year Ending June 30,	Historical (1)				Budget		Projections==>									
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Projected Tonnage (Public Participants)							190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717
Projected Tip Fee							\$ 125.40	\$ 131.67	\$ 136.94	\$ 141.32	\$ 145.84	\$ 150.51	\$ 155.32	\$ 160.29	\$ 165.42	\$ 170.72
Revenues																
Charges for services	\$ 16,098	\$ 17,208	\$ 17,306	\$ 19,154	\$ 17,982	\$ 25,357	\$ 33,116	\$ 34,741	\$ 36,117	\$ 37,272	\$ 38,465	\$ 39,696	\$ 40,966	\$ 42,277	\$ 43,630	\$ 45,026
Other operating revenues (2)	3,229	3,356	3,405	3,454	2,916	2,917	3,221	3,237	3,240	3,242	3,245	3,248	3,251	3,254	3,257	3,260
Use of money and property	244	590	510	606	135	135	135	135	135	135	135	135	135	135	135	135
Other non-operating revenues (3)	3,610	2,950	2,382	2,141	3,207	3,192	2,720	2,707	2,690	2,633	2,553	2,473	2,394	2,314	2,235	2,155
Total Revenues (4)	23,181	24,104	23,603	25,355	24,239	31,600	39,192	40,820	42,181	43,282	44,398	45,552	46,746	47,980	49,257	50,576
Operating Expenses																
Salaries & Benefits	\$ 7,552	\$ 8,190	\$ 7,870	\$ 8,537	\$ 9,278	\$ 9,637	\$ 8,991	\$ 9,260	\$ 9,538	\$ 9,824	\$ 10,119	\$ 10,423	\$ 10,735	\$ 11,057	\$ 11,389	\$ 11,731
Services & Supplies	3,240	3,743	3,374	3,338	5,176	4,882	7,401	4,533	4,669	4,809	4,953	5,102	5,255	5,413	5,575	5,742
Contractual Services	5,782	5,591	5,067	6,429	6,227	6,475	4,338	4,468	4,602	4,741	4,883	5,029	5,180	5,336	5,496	5,660
Contractual Services MRF/AD (5)							4,477	5,149	5,791	6,202	6,626	7,062	7,512	7,974	8,451	8,942
County Overhead Allocation	258	120	253	317	281	308	317	327	336	347	357	368	379	390	402	414
Other Charges (6)	804	787	832	878	814	835	1,087	1,120	1,153	1,188	1,224	1,260	1,298	1,337	1,377	1,419
Closure/postclosure costs (7)	665	(565)	6,126	725	1,055	1,055	685	706	727	749	771	794	818	842	868	894
Total Operating Expenses	18,301	17,866	23,522	20,224	22,832	23,192	27,296	25,563	26,817	27,859	28,933	30,038	31,177	32,350	33,558	34,802
Net Revenues	4,880	6,238	81	5,131	1,408	8,409	11,896	15,257	15,364	15,423	15,465	15,514	15,569	15,631	15,699	15,775
Solid Waste Revenue COP Debt Service	0	0	0	0	0	0	(5,114)	(10,156)	(10,143)	(10,080)	(10,000)	(9,922)	(9,844)	(9,761)	(9,685)	(9,603)
Solid Waste Revenue COP D/S Coverage (Annual)	N/A	N/A	N/A	N/A	N/A	N/A	2.33x	1.50x	1.51x	1.53x	1.55x	1.56x	1.58x	1.60x	1.62x	1.64x
Solid Waste Revenue COP D/S Coverage (MADS)	N/A	N/A	N/A	N/A	N/A	N/A	1.17x	1.50x	1.51x	1.52x	1.52x	1.53x	1.53x	1.54x	1.55x	1.55x
Notes:																
(1)	From County CAFRs and County Public Works Department.															
(2)	Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.															
(3)	Non-Operating Revenues includes rental income, State revenue, Federal revenue; oil, e-waste, container sales, and CREBS Reimbursement.															
(4)	Includes Operating and Non-Operating Revenues excluding interest expense. Includes earnings on cash.															
(5)	Decrease in Recyclable Revenue results to increase in Tip Fee and increase payment to MSB.															
(6)	Other Charges include: County Services, Motor Pool, and Utilities															
(7)	Only cash contribution to Closure/Postclosure Fund used to calculate Net Revenues and Debt Service Coverage.															

ATTACHMENT B: REDUCED RECYCLING COMMODITY PRICES (SCENARIO 1 CONTINUED)

County of Santa Barbara - Resource Recovery

(in thousands of dollars)

Fiscal Year Ending June 30,	Projections==>									
	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Projected Tonnage (Public Participants)	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717
Projected Tip Fee	\$ 176.18	\$ 181.82	\$ 187.64	\$ 193.64	\$ 199.84	\$ 206.23	\$ 212.83	\$ 219.64	\$ 226.67	\$ 233.92
Revenues										
Charges for services	\$ 46,467	\$ 47,954	\$ 49,489	\$ 51,072	\$ 52,707	\$ 54,393	\$ 56,134	\$ 57,930	\$ 59,784	\$ 61,697
Other operating revenues (2)	3,263	3,266	3,270	3,273	3,277	3,281	3,284	3,288	3,292	3,297
Use of money and property	135	135	135	135	135	135	135	135	135	0
Other non-operating revenues (3)	2,075	1,995	1,914	1,833	1,750	1,667	1,583	1,497	1,411	1,458
Total Revenues (4)	51,941	53,351	54,808	56,313	57,869	59,476	61,136	62,851	64,622	66,451
Operating Expenses										
Salaries & Benefits	\$ 12,083	\$ 12,445	\$ 12,819	\$ 13,203	\$ 13,599	\$ 14,007	\$ 14,427	\$ 14,860	\$ 15,306	\$ 15,765
Services & Supplies	5,914	6,092	6,275	6,463	6,657	6,856	7,062	7,274	7,492	7,717
Contractual Services	5,830	6,005	6,185	6,371	6,562	6,759	6,962	7,171	7,386	7,607
Contractual Services MRF/AD (5)	9,302	9,822	10,359	10,912	11,481	12,067	12,671	13,293	13,934	14,594
County Overhead Allocation	426	439	452	466	480	494	509	524	540	556
Other Charges (6)	1,461	1,505	1,550	1,597	1,644	1,694	1,745	1,797	1,851	1,906
Closure/postclosure costs (7)	921	948	977	1,006	1,036	1,067	1,099	1,132	1,166	1,201
Total Operating Expenses	35,937	37,257	38,616	40,017	41,459	42,945	44,475	46,051	47,675	49,347
Net Revenues	16,004	16,094	16,191	16,296	16,410	16,531	16,661	16,799	16,947	17,105
Solid Waste Revenue COP Debt Service	(9,522)	(9,444)	(9,362)	(9,281)	(9,199)	(9,117)	(9,031)	(8,941)	(8,858)	(8,775)
Solid Waste Revenue COP D/S Coverage (Annual)	1.68x	1.70x	1.73x	1.76x	1.78x	1.81x	1.84x	1.88x	1.91x	1.95x
Solid Waste Revenue COP D/S Coverage (MADS)	1.58x	1.58x	1.59x	1.60x	1.62x	1.63x	1.64x	1.65x	1.67x	1.68x

Notes:

- (1) From County CAFRs and County Public Works Department.
- (2) Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.
- (3) Non-Operating Revenues includes rental income, State revenue, Federal revenue; oil, e-waste, container sales, and CREBS Reimbursement.
- (4) Includes Operating and Non-Operating Revenues excluding interest expense. Includes earnings on cash.
- (5) Decrease in Recyclable Revenue results to increase in Tip Fee and increase payment to MSB.
- (6) Other Charges include: County Services, Motor Pool, and Utilities
- (7) Only cash contribution to Closure/Postclosure Fund used to calculate Net Revenues and Debt Service Coverage.

ATTACHMENT C: ELIMINATION OF COMMODITY REVENUE, EXCEPT CRV (SCENARIO 2)

County of Santa Barbara - Resource Recovery

(in thousands of dollars)

Fiscal Year Ending June 30,	Historical (1)				Budget		Projections==>										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Projected Tonnage (Public Participants)							190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717
Projected Tip Fee							\$ 142.25	\$ 149.36	\$ 155.34	\$ 160.31	\$ 165.44	\$ 170.73	\$ 176.20	\$ 181.83	\$ 187.65	\$ 193.66	
Revenues																	
Charges for services	\$ 16,098	\$ 17,208	\$ 17,306	\$ 19,154	\$ 17,982	\$ 25,357	\$ 36,398	\$ 38,187	\$ 39,700	\$ 40,971	\$ 42,282	\$ 43,635	\$ 45,031	\$ 46,472	\$ 47,959	\$ 49,494	
Other operating revenues (2)	3,229	3,356	3,405	3,454	2,916	2,917	3,221	3,237	3,240	3,242	3,245	3,248	3,251	3,254	3,257	3,260	
Use of money and property	244	590	510	606	135	135	135	135	135	135	135	135	135	135	135	135	
Other non-operating revenues (3)	3,610	2,950	2,382	2,141	3,207	3,192	2,720	2,707	2,690	2,633	2,553	2,473	2,394	2,314	2,235	2,155	
Total Revenues (4)	23,181	24,104	23,603	25,355	24,239	31,600	42,474	44,266	45,765	46,981	48,214	49,491	50,810	52,175	53,586	55,044	
Operating Expenses																	
Salaries & Benefits	\$ 7,552	\$ 8,190	\$ 7,870	\$ 8,537	\$ 9,278	\$ 9,637	\$ 8,991	\$ 9,260	\$ 9,538	\$ 9,824	\$ 10,119	\$ 10,423	\$ 10,735	\$ 11,057	\$ 11,389	\$ 11,731	
Services & Supplies	3,240	3,743	3,374	3,338	5,176	4,882	7,401	4,533	4,669	4,809	4,953	5,102	5,255	5,413	5,575	5,742	
Contractual Services	5,782	5,591	5,067	6,429	6,227	6,475	4,338	4,468	4,602	4,741	4,883	5,029	5,180	5,336	5,496	5,660	
Contractual Services MRF/AD (5)							7,919	8,591	9,233	9,644	10,067	10,504	10,953	11,416	11,893	12,384	
County Overhead Allocation	258	120	253	317	281	308	317	327	336	347	357	368	379	390	402	414	
Other Charges (6)	804	787	832	878	814	835	1,087	1,120	1,153	1,188	1,224	1,260	1,298	1,337	1,377	1,419	
Closure/postclosure costs (7)	665	(565)	6,126	725	1,055	1,055	685	706	727	749	771	794	818	842	868	894	
Total Operating Expenses	18,301	17,866	23,522	20,224	22,832	23,192	30,738	29,004	30,259	31,301	32,374	33,480	34,618	35,791	36,999	38,243	
Net Revenues	4,880	6,238	81	5,131	1,408	8,409	11,736	15,261	15,506	15,680	15,840	16,011	16,192	16,384	16,587	16,801	
Solid Waste Revenue COP Debt Service	0	0	0	0	0	0	(5,114)	(10,156)	(10,143)	(10,080)	(10,000)	(9,922)	(9,844)	(9,761)	(9,685)	(9,603)	
Solid Waste Revenue COP D/S Coverage (Annual)	N/A	N/A	N/A	N/A	N/A	N/A	2.29x	1.50x	1.53x	1.56x	1.58x	1.61x	1.64x	1.68x	1.71x	1.75x	
Solid Waste Revenue COP D/S Coverage (MADS)	N/A	N/A	N/A	N/A	N/A	N/A	1.16x	1.50x	1.53x	1.54x	1.56x	1.58x	1.59x	1.61x	1.63x	1.65x	

Notes:

- (1) From County CAFRs and County Public Works Department.
- (2) Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.
- (3) Non-Operating Revenues includes rental income, State revenue, Federal revenue; oil, e-waste, container sales, and CREBS Reimbursement.
- (4) Includes Operating and Non-Operating Revenues excluding interest expense. Includes earnings on cash.
- (5) Decrease in Recyclable Revenue results to increase in Tip Fee and increase payment to MSB.
- (6) Other Charges include: County Services, Motor Pool, and Utilities
- (7) Only cash contribution to Closure/Postclosure Fund used to calculate Net Revenues and Debt Service Coverage.

ATTACHMENT C: ELIMINATION OF COMMODITY REVENUE, EXCEPT CRV (SCENARIO 2 CONTINUED)

County of Santa Barbara - Resource Recovery										
<i>(in thousands of dollars)</i>										
Fiscal Year Ending June 30,	Projections==>									
	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Projected Tonnage (Public Participants)	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717
Projected Tip Fee	\$ 199.85	\$ 206.25	\$ 212.85	\$ 219.66	\$ 226.69	\$ 233.94	\$ 241.43	\$ 249.16	\$ 257.13	\$ 265.36
Revenues										
Charges for services	\$ 51,078	\$ 52,712	\$ 54,399	\$ 56,140	\$ 57,936	\$ 59,790	\$ 61,704	\$ 63,678	\$ 65,716	\$ 67,819
Other operating revenues (2)	3,263	3,266	3,270	3,273	3,277	3,281	3,284	3,288	3,292	3,297
Use of money and property	135	135	135	135	135	135	135	135	135	0
Other non-operating revenues (3)	2,075	1,995	1,914	1,833	1,750	1,667	1,583	1,497	1,411	1,458
Total Revenues (4)	56,551	58,109	59,718	61,381	63,099	64,873	66,706	68,599	70,554	72,573
Operating Expenses										
Salaries & Benefits	\$ 12,083	\$ 12,445	\$ 12,819	\$ 13,203	\$ 13,599	\$ 14,007	\$ 14,427	\$ 14,860	\$ 15,306	\$ 15,765
Services & Supplies	5,914	6,092	6,275	6,463	6,657	6,856	7,062	7,274	7,492	7,717
Contractual Services	5,830	6,005	6,185	6,371	6,562	6,759	6,962	7,171	7,386	7,607
Contractual Services MRF/AD (5)	12,743	13,264	13,800	14,353	14,922	15,509	16,113	16,735	17,375	18,035
County Overhead Allocation	426	439	452	466	480	494	509	524	540	556
Other Charges (6)	1,461	1,505	1,550	1,597	1,644	1,694	1,745	1,797	1,851	1,906
Closure/postclosure costs (7)	921	948	977	1,006	1,036	1,067	1,099	1,132	1,166	1,201
Total Operating Expenses	39,378	40,698	42,058	43,458	44,901	46,386	47,917	49,493	51,116	52,788
Net Revenues	17,173	17,410	17,660	17,923	18,198	18,487	18,789	19,106	19,438	19,785
Solid Waste Revenue COP Debt Service	(9,522)	(9,444)	(9,362)	(9,281)	(9,199)	(9,117)	(9,031)	(8,941)	(8,858)	(8,775)
Solid Waste Revenue COP D/S Coverage (Annual)	1.80x	1.84x	1.89x	1.93x	1.98x	2.03x	2.08x	2.14x	2.19x	2.25x
Solid Waste Revenue COP D/S Coverage (MADS)	1.69x	1.71x	1.74x	1.76x	1.79x	1.82x	1.85x	1.88x	1.91x	1.95x
Notes:										
(1) From County CAFRs and County Public Works Department.										
(2) Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.										
(3) Non-Operating Revenues includes rental income, State revenue, Federal revenue; oil, e-waste, container sales, and CREBS Reimbursement.										
(4) Includes Operating and Non-Operating Revenues excluding interest expense. Includes earnings on cash.										
(5) Decrease in Recyclable Revenue results to increase in Tip Fee and increase payment to MSB.										
(6) Other Charges include: County Services, Motor Pool, and Utilities										
(7) Only cash contribution to Closure/Postclosure Fund used to calculate Net Revenues and Debt Service Coverage.										

ATTACHMENT D: REDUCED SELF HAUL TONNAGE (SCENARIO 3)

County of Santa Barbara - Resource Recovery

(in thousands of dollars)

Fiscal Year Ending June 30,	Historical (1)				Budget		Projections==>									
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Projected Tonnage (Public Participants)							190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717
Projected Tip Fee							\$ 131.00	\$ 137.55	\$ 143.05	\$ 147.63	\$ 152.35	\$ 157.23	\$ 162.26	\$ 167.45	\$ 172.81	\$ 178.34
Revenues																
Charges for services	\$ 16,098	\$ 17,208	\$ 17,306	\$ 19,154	\$ 17,982	\$ 25,357	\$ 31,616	\$ 33,166	\$ 34,478	\$ 35,582	\$ 36,720	\$ 37,895	\$ 39,108	\$ 40,359	\$ 41,651	\$ 42,984
Other operating revenues (2)	3,229	3,356	3,405	3,454	2,916	2,917	3,221	3,237	3,240	3,242	3,245	3,248	3,251	3,254	3,257	3,260
Use of money and property	244	590	510	606	135	135	135	135	135	135	135	135	135	135	135	135
Other non-operating revenues (3)	3,610	2,950	2,382	2,141	3,207	3,192	2,720	2,707	2,690	2,633	2,553	2,473	2,394	2,314	2,235	2,155
Total Revenues (4)	23,181	24,104	23,603	25,355	24,239	31,600	37,692	39,244	40,543	41,591	42,653	43,751	44,887	46,062	47,277	48,534
Operating Expenses																
Salaries & Benefits	\$ 7,552	\$ 8,190	\$ 7,870	\$ 8,537	\$ 9,278	\$ 9,637	\$ 8,991	\$ 9,260	\$ 9,538	\$ 9,824	\$ 10,119	\$ 10,423	\$ 10,735	\$ 11,057	\$ 11,389	\$ 11,731
Services & Supplies	3,240	3,743	3,374	3,338	5,176	4,882	7,401	4,533	4,669	4,809	4,953	5,102	5,255	5,413	5,575	5,742
Contractual Services	5,782	5,591	5,067	6,429	6,227	6,475	4,338	4,468	4,602	4,741	4,883	5,029	5,180	5,336	5,496	5,660
Contractual Services MRF/AD							2,889	3,561	4,203	4,614	5,037	5,474	5,923	6,386	6,863	7,354
County Overhead Allocation	258	120	253	317	281	308	317	327	336	347	357	368	379	390	402	414
Other Charges (5)	804	787	832	878	814	835	1,087	1,120	1,153	1,188	1,224	1,260	1,298	1,337	1,377	1,419
Closure/postclosure costs (6)	665	(565)	6,126	725	1,055	1,055	685	706	727	749	771	794	818	842	868	894
Total Operating Expenses	18,301	17,866	23,522	20,224	22,832	23,192	25,708	23,974	25,229	26,271	27,344	28,450	29,588	30,761	31,969	33,213
Net Revenues	4,880	6,238	81	5,131	1,408	8,409	11,984	15,270	15,314	15,321	15,309	15,302	15,299	15,301	15,309	15,321
Solid Waste Revenue COP Debt Service	0	0	0	0	0	0	(5,114)	(10,156)	(10,143)	(10,080)	(10,000)	(9,922)	(9,844)	(9,761)	(9,685)	(9,603)
Solid Waste Revenue COP D/S Coverage (Annual)	N/A	N/A	N/A	N/A	N/A	N/A	2.34x	1.50x	1.51x	1.52x	1.53x	1.54x	1.55x	1.57x	1.58x	1.60x
Solid Waste Revenue COP D/S Coverage (MADS)	N/A	N/A	N/A	N/A	N/A	N/A	1.18x	1.50x	1.51x	1.51x	1.51x	1.51x	1.51x	1.51x	1.51x	1.51x

Notes:

- (1) From County CAFRs and County Public Works Department.
- (2) Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.
- (3) Non-Operating Revenues includes rental income, State revenue, Federal revenue; oil, e-waste, container sales, and CREBS Reimbursement.
- (4) Includes Operating and Non-Operating Revenues excluding interest expense. Includes earnings on cash.
- (5) Other Charges include: County Services, Motor Pool, and Utilities
- (6) Only cash contribution to Closure/Postclosure Fund used to calculate Net Revenues and Debt Service Coverage.

ATTACHMENT D: REDUCED SELF HAUL TONNAGE (SCENARIO 3 CONTINUED)

County of Santa Barbara - Resource Recovery										
<i>(in thousands of dollars)</i>										
Fiscal Year Ending June 30,	Projections==>									
	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Projected Tonnage (Public Participants)	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717
Projected Tip Fee	\$ 184.05	\$ 189.94	\$ 196.02	\$ 202.29	\$ 208.76	\$ 215.44	\$ 222.34	\$ 229.45	\$ 236.79	\$ 244.37
Revenues										
Charges for services	\$ 44,359	\$ 45,779	\$ 47,244	\$ 48,755	\$ 50,316	\$ 51,926	\$ 53,587	\$ 55,302	\$ 57,072	\$ 58,898
Other operating revenues (2)	3,263	3,266	3,270	3,273	3,277	3,281	3,284	3,288	3,292	3,297
Use of money and property	135	135	135	135	135	135	135	135	135	0
Other non-operating revenues (3)	2,075	1,995	1,914	1,833	1,750	1,667	1,583	1,497	1,411	1,458
Total Revenues (4)	49,833	51,175	52,563	53,996	55,478	57,008	58,589	60,223	61,910	63,653
Operating Expenses										
Salaries & Benefits	\$ 12,083	\$ 12,445	\$ 12,819	\$ 13,203	\$ 13,599	\$ 14,007	\$ 14,427	\$ 14,860	\$ 15,306	\$ 15,765
Services & Supplies	5,914	6,092	6,275	6,463	6,657	6,856	7,062	7,274	7,492	7,717
Contractual Services	5,830	6,005	6,185	6,371	6,562	6,759	6,962	7,171	7,386	7,607
Contractual Services MRF/AD	7,713	8,234	8,770	9,323	9,892	10,479	11,083	11,705	12,345	13,005
County Overhead Allocation	426	439	452	466	480	494	509	524	540	556
Other Charges (5)	1,461	1,505	1,550	1,597	1,644	1,694	1,745	1,797	1,851	1,906
Closure/postclosure costs (6)	921	948	977	1,006	1,036	1,067	1,099	1,132	1,166	1,201
Total Operating Expenses	34,348	35,668	37,028	38,428	39,871	41,356	42,887	44,463	46,086	47,758
Net Revenues	15,484	15,507	15,535	15,568	15,607	15,652	15,703	15,760	15,824	15,894
Solid Waste Revenue COP Debt Service	(9,522)	(9,444)	(9,362)	(9,281)	(9,199)	(9,117)	(9,031)	(8,941)	(8,858)	(8,775)
Solid Waste Revenue COP D/S Coverage (Annual)	1.63x	1.64x	1.66x	1.68x	1.70x	1.72x	1.74x	1.76x	1.79x	1.81x
Solid Waste Revenue COP D/S Coverage (MADS)	1.52x	1.53x	1.53x	1.53x	1.54x	1.54x	1.55x	1.55x	1.56x	1.57x
Notes:										
(1) From County CAFRs and County Public Works Department.										
(2) Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.										
(3) Non-Operating Revenues includes rental income, State revenue, Federal revenue; oil, e-waste, container sales, and CREBS Reimbursement.										
(4) Includes Operating and Non-Operating Revenues excluding interest expense. Includes earnings on cash.										
(5) Other Charges include: County Services, Motor Pool, and Utilities										
(6) Only cash contribution to Closure/Postclosure Fund used to calculate Net Revenues and Debt Service Coverage.										

ATTACHMENT E: REDUCED VALUE THROUGH ADF (SCENARIO 4)

County of Santa Barbara - Resource Recovery

(in thousands of dollars)

Fiscal Year Ending June 30,	Historical (1)				Budget		Projections==>										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Projected Tonnage (Public Participants)							190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717
Projected Tip Fee							\$ 120.00	\$ 126.00	\$ 131.04	\$ 135.23	\$ 139.56	\$ 144.03	\$ 148.64	\$ 153.39	\$ 158.30	\$ 163.37	
Revenues																	
Charges for services	\$ 16,098	\$ 17,208	\$ 17,306	\$ 19,154	\$ 17,982	\$ 25,357	\$ 32,064	\$ 33,637	\$ 34,968	\$ 36,087	\$ 37,242	\$ 38,434	\$ 39,664	\$ 40,933	\$ 42,243	\$ 43,595	
Other operating revenues (2)	3,229	3,356	3,405	3,454	2,916	2,917	3,221	3,237	3,240	3,242	3,245	3,248	3,251	3,254	3,257	3,260	
Use of money and property	244	590	510	606	135	135	135	135	135	135	135	135	135	135	135	135	
Other non-operating revenues (3)	3,610	2,950	2,382	2,141	3,207	3,192	2,720	2,707	2,690	2,633	2,553	2,473	2,394	2,314	2,235	2,155	
Total Revenues (4)	23,181	24,104	23,603	25,355	24,239	31,600	38,140	39,715	41,032	42,097	43,175	44,290	45,443	46,636	47,869	49,145	
Operating Expenses																	
Salaries & Benefits	\$ 7,552	\$ 8,190	\$ 7,870	\$ 8,537	\$ 9,278	\$ 9,637	\$ 8,991	\$ 9,260	\$ 9,538	\$ 9,824	\$ 10,119	\$ 10,423	\$ 10,735	\$ 11,057	\$ 11,389	\$ 11,731	
Services & Supplies	3,240	3,743	3,374	3,338	5,176	4,882	7,401	4,533	4,669	4,809	4,953	5,102	5,255	5,413	5,575	5,742	
Contractual Services	5,782	5,591	5,067	6,429	6,227	6,475	4,338	4,468	4,602	4,741	4,883	5,029	5,180	5,336	5,496	5,660	
Contractual Services MRF/AD							3,406	4,078	4,720	5,131	5,555	5,991	6,440	6,903	7,380	7,871	
County Overhead Allocation	258	120	253	317	281	308	317	327	336	347	357	368	379	390	402	414	
Other Charges (5)	804	787	832	878	814	835	1,087	1,120	1,153	1,188	1,224	1,260	1,298	1,337	1,377	1,419	
Closure/postclosure costs (6)	665	(565)	6,126	725	1,055	1,055	685	706	727	749	771	794	818	842	868	894	
Total Operating Expenses	18,301	17,866	23,522	20,224	22,832	23,192	26,225	24,492	25,746	26,788	27,861	28,967	30,106	31,278	32,486	33,731	
Net Revenues	4,880	6,238	81	5,131	1,408	8,409	11,915	15,224	15,286	15,309	15,313	15,323	15,337	15,357	15,383	15,414	
Solid Waste Revenue COP Debt Service	0	0	0	0	0	0	(5,114)	(10,156)	(10,143)	(10,080)	(10,000)	(9,922)	(9,844)	(9,761)	(9,685)	(9,603)	
Solid Waste Revenue COP D/S Coverage (Annual)	N/A	N/A	N/A	N/A	N/A	N/A	2.33x	1.50x	1.51x	1.52x	1.53x	1.54x	1.56x	1.57x	1.59x	1.61x	
Solid Waste Revenue COP D/S Coverage (MADS)	N/A	N/A	N/A	N/A	N/A	N/A	1.17x	1.50x	1.51x	1.51x	1.51x	1.51x	1.51x	1.51x	1.51x	1.52x	

Notes:

- (1) From County CAFRs and County Public Works Department.
- (2) Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.
- (3) Non-Operating Revenues includes rental income, State revenue, Federal revenue; oil, e-waste, container sales, and CREBS Reimbursement.
- (4) Includes Operating and Non-Operating Revenues excluding interest expense. Includes earnings on cash.
- (5) Other Charges include: County Services, Motor Pool, and Utilities
- (6) Only cash contribution to Closure/Postclosure Fund used to calculate Net Revenues and Debt Service Coverage.

ATTACHMENT E: REDUCED VALUE THROUGH ADF (SCENARIO 4 CONTINUED)

County of Santa Barbara - Resource Recovery										
<i>(in thousands of dollars)</i>										
Fiscal Year Ending June 30,	Projections==>									
	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Projected Tonnage (Public Participants)	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717	190,717
Projected Tip Fee	\$ 168.59	\$ 173.99	\$ 179.56	\$ 185.30	\$ 191.23	\$ 197.35	\$ 203.67	\$ 210.18	\$ 216.91	\$ 223.85
Revenues										
Charges for services	\$ 44,990	\$ 46,429	\$ 47,915	\$ 49,448	\$ 51,031	\$ 52,664	\$ 54,349	\$ 56,088	\$ 57,883	\$ 59,735
Other operating revenues (2)	3,263	3,266	3,270	3,273	3,277	3,281	3,284	3,288	3,292	3,297
Use of money and property	135	135	135	135	135	135	135	135	135	0
Other non-operating revenues (3)	2,075	1,995	1,914	1,833	1,750	1,667	1,583	1,497	1,411	1,458
Total Revenues (4)	50,463	51,826	53,234	54,689	56,193	57,746	59,351	61,009	62,721	64,490
Operating Expenses										
Salaries & Benefits	\$ 12,083	\$ 12,445	\$ 12,819	\$ 13,203	\$ 13,599	\$ 14,007	\$ 14,427	\$ 14,860	\$ 15,306	\$ 15,765
Services & Supplies	5,914	6,092	6,275	6,463	6,657	6,856	7,062	7,274	7,492	7,717
Contractual Services	5,830	6,005	6,185	6,371	6,562	6,759	6,962	7,171	7,386	7,607
Contractual Services MRF/AD	8,230	8,751	9,288	9,841	10,410	10,996	11,600	12,222	12,863	13,523
County Overhead Allocation	426	439	452	466	480	494	509	524	540	556
Other Charges (5)	1,461	1,505	1,550	1,597	1,644	1,694	1,745	1,797	1,851	1,906
Closure/postclosure costs (6)	921	948	977	1,006	1,036	1,067	1,099	1,132	1,166	1,201
Total Operating Expenses	34,866	36,186	37,545	38,946	40,388	41,874	43,404	44,980	46,604	48,276
Net Revenues	15,597	15,640	15,689	15,744	15,805	15,872	15,947	16,028	16,117	16,214
Solid Waste Revenue COP Debt Service	(9,522)	(9,444)	(9,362)	(9,281)	(9,199)	(9,117)	(9,031)	(8,941)	(8,858)	(8,775)
Solid Waste Revenue COP D/S Coverage (Annual)	1.64x	1.66x	1.68x	1.70x	1.72x	1.74x	1.77x	1.79x	1.82x	1.85x
Solid Waste Revenue COP D/S Coverage (MADS)	1.54x	1.54x	1.54x	1.55x	1.56x	1.56x	1.57x	1.58x	1.59x	1.60x
Notes:										
(1) From County CAFRs and County Public Works Department.										
(2) Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.										
(3) Non-Operating Revenues includes rental income, State revenue, Federal revenue; oil, e-waste, container sales, and CREBS Reimbursement.										
(4) Includes Operating and Non-Operating Revenues excluding interest expense. Includes earnings on cash.										
(5) Other Charges include: County Services, Motor Pool, and Utilities										
(6) Only cash contribution to Closure/Postclosure Fund used to calculate Net Revenues and Debt Service Coverage.										