



Recycling & Waste Reduction Commission
of Santa Clara County

Recycling and Waste Reduction Commission of Santa Clara County
Wednesday, October 25, 2017 Meeting Packet
5:30 p.m.
County of Santa Clara
Board Chambers
70 West Hedding Street
San Jose, CA 95112

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County of Santa Clara

Recycling and Waste Reduction Commission of Santa Clara County
Recycling and Waste Reduction Division

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RECYCLING AND WASTE REDUCTION COMMISSION MEETING AGENDA

(*Denotes item on which action may be taken)

DATE: Wednesday, October 25, 2017
TIME: 5:30 P.M.
LOCATION: BOARD CHAMBERS
70 West Hedding Street
San Jose, CA 95110

COMMUTE ALTERNATIVES: The Board of Supervisors encourages the use of commute alternatives including bicycles, carpooling and hybrid vehicles. Public transit access is available to and from the Board Chambers, San Jose, California by VTA bus line 66. For trip planning information, contact the VTA Customer Service Department at 408-321-2300 Monday through Friday between the hours of 6:00 a.m. to 7:00 p.m., and on Saturday from 7:30 a.m. to 4:00 p.m. Schedule information is also available on the web at www.vta.org. Bicycle racks are available in front of the building.

1. Call to Order and Roll Call

2. Special Orders of the Day

- Welcome Commissioner Watanabe from City of Santa Clara
- Thank you to Commissioner O'Neill for her service to the Commission

3. Public Presentation (3-minute limit)

This portion of the meeting is reserved for persons desiring to address the Commission on any matter not on the agenda. Speakers are limited to three minutes. The law does not permit Commission action or extended discussion on any items not on the agenda except under special circumstances. Statements that require a response may be placed on the agenda for the next regular meeting of the Commission. Persons wishing to address the Commission on any item on the agenda are requested to complete a Request to Speak form and give it to the Staff Liaison so the Chairperson can call on you when the item comes up for discussion.

4. Approve Consent Calendar*

Regular Agenda – Items for Discussion

5. Election of Officers*

10 Minutes

The Bylaws state that election of officers will take place at the first meeting following the fiscal year. Also consider amending bylaws to elect officers following the start of the calendar year.

6. Compost Capacity/Organics Diversion Presentation*

20 Minutes

Tracie Bills, SCS Consulting, will present the results of the Compost Capacity and Organics Diversion Study that her firm conducted
TAC Recommended Action: Accept Report

Commissioners: James R. Griffith – Chair, Linda J. LeZotte – Vice-Chair, Mary-Lynne Bernald, Lan Diep, Susan M. Landry, Pat Showalter, Rod Sinks, Mike Wasserman, Kathy Watanabe

7. Strategic Planning for the Future* **30 Minutes**

The following items are proposed for discussion: managing straws, facility and program needs anticipated after CARB organics regulations are issued, County and/or City ordinances for single-use propane cylinder ban, continued support for Expanded Producer Responsibility related to Carpet Recycling and items with an electrical current (i.e., coffee pots, cellular phones, electronic keyboards, etc.).

8. 2018 Legislative Policies and Priorities* **5 Minutes**

Lori Topley, TAC Chair will present the proposed 2018 Legislative Policies and Priorities.
TAC Recommendation: Accept 2018 Legislative Policies and Priorities and forward recommendation to the Board of Supervisors.

9. Legislative Update **10 Minutes**

Mark Bowers, Legislative Subcommittee Chair, will provide an update on current legislation.
TAC Recommendation: Accept Report

10. Announcements/Future Agenda Items* **5 Minutes**

11. Adjournment

Next Meeting: December 20, 2017

<p>Consent Calendar – Items will be considered under Item No. 4. Items removed from the consent calendar will be considered at the end of the regular agenda.</p>
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12. 17th Amendment to the Non-Disposal Facility Element (NDFE) – Informational Item Only

The County of Santa Clara has submitted the Seventeenth Amendment to the NDFE to CalRecycle. The new factsheet is for Sunnyvale Food Materials Transfer/Processing Operations (FMTPO) located at the SMaRT Station, 301 Carl Road in Sunnyvale. The process of amending NDFEs has changed pursuant to AB341, where there are no longer specific regulatory requirements for public noticing or approval. The NDFE shall be provided to CalRecycle and the local task force but is not subject to review or comment.

13. Approval of Minutes from June 28, 2017 RWRC Meeting*

14. Review approved May, July and September 2017 TAC Minutes



Final Report

Composting Processing Capacity and Organic Materials Diversion Study

Presented to:

County of Santa Clara

Consumer and Environmental Protection Agency



1553 Berger Drive, Building 1
San Jose, CA 95112

Presented by:

SCS ENGINEERS

7041 Koll Center Pkwy, Suite 135
Pleasanton, CA 94566

Cascadia Consulting Group

1109 1st Ave, Suite 400
Seattle, WA 98101

October 2017
File No. 01217021

Offices Nationwide
www.scsengineers.com

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EXECUTIVE SUMMARY

The County of Santa Clara (County) contracted with SCS Engineers (SCS) to complete a Composting Processing Capacity and Organic Materials Diversion Study (Study). The purpose of the Study was to provide the County with data that will assist in planning for the management of organic materials, and complying with legislative and regulatory requirements, including Assembly Bill (AB) 1826, AB 876 and Senate Bill (SB) 1383. The project included evaluating the existing capacity of compost facilities, quantifying organics generation and diversion within Santa Clara County, and preparing projections of future organics generation.

The information included in this report includes:

- Current and projected organic materials generated by the commercial and residential sectors.
- Quantities and types of organic materials accepted and processed by existing facilities.
- Requirements for organic materials processing facility development or expansion.
- Additional composting capacity, such as backyard composting, and mid-sized composting operations at schools, institutions, parks, community gardens, farms, golf courses, and horse stables.
- On-site processing technologies.
- Existing organic materials backhauling operations.
- Food waste reduction programs in the County.

The key findings from this study are:

1. It is estimated a total of 657,000 tons of organic materials were generated in Santa Clara County in 2015. Of the 657,000 tons of organic materials, 416,000 tons (63%) were diverted by some method of organics processing, and 241,300 (37%) tons were disposed.
2. The 11 Santa Clara County facilities interviewed for this project anticipate increased quantities of compostables (mixed food and compostable paper) will be collected from residential and commercial sources and require processing. Although the findings show unused permitted capacity, most interviewees reported that facilities are running close to through-put capacity and some are turning away material or transferring material out-of-county for processing.
3. Four of the 11 facilities are planning to modify their facilities, and three are increasing their tonnage to accommodate additional organic materials. The Sunnyvale Materials Recovery and Transfer Station (SMaRT Station®) is adding organics processing capabilities, but are not increasing the maximum amount of permitted tonnage of waste received at their facilities. For Zero Waste to Energy, Z-best and Kirby Canyon, the planned permitted tonnage increases range from 500 to 650 tons per day of organic materials, including source separated food scraps, compostable material, mixed MSW, and green waste.

4. The estimated amount of additional capacity projected to be available at organics facilities is 456,000 to 639,000 tons per year, which includes both current permitted capacity and potential expansion. No expansions have completed permitting and final capacity is subject to change.
5. It is anticipated that there will be a nine percent population growth over the next 15 years, which will increase organics by 250,000 tons. If you add in the 241,000 tons currently not diverted, and the anticipated increase in organics tonnage over the next 15 years, the County will need to find organics processing capacity for another 491,000 tons. This does not include additional capacity needed for organics tonnage from outside the County. With the estimated capacity from 456,000 to 639,000 tons annually, there will not be enough capacity if all organics are processed.
6. Assembly Bill 876 requires the County to submit organics data in the 2017 CalRecycle Annual Report. These results include 1,142,100 tons/year of current organics permitted capacity, 1,598,100 to 1,781,100 tons/year estimated organics permitted capacity in 15-years, 657,100 tons/year of current estimate of organics generation and 772,100 tons/year projected estimate of organics generation in 15-years.
7. A total of 108 organics material processing facilities located outside of Santa Clara County (within 100 miles) were identified as part of the project. From this list, 62 were identified as not having available capacity for Santa Clara organics, either because they do not accept material from the public, or they are located too far from Santa Clara County to be considered viable. Three facilities do not have available capacity, and 40 facilities have some capacity available for organic materials, however the data is provided as a range, and therefore a specific number is not available.
8. Research on additional organics processing capacity included backyard composting, as well as composting occurring at parks, schools, golf courses, and stables. The information provided by the municipalities and the phone calls made to businesses did not provide significant data on the quantity of organic materials managed onsite.
9. Food rescue activities in the County include a number of gleaning organizations that harvest and donate fruits from trees, and seven food rescue organizations that utilize websites to connect donors with recipients. In 2016, Santa Clara County awarded a grant to Joint Venture Silicon Valley and Talent Partnership to work on a three-year tiered plan of action to help reduce hunger and food waste in Silicon Valley by developing a regional framework that matches surplus food to authorized agencies.

The results of the study indicate the need for additional efforts to reduce the quantity of organic waste generated in the County, and to divert organic materials from disposal. It would be valuable to establish a system that monitors and tracks the types and quantities of organic materials that are generated in each city to understand how much organic material is in the waste stream, how much is disposed, and how much is diverted. The County should consider establishing a metric to understand how much food is rescued and diverted from landfills. Additionally, the County should consider a local organics ban that would require all organic

material to be diverted, and implement enforcement actions for businesses and residents if organic materials are placed in waste containers.

New capacity to manage organic materials is necessary. It will be important for the County to establish and maintain communication with organics processors to gain an understanding of the planned capacity and timeline for adding new organics processing capacity. Furthermore, it is recommended the County work with CalRecycle to establish access to information regarding the proposed, planned, and permitted modifications and/or new facilities for organics processing.

1.0 QUANTITIES AND TYPES OF ORGANIC MATERIALS ACCEPTED AND PROCESSED BY EXISTING FACILITIES

In order to identify the types and quantities of organic materials that are taken to local processing facilities, and the existing capacity to process the materials, two surveys were performed: one of organic materials processing facilities within Santa Clara County; and one of regional facilities within 100 miles of Santa Clara County. The surveys were conducted to estimate the current processing at facilities within the County, as well as to calculate local and regional composting capacity.

1.1 SURVEY OF LOCAL ORGANIC MATERIALS PROCESSORS

The first survey focused on the organic processors located inside the County. A total of 11 local organic materials processors were identified, including composting, landfills, and Publicly Owned Treatment Works (POTWs)/wastewater treatment facilities. Landfills were included with the processing facilities because they mulch the organics material they receive, and in some cases, divert it to another processor. During the kick-off meeting, it was decided to remove Fats Oils & Grease (FOG) rendering businesses and biodiesel producers, and to remain focused on the organic materials processing facilities. The 11 facilities include:

1. Guadalupe Landfill - 15999 Guadalupe Mine Rd., San Jose, CA 951202.
2. Kirby Canyon Landfill – 910 Coyote Creek Golf Dr., Morgan Hill, CA 95037
3. Newby Island Resource Recovery Park – 1601 Dixon Landing Rd., Milpitas, CA 95035
4. Palo Alto Regional Water Quality Control Plant – 2501 Embarcadero Way, Palo Alto, CA 94303
5. San Jose / Santa Clara Regional Wastewater Facility – 700 Los Esteros Rd., San Jose, CA 95134
6. South County Organics – 3675 Pacheco Pass Highway, Gilroy, CA 95020
7. South County Regional Wastewater Authority – 1500 Southside Dr., Gilroy, CA 95020
8. Sunnyvale Donald M. Somers Water Pollution Control Plant - 1444 Borregas Ave., Sunnyvale, CA 94089
9. Sustainable Alternative Feed Enterprise (SAFE) / Sustainable Organics Solutions (SOS) - 1080 Walsh Ave, Santa Clara, CA 95050
10. Z-Best – 980 CA-25, Gilroy, CA 95020
11. Zero Waste Energy Development Company (ZWEDC) – 685 Los Esteros Rd. San Jose, CA 95134

Initially, research was performed to collect data on each facility, using CalRecycle’s Solid Waste Information System, Facility Information Toolbox (FacIT) Detailed Facility Search database.¹ For each facility, the following information was obtained:

- Facility category (e.g., composting)
- Permitted feedstocks (e.g., green materials, food waste, agricultural)
- Permitted capacity
- Maximum permitted throughput
- Quantity of organic materials used as alternative daily cover (ADC)

Interviews were conducted with the facilities to verify the types and quantities of organic materials they currently process, plans for facility modifications, and other related information. In advance of the interviews, a letter was prepared and sent to the processors explaining the purpose and objectives of the Study, and requesting their participation in an interview. To ensure the interviews were productive, a survey guide of key questions was developed and is included in **Table 1**.

Table 1. Organic Materials Facility Key Questions

1) Verify or request the following information.
- Facility category (e.g., composting).
- Permitted feedstocks (e.g., green materials, food waste, agricultural).
- Permitted capacity.
- Maximum permitted throughput.
- Quantity of organic materials used as alternative daily cover (ADC).
- Current commodities accepted
- Current quantities received
- Facility locations that receive material generated within Santa Clara County
2) From which sectors does your facility receive material: residential/commercial/industrial/institutional?
3) How much unused capacity does the facility (ies) have?
4) Does the facility have any plans to increase capacity or expand the types of commodities accepted? If there are plans to increase capacity, what is the current status?
5) Does the facility (ies) accept or would you consider accepting animal waste, manure, compostable diapers, or farm waste?
6) Does your facility have any expectations for future changes in the market for organics material (e.g., anticipated new facilities)? Looking 5 years into the future, what do you see as the needs in terms of additional capacity in Santa Clara County?
7) Do you see any barriers to expanding organics material diversion in Santa Clara County? Are you having any problems with material quality or contamination?

¹ **CalRecycle information sources:**

SWIS Facility/Site Search, www.calrecycle.ca.gov/swfacilities/directory/Search.aspx;

Disposal Reporting System (DRS): Alternative Daily Cover (ADC) Tons by Facility and Material Type, www.calrecycle.ca.gov/LGCentral/Reports/DRS/Destination/ADCSiteTons.aspx;

Facility Information Toolbox (FacIT) Detailed Facility Search, www.calrecycle.ca.gov/FacIT/Facility/Search.aspx.

During the interviews, processors reported that their ability to expand existing operations or build new facilities is highly dependent on obtaining air quality permits. Due to expanded collections, all facilities anticipate increased quantities of compostables (mixed food and compostable paper from residential or commercial sources) and see the need to add processing capacity. Many processors are opposed to composting diapers, even if made from compostable materials. Although the findings show unused permitted capacity, most interviewees reported their facilities are running close to through-put capacity, and some are turning away material or transferring material out-of-county for processing. Almost all sites reported having plans to apply for increased permitted capacity to accept more material or expand their facility. Processors were only able to predict capacity within the next five years.

1.2 SURVEY OF REGIONAL FACILITIES

SCS surveyed existing organic materials processing facilities to identify capacity in counties within 100 miles of Santa Clara County. In order to understand how this regional capacity might draw from Santa Clara County generators, SCS identified the facilities from the CalRecycle website, including the permitted volumes, annual throughput capacity, and actual incoming volumes of material. This survey was performed by researching the CalRecycle Solid Waste Information System, the Facility Information Toolbox (FacIT) Detailed Facility Search, and lists that have been developed by other municipalities. Information detailing the type and quantity of facility types is located in **Table 2**.

Table 2. Summary of Facility Type by County

Facility Type	Alameda	Contra Costa	Marin	Merced	Monterey	Napa	San Benito	San Francisco	San Joaquin	San Mateo	Santa Cruz	Sonoma	Stanislaus
Anaerobic Digestion	1												
Biosolids Composting at POTWs (Publicly Operated Treatment)	1											2	
Composting Facility (Agricultural)			2	6	5	4	2		3		3	5	2
Composting Facility (Green Waste)	2	1	1	4	3	2	1	1	5		4	1	5
Composting Facility (Mixed) - A facility that composts sewage sludge, animal material, or green material, in addition to mixed solid waste	1	1	1	1	4	1			2				4
Composting Facility (Research)					1								
Chipping and Grinding Activity Facility/Operations	4	6	1	1	2		2	1	1	4		4	
TOTAL	9	8	5	12	15	7	5	2	11	4	7	12	11

A total of 108 organics material processing facilities located outside of Santa Clara County (within 100 miles) were identified as part of the project. From this list, 62 were identified as not having available capacity for Santa Clara organics, either because they do not accept material from the public, or they are located too far from Santa Clara County to be considered viable. Three facilities do not have available capacity, and 40 facilities have some capacity available for

organic materials, however the data is provided as a range, and therefore specific available capacity at each facility is difficult to determine. This is due in part to the way CalRecycle reports the daily and annual throughput for each facility. For example, a facility could have a range from 0 to 10,000 tons a year, while another facility could have a range of 80,000 to 240,000 tons a year. This range is provided to allow for a level of confidentiality, however it is unclear where the facility falls within the range. Additionally, in many instances, the top of the range for annual throughput was the same as the permitted capacity, therefore the facility may or may not have available capacity and the only way to determine the remaining capacity would be to contact each facility, which was outside the scope of work for this project. For further detail on the facilities located Outside-of-County, please refer to **Attachment A**.

2.0 CURRENT AND PROJECTED ORGANIC MATERIALS GENERATION

The SCS team used waste characterization data from similar communities to model the organic materials generated within the County. The steps below describe the methodology to model the quantities of organic materials generated by the residential and commercial sectors, as well as how the model would account for material that is currently processed.

Step 1. Model Disposed and Recovered Organic Materials Composition

A modeling composition was performed using composition data from representative Bay Area communities included in the 2014 CalRecycle statewide study, composition data from City of Seattle waste characterization studies (2012-2015), and unpublished private sector data from the Bay Area. Distinguishing characteristics that were considered when selecting representative compositions for use in modeling included: similarity of business types and sizes (by employment); level of urbanization; geographic proximity; and availability of waste collection and diversion systems such as single-stream recycling collection, acceptance of food waste in the organics material curbside service, and use of mixed waste processing.

The modeled composition was performed for seven material types: yard waste, food, compostable paper, clean wood, animal waste, potentially compostable material, and other waste. Specific sources and assumptions used to model disposal and organic materials composition by generator are described below.

- **Single-family residential.** The modeled single-family disposal and organic materials composition was from the 2014 CalRecycle residential composition, composition data from City of Seattle waste characterization studies (2012-2015), and unpublished private sector data from the Bay Area.
- **Multifamily residential.** The modeled multifamily disposal composition was from the 2014 CalRecycle generator-based data. To model disposal and organic recovery compositions for San Jose multifamily material that was sent to the Newby Island mixed waste processing facility, the team relied on the SMaRT Station Annual Report for 2015-2016 and the City of Palo Alto Waste Characterization Report from 2013.
- **Commercial.** Weighting factors were assigned to the CalRecycle composition data by commercial sector based on Santa Clara County's commercial sector employment profiles (as reported by the California Employment Development Department). The statewide modeled data was then refined by using unpublished private sector data from the Bay Area. The disposed composition of commercial material sent to mixed waste processing at the SMaRT Station and Newby Island was estimated by using the composition of residuals from mixed waste processing from the SMaRT Station Annual Report for 2015-2016 and the 2013 City of Palo Alto Waste Characterization Report.

- **Self-haul.** Self-haul includes material that generators disposed directly at transfer stations or the landfill. The team modeled self-haul disposal composition and organic materials recovery rates from a combination of 2014 CalRecycle self-haul composition data and data from the city of Seattle and King County in Washington, both of which have aggressive organics material recovery programs in place. Self-hauled organic materials were assumed to be exclusively yard waste.

Step 2. Modeled Baseline (2015) Organic Materials Generation

Reported tonnage data from haulers was used for waste and organic materials collection from cities in Santa Clara County and unincorporated areas to estimate the quantities of organic materials generated (both disposed and recovered) in 2015 for the residential and commercial sectors. Available hauler data covered 96 percent of the County by population. The remaining four percent was modeled based on per capita discard rates from hauler data for each of the cities and the respective population for each city. Recovered organic tons were estimated from hauler reported data and from the processor interviews. The modeled disposal and recovered organic materials compositions were used from the previous step to estimate the quantity of organic materials in the disposed waste stream.

To estimate self-haul quantities, Santa Clara County reported tonnage was combined with composition data from City of Seattle waste characterization studies (2012-2015) and representative Bay Area communities. The estimated self-haul quantities from these jurisdictions by population was scaled to estimate the organics material quantities generated by the self-haul sector in Santa Clara County.

The results from the modeling composition study are included in the following sections.

2.1 RESIDENTIAL SECTOR MODELING

To model the residential waste, waste characterization data, as noted above in the methodology, was used to identify recent residential composition data from jurisdictions that are similar to Santa Clara County in both demographics and service levels. This took into account the mixed-waste processing used in some jurisdictions in Santa Clara County. The composition data was applied to County-supplied residential waste tonnages to estimate the quantities of materials, including organics material, generated in Santa Clara County.

The model was developed to understand the breakdown of organic materials found in the residential sector. The residential sector generates approximately 345,500 tons of organic materials per year, approximately 140,600 tons more than the commercial sector.

Table 3 shows the breakdown of organic materials found in the residential organic materials stream. Food waste is the largest organic material type that is estimated to be disposed, accounting for 60 percent, yet only 30 percent is diverted. Yard waste is the largest contributor to materials being diverted at 63 percent or 140,500 tons per year.

Table 3. Residential Organic Materials Stream

Material Type	Disposed		Diverted		Generated	
	%	Tons	%	Tons	%	Tons
Organic Materials	88%	123,400	37%	222,100	55%	345,500
Yard Waste	12%	14,800	63%	140,500	45%	155,300
Food	60%	74,100	30%	66,500	41%	140,600
Compostable Paper	22%	26,800	5%	11,200	11%	38,000
Clean Wood	2%	1,900	0%	300	1%	2,200
Animal Waste	2%	3,100	0%	100	1%	3,200
Potentially Compostable	2%	2,700	2%	3,500	2%	6,200

Tons by material may not sum to total due to rounding.

2.2 COMMERCIAL SECTOR MODELING

The disposed quantity of organics material was calculated by subtracting the quantity currently being processed (calculated through facility and processor interviews in Section 1) from the generated quantity (calculated as described above). Estimates of current organic commodities and future organic commodities remaining in the disposed waste stream, for the commercial/industrial/institutional sectors are described below.

Organic materials remaining in the disposed waste stream could be targeted for additional diversion. The model was developed to understand the breakdown of organic materials found in the commercial sector. The commercial sector generates approximately 204,900 tons of organic materials per year, approximately 140,600 tons less than the residential sector.

Table 4 shows the breakdown of organic materials found in the commercial organics material stream. Food waste is the largest organics materials type that is being disposed; accounting for 39 percent, with 62 percent being diverted. Food waste is also the largest type of material being diverted and generated, accounting for 53 percent or 109,300 tons generated per year.

Table 4. Commercial Organics Material Stream

Material Type	Disposed		Diverted		Generated	
	%	Tons	%	Tons	%	Tons
Organic Materials	93%	75,800	85%	129,100	88%	204,900
Yard Waste	7%	5,500	15%	18,700	12%	24,200
Food	39%	29,900	62%	79,400	53%	109,300
Compostable Paper	31%	23,600	21%	26,800	25%	50,400
Clean Wood	7%	5,100	0%	400	3%	5,500
Animal Waste	0%	100	0%	-	0%	100
Potentially Compostable	15%	11,600	3%	3,700	7%	15,300

Tons by material may not sum to total due to rounding.

Both the commercial and residential sector data are shown in **Exhibit 1**. This reflects the difference between disposed and diverted material, for each business sector. Animal waste only shows up in the residential disposal column.

Exhibit 1. Comparison of Commercial and Residential Disposed and Diverted Materials



2.3 ORGANIC MATERIALS PROJECTIONS

2.3.1 Current and Projected Permitted Capacity

Existing and potential processors were interviewed in order to determine the current and future potential capacity for compost processing, as stated in Section 1. Due to expanded collections, all facilities anticipate increased quantities of compostables (mixed food and compostable paper from residential or commercial sources) and see the need to add processing capacity. Although the findings show unused permitted capacity, most interviewees reported that facilities are running close to through-put capacity and some are turning away material or transferring material out-of-county for processing. Processors were only able to predict capacity within the next five years.

Table 5 presents estimates of current and future processing quantities and permitted capacities as obtained from permit records and interviews with organics material processing facilities. All processing types are currently operating below their permitted capacity, with the exception of food waste only, which is currently processing and permitted at 100 tons per year. Future

organics material processing, refers to the next five years which is as far as the processors could predict. The estimated future available capacity was calculated by summing unused and additional permitted capacity, and then subtracting future estimated additional processing and estimated additional capacity needed for re-processing of material. Processors that are expanding organics operations were not certain of their permitted capacity, and therefore the numbers provided are an estimate that will more than likely change.

Table 5. Current and Future Processing Quantities and Permitted Capacities

Material Type	Current Organics Material Processing Operations(Tons/Yr)			Future Organics Material Processing Operations (Range of Tons/Yr)		
	Current Processing	Permitted Capacity	Unused Permitted Capacity	Est. Additional Processing	Est. Additional Permitted Capacity	Est. Future Available Capacity
ADC	16,800	NA	NA	-	-	NA
Recovery	1,018,100	1,142,100	124,000	99,000 - 154,000	456,000 - 639,000	481,000 - 609,000
Yard Waste only	280,000	292,000	12,000	31,000	0 - 183,000	0 - 164,000
Yard Waste & MSW (MRF organic fraction) Compost	730,000	840,000	110,000	55,000 - 110,000	456,000	485,000 - 430,000
Food Waste Only	100	100	-	13,000	-	-
Animal Waste	8,000	10,000	2,000	-	-	2,000
Total Tons per Year	1,034,900	1,142,100	124,000	99,000 - 154,000	456,000 - 639,000	481,000 - 609,000

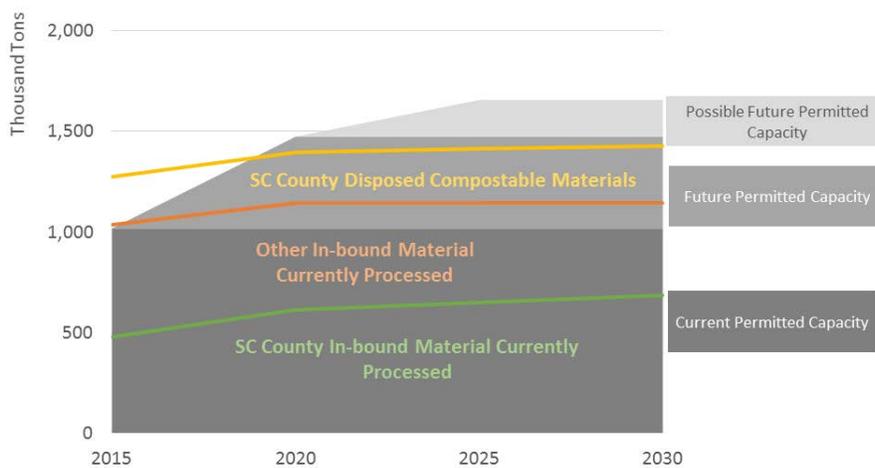
The overall estimate shows an additional 481,000 to 609,000 tons annually of future available capacity for organics processing.

The estimated future capacity and organics material generation and capture are shown in **Exhibit 2**. The difference between inbound material and processed compostable material generated by Santa Clara County is due to several factors.

1. Quantities of organic materials, specifically yard waste, are seasonal.
2. Incoming material to processors includes contamination, sometimes as high as 30%.
3. Some processors are accepting material from out-of-county and some are also sending material out of county.
4. Some material needs to be reprocessed, such as digestate from anaerobic digesters.
5. Limitations of the model and estimated processing quantities from processors.

As seen in **Exhibit 2** below, between the County in-bound material currently processed (477,224 tons per year including the five items mentioned above), the other in-bound material currently processed (557,676 tons per year), and the County disposed compostable materials (241,300 tons per year), there is a total of 1,276,203 tons each year of organic material taken to the In-County organics processing facilities. There is 1,018,100 tons of current permitted capacity for In-County organics processing, with 456,250 tons per year of estimated future permitted capacity, and another 182,500 tons per year of possible future permitted capacity (range as seen in **Table 5** above, 456,000 to 639,000 tons per year). There is not enough current capacity to manage the county’s estimated organic material. No expansion projects have completed permitting and final capacity is subject to change.

Exhibit 2. Projected Permitted Capacity and Generation



2.3.2 Current and Projected Tonnage by Generator

The quantities of organic materials accepted and processed by existing facilities was analyzed in order to recognize potential gaps in processing capacity in the future. Projections of future types and quantities of organic materials generated (both disposed and recovered) in Santa Clara County were developed through the following steps:

1. Modeled disposed and recovered organics material compositions
2. Modeled baseline (2015) organics material generation
3. Estimated organics material generation rates and developing future projections

In order to estimate organic materials generation rates and develop projections, the following methodology was used.

Using the total quantities of organic materials generated by sector (residential, commercial, and self-haul) estimated in the beginning of Section 2, generation rates were estimated from publicly available demographics data as follows:

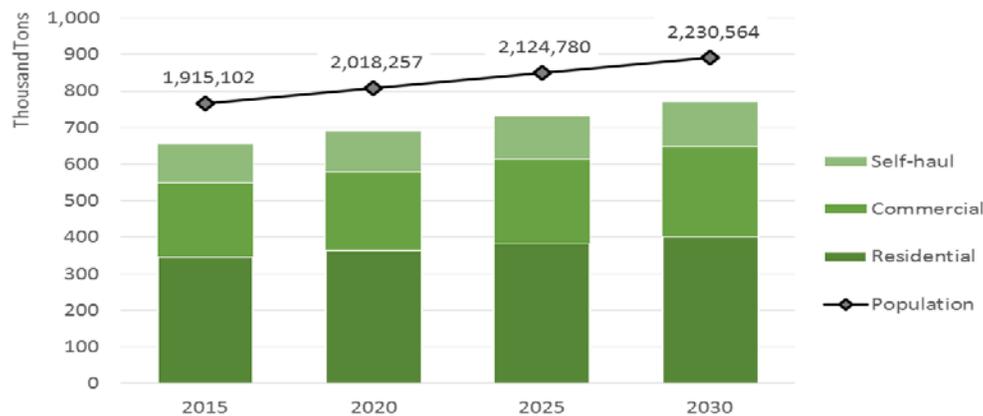
- Residential organic materials generation rates as **tons per year per household**, based on housing unit data from the California Department of Finance.

- Commercial organic materials generation rates as **tons per year per employee**, based on total number of full-time employees from the California Employment Development Department.
- Self-haul generation rates as **tons per year per capita**, based on the total County population as reported by the Department of Finance.

The organic materials generation rates in terms of tons per year per household, per employee, and per capita were applied to projections of future housing unit counts, employment, and population in order to estimate organics material generation in Santa Clara County through 2030.

The population of Santa Clara County was 1.9 million in 2015, and it is estimated by 2030 there will be 2.23 million, or 9% growth over 15 years. The projected quantity of organic materials by generator are shown in **Exhibit 3**.

Exhibit 3. Projected Annual Organic Tons by Generator



2.3.3 AB 876 Organics Capacity

As part of this study SCS compiled data needed to comply with Assembly Bill 876, which requires the County to submit specific information in the 2017 CalRecycle Annual Report. The data required for input into the 2017 annual report includes the following:

- Current organics permitted capacity: 1,142,100 tons/year
 - Organics material processed: 1,034,900 tons/year
 - Unused capacity: 124,000 tons/year
- Estimated organics permitted capacity in 15-years: 1,598,100 to 1,781,100 tons/year
 - 1,142,100 tons/year current capacity plus additional 456,000 to 639,000 tons/year capacity if expansions happen. The areas identified by the County as locations for new or expanded organic waste recycling facilities can be found in section 1 above.
- Current estimate of organics generation: 657,100 tons/year
- Projected estimate of organics generation in 15-years: 772,100 tons/year

3.0 PROCESSING FACILITY DEVELOPMENT AND/OR MODIFICATION

Developing a new organic materials processing facility, or modifying an existing one requires a number of state and local permits and approvals. This memorandum includes a description of these permits and approvals, as well as the results of research performed on potential facility modifications, including the facility name and location, current status of any modification plans, the planned new capacity for the facility, any new materials that may be accepted, and the date of the anticipated modification.

3.1 PERMITTING REQUIREMENTS AND REGULATIONS

Development of a new organics material processing facility or the expansion of current facilities include a number of permits and approvals from State and local agencies. The permit process varies based on the location of the facility, types and quantities of materials to be handled, and the type of composting process. There are seven issues discussed below, some or all of which may apply to a specific facility, depending on the extent of the proposed project.

3.0.1 Compostable Materials Handling Permit

Depending on the type and quantity of the material to be handled and the type of processing, a new organic materials facility may fall under the notification, registration, or full solid waste facility permit tier. The facility tiers are shown in **Table 6**.

In order to obtain a permit, a number of documents must be prepared, reviewed and subsequently approved by the regional regulatory body, typically the County Health Department, acting as the Local Enforcement Agency (LEA) for CalRecycle. The permit will be concurred upon by CalRecycle. The permit documents include the Permit Application and the Report of Composting Site Operation. The modification of an existing compost facility could cause a facility to fall under a different regulatory tier, based on the change of feedstock and/or change in capacity.

Table 6. Compostable Material Handling Facility Tiers

Enforcement Agency Notification	Registration Permit	Full Solid Waste Facility Permit
Agricultural Material Composting Operations (all) Section 17856		Composting Facilities (all) (e.g., biosolids, digestate, food material, mixed material) Section 17854
Green Material Composting Operations ($\leq 12,500$ yd ³) Section 17857.1(a)	Vegetative Food Material Composting Facilities ($\leq 12,500$ yd ³) Section 17857.2	Green Material Composting Facilities ($> 12,500$ yd ³) Section 17857.1(c)
Biosolids Composting Operations at POTWs (all) Section 17859.1		Vegetative Food Material Composting Facilities ($> 12,500$ yd ³) Section 17857.2
Research Composting Operations ($\leq 5,000$ yd ³)(Within-vessel $> 5,000$ yd ³ with EA determination) Section 17862		

Feedstock types are defined by CalRecycle as follows:

- **Agricultural Material** - Waste material of plant or animal resulting directly from agriculture.
- **Biosolids** - Residue from treated septage or wastewater.
- **Chipping and Grinding** – Green compost material mechanically reduced in size but not composted.
- **Compostable Material** – Organic Material
- **Food Material** – Waste material of plant or animal resulting from preparation or processing of food.
- **Green Material** – Plant material excluding food material and vegetative food material.
- **Vegetative Food Material** – A subcategory of food material of only plant origin.

County Siting Element

For a new facility, a Finding of Conformance with the County Siting Element (CSE) must be approved by CalRecycle. The CSE requires that prior to the development of such facilities in a County, the facility proponent must: (1) show the project is consistent with the CSE; (2) undergo a vigorous site specific assessment and permitting process at the Federal, State, and local levels; and (3) address all environmental concerns as mandated by CEQA. The local task force would determine whether a particular project is consistent with the CSE and its Siting Criteria through a Finding of Conformance process.

Odor Impact Minimization Plan

All compostable material handling operations and facilities must prepare, implement and maintain a site-specific odor impact minimization plan. A complete plan must be submitted to the LEA with the permit application. The odor impact minimization plan provides guidance to on-site operation personnel by describing, at a minimum, the following items.

- Odor monitoring protocol
- Meteorological Conditions
- Compliant Response Protocol
- Operating Procedures to Minimize Odors

If the operator will not be implementing any of these procedures, the plan must explain why it is not necessary.

California Environmental Quality Act

A new or modified facility would also undergo review under the California Environmental Quality Act (CEQA). Evaluation of potential significant impacts associated with construction and operation of the facility would determine whether a Mitigated Negative Declaration or full Environmental Impact Report (EIR) would be required. Potential impacts could include Air Quality, Odors, Traffic, and Land Use, to name just a few. If development of an anaerobic digestion facility is proposed, the project could utilize the EIR prepared by the State for that purpose.

Land Use Permits

Local land use approval for a new or modified facility would be required, including consistency with the General Plan and Zoning ordinance. Issues such as location in a County Community Standards District, proposed operation type, and type and quantity of materials to be handled are all factors that would be evaluated to determine the land use approval process for a proposed organic materials facility. The authority for determining the consistency with the General Plan lies with the government of the local jurisdiction in which the facility is located or to be located. As such, the siting and protection of the areas identified for future use as solid waste facilities are subject to the land use regulations of the local planning agency.

Air Quality

Compliance with local air quality rules and regulations are required for organic materials processing facilities. Locally, the Bay Area Air Quality Management District (BAAQMD) requires either a Synthetic Minor Operating Permit for facilities that operate with annual emissions below all of the Title V trigger levels, or a Title V Permit for facilities that emit at least one major source threshold at or above the trigger levels for new composting operations, modifications to the existing composting operations, and modifications of related feed stock and compost processing equipment. Trigger levels are: (1) 100 tons per year of a criteria air pollutant (NO_x, SO₂, Pb, VOC, CO or PM₁₀); (2) 10 tons per year of a Hazardous Air Pollutant (HAP); or (3) 25 tons per year of any combination of HAPs.

Water Quality

New and existing composting operations are required to submit an Industrial Storm Water General Permit or obtain the appropriate National Pollutant Discharge Elimination System (NPDES) wastewater discharge permit from the Regional Water Quality Control Board. The local Regional Water Quality Control Board for all cities within Santa Clara County except Morgan Hill is the San Francisco Regional Water Quality Control Board. The local Regional Water Quality Board for Morgan Hill is the Central Coast Regional Water Quality Control Board. A Notice of Intent along with a filing fee and technical report must be completed and submitted with the application. A new facility must submit no less than 90 days prior to commencement of composting operations. The Regional Water Board will issue a Notice of Applicability that confirms the Discharger's Tier, timeline for compliance, monitoring requirements and monitoring methods.

3.2 PROPOSED AND PENDING FACILITY MODIFICATIONS

Based on research performed for this project, 11 facilities within Santa Clara County were surveyed to understand their current capacity and future plans. Of the 11 facilities researched, five are planning some type of modification, and three are adding new tonnage: Kirby Canyon Landfill, Z-Best and ZWEDC. SMaRT Station is adding organics processing, but not adding new organics capacity to their permits. The planned facility expansions range from 500 to 650 tons per day of organic material, including source separated food scraps, compostable material, mixed MSW, and green waste. According to the research, no new organic materials processing facilities are planned in Santa Clara County.

The planned facility modifications, along with their current status, new materials, capacity, and anticipated date of completion are included in **Table 7**.

Table 7. Facility Modifications

Facility Name	Current Status	Current Materials & Capacity	New Materials & Capacity	Anticipated Expansion Date
Kirby Canyon Landfill	Early planning stages	C & D, Industrial, special waste, solid waste, chipping and grinding. 2,600 tons per day (tpd)	Possibly 500 tons per day (tpd)	Not Available
Palo Alto Regional Water Quality Control Plant	Organics Facility Plan adopted in 2014 with 4 components. Component one: Biosolids Dewatering is under construction. Component two (wet anaerobic digestion) and Component three (food processing facility) on hold pending study.	Biosolids	Food Scraps. Capacity unknown	Unknown
SMaRT Station	Installing Auger / Press System.	C&D, industrial, mixed Municipal Solid Waste MSW, green waste 1,500 tons per day (tpd)	Source separated food scraps. No additional tonnage, adding system to process current program materials.	10/1/2017
Z-Best (Gilroy)	Have not yet resubmitted revised application. Preliminary CEQA activities in process.	Agriculture, food scraps, green materials, manure, MSW. 1,500 tons per day	Expand and convert a Compost Technology Inc. (CTI) system to an engineered Composting System (ECS), open aerated model.	Not Available
ZWEDC	Through-put permit in process.	Source Separated Food Scraps and Compostable material from Mixed Material MRF 500 tpd	Same materials, expanding 650 tpd	Not Available

4.0 ADDITIONAL COMPOSTING CAPACITY

In order to thoroughly evaluate composting capacity available in Santa Clara County, supplementary research was performed to understand additional capacity other than organic processing facilities. In collaboration with the County, SCS developed a list of alternative composting programs to research and identify potential available capacity. This list includes locations that have on-site composting that manage in-house organic materials. The following programs were researched:

- Backyard composting
- Mid-sized compost operations at schools and institutions
- Parks, community gardens, and farms
- Golf courses
- Horse stables and boarding

SCS sent a survey to each city within Santa Clara County to receive a comprehensive list of alternative composting programs. Of the fifteen (15) cities in the County, only two (2) did not respond to the survey. These details can be found in **Attachment B**.

4.1 BACKYARD COMPOSTING

Backyard composting can provide an outlet for residential organic materials. All cities and the unincorporated county sell organics bins to residents at a discounted rate, and also provide free composting classes. The number of bins sold in each city since 2010 is included in **Table 8**.²

Table 8. Number of Composting Bins Sold by City

City	2010	2011	2012	2013	2014
Campbell	0	8	10	6	4
Cupertino	63	40	5	12	5
Gilroy	0	4	2	0	2
Los Altos	4	4	6	0	1
Los Altos Hills	1	2	1	1	0
Milpitas	5	13	6	17	6
Monte Sereno	0	0	0	4	0
Morgan Hill	3	7	2	9	7
Mountain View	8	17	21	41	12
Palo Alto	27	20	9	46	83
San Jose	59	122	158	187	26
Santa Clara	10	11	22	34	13
Saratoga	5	4	14	8	18
Sunnyvale	32	71	85	41	39
Total	217	323	341	406	216

²2010 Data consisted of June-December. 2014 Data consisted of January-June.

² Data provided for compost sales was only for 2010 to 2014

As part of the survey, each city was asked how many households backyard compost. The City of Palo Alto had previously surveyed their residents, and was the only city that provided an estimate of the number of residents that backyard compost. According to Palo Alto's survey, 10% of their resident's backyard compost on a regular basis. Although the estimate may be high for other communities, it is the only local data available, and is used in the projections in **Table 9**. Table 9 includes an estimate of the number of households (as provided in the United States Census Bureau 2011 to 2015), then multiplied by 0.24 tons of organic materials composted per household annually, to estimate the tons of organic materials composted in back yards each year.

Table 9. Backyard Composting by City

City	Population	# Households (United States Census Bureau 2011-2015)	Estimated No. of Households that Backyard Compost (10% of total HH)	Tons per Household per year of Food Scraps**	Estimated Food Scraps Backyard Composted (tons / year)
Campbell	42,584	16,042	1,604	0.24	385
Cupertino	60,189	20,422	2,042	0.24	490
Gilroy	51,701	14,989	1,499	0.24	360
Los Altos	30,177	10,877	1,088	0.24	261
Los Altos Hills	7,922	3,047	305	0.24	73
Los Gatos	30,000	12,146	1,215	0.24	292
Milpitas	69,783	20,792	2,079	0.24	499
Morgan Hill	40,872	13,460	1,346	0.24	323
Mountain View	76,260	32,714	3,271	0.24	785
Monte Sereno	3,485	1,211	121	0.24	29
Palo Alto	75,000	26,087	2,609	0.24	626
San Jose	1,042,094	314,297	31,430	0.24	7,543
Santa Clara	120,245	43,433	4,343	0.24	1,042
Santa Clara County RWRD	87,764	26,052	2,605	0.24	625
Saratoga	30,000	10,800	1,080	0.24	259
Sunnyvale	148,372	55,094	5,509	0.24	1,322
TOTAL in County	1,916,448	621,463	62,146	0.24	14,915

An estimated 14,915 tons per year of food scraps are composted in backyards. The potential increase in number of bins sales is estimated to be 12 % per year, based on the average percent change between 2011 and 2013. **Table 10** reveals the projected number of households that will backyard compost, calculated by adding the yearly bin sales and the 14,915 baseline for 2016. Table 12 also demonstrates the annual pounds of food scraps that could potentially be removed from the waste stream by backyard composting.

**Table 10. Projected Backyard Composting 2016 to 2020
(tons per year)**

Year	Number of Households that Backyard Compost	Projected Composter Sales	Annual Average Tons per Household of Food Scraps	Estimated Overall Tons of Food Scraps that will be Backyard Composted Annually	Additional Tons of Food Scraps that will be Backyard Composted
2016	62,146	570	0.24	14,915	
2017	62,765	639	0.24	15,068	153
2018	63,390	716	0.24	15,240	172
2019	64,021	801	0.24	15,432	192
2020	64,658	898	0.24	15,648	216

4.2 MID-SIZED COMPOST OPERATIONS AT SCHOOLS AND INSTITUTIONS

The 15 jurisdictions within Santa Clara County were surveyed regarding mid-sized compost operations at schools and institutions. Two of the cities did not respond to the survey, four cities were uncertain of whether any of the schools in their area had onsite composting, and one city was able to provide the number of schools that had onsite composting. Seven cities were aware of the number of schools that had their hauler collect organic materials and compost. None of the jurisdictions could report the volume of material that was composted onsite. Based on the results of the survey, onsite compost programs at schools does not appear to contribute a great deal to the diversion of organic materials. **Table 11** provides the overall results.

Table 11. Onsite Composting at Schools

Cities	Number of Schools in Jurisdiction	Number of Schools with onsite Composting	Number of Schools that have Organics Collected by Hauler	Total Volume of Material
Campbell	36	0	3	Unknown
Cupertino	27	Unknown	Unknown	Unknown
Gilroy	Unknown	Unknown	Unknown	Unknown
Los Altos	Unknown	Unknown	Unknown	Unknown
Los Gatos	29	0	5	Unknown
Milpitas	14	0	Unknown	Unknown
Monte Sereno	1	0	1	3yds and 95 gal/week
Morgan Hill	15	0	0	Unknown
Mountain View	11	Unknown	2	Unknown

Cities	Number of Schools in Jurisdiction	Number of Schools with onsite Composting	Number of Schools that have Organics Collected by Hauler	Total Volume of Material
Palo Alto	35 (17 private)	0	18	Unknown
San Jose	92	City was uncertain (37 gardens)	9	Unknown
Santa Clara	1	Unknown	Unknown	Unknown
Santa Clara County	3	2	Unknown	Unknown
Saratoga	25	0	0	Unknown
Sunnyvale	31	0	9	Unknown

Eleven jurisdictions in the County have some type of small or large institution. SCS contacted all of the larger institutions, however only a few responses were received. It does not appear that any of the institutions have onsite composting, the smaller institutions use landscapers, and the larger facilities either mulch, chip, or have their organic materials collected by a hauling company. **Table 12** shows the results from the survey and phone calls made to large institutions.

Table 12. Onsite Composting at Large Institutions

Table 12. Onsite Composting at Large Institutions

Cities	No. of Institutions in Jurisdiction*	Name of Institution	On-Site Composting?	No on-site, what else are they doing with compost?	Total Volume of Material? Entire amt. from Cafeteria? Only parts of material? Need % and information entered in NOTES column
Campbell	0	N/A	N/A	N/A	N/A
Cupertino	3	DeAnza Community College	No	Recology Services	~8 tons/month
Gilroy	1	Gavilan College	Unknown	Unknown	6-2-17 left v/m w/ Jeff Gopp
Los Altos	1	Foothill College	Unknown	Unknown	closed after 12pm Fridays (6.2.17); 6-5-17 need to call back w/ auto system; left v/m with Andrea Hanstein-pub. Relations/admiration
Los Gatos	0	N/A	N/A	N/A	N/A
Milpitas	1	California Science and Technology University	No	Landscaper	Not sure
Monte Sereno	0	N/A	N/A	N/A	N/A
Morgan Hill	1	Gavilan College	Unknown	Unknown	6-2-17 left v/m w/ Jeff Gopp
Mountain View	0	N/A	N/A	N/A	N/A
Palo Alto		Palo Alto University	No	Landscaper	Not sure
San Jose	14	San Jose City College	Unknown	Unknown	N/A?
San Jose		San Jose State	No	Hauling Company	not sure
San Jose		University of Phoenix	No	Landscaper	Not sure
San Jose		USF College	No	Landscaper	Not sure
San Jose		Cogswell College	No	Landscaper	Not sure
San Jose		Henley Putnam University	No	Landscaper	Not sure
San Jose		Everest College	No	Landscaper	Not sure
San Jose		San Jose - Evergreen Community College	Unknown	Unknown	
San Jose		William Jessup University	No	Landscaper	Not sure
San Jose		Carrington College	No	Landscaper	Not sure
San Jose		DeVry University	No	Landscaper	Not sure
San Jose		JFK University	No	Landscaper	Not sure
San Jose		Silicon Valley University	No	Landscaper	Not sure
San Jose		Pepperdine University Executive Program	No	Landscaper	Not sure
Santa Clara	6	Santa Clara University	No	Mission Trail Waste Systems	Not sure
Santa Clara		Golden Gate University	No	Landscaper	Not sure
Santa Clara		Golden State Baptist College	No	Landscaper	Not sure
Santa Clara		Mission College	No	Mission Trail Waste Systems	Not sure
Santa Clara		California College of Communications	No	Landscaper	Not sure
Santa Clara County	0	N/A	N/A	N/A	N/A
Saratoga	1	West Valley Junior College	Unknown	Unknown	closed on Fridays (6.2.17); 6-5-17 cannot get thru automated system (11min wait time) ; left v/m with Kim Aufhauser-park mgmt.
Stanford	4	Stanford	No	Peninsula Sanitary Services Inc. Hauls Material to Newby	Not sure
Sunnyvale	2	Art Institute of California Sunnyvale (closing), Foothill De Anza Community College, Herguan university, TBD	No	New site, no material; within 6 months they will be utilizing City landscape bins	

* The number of known institutions were added in this column, only the larger institutions were documented in the table

4.3 PARKS, COMMUNITY GARDENS, AND FARMS

SCS surveyed County of Santa Clara municipalities to identify the number of parks, community gardens, and farms within each city, and if there are composting operations. The survey was used to identify current capacity and what is anticipated regarding future growth of the program. Due to limited responses, understanding the amount of materials composted on site at parks, community gardens, and farms is limited. A total of 253 parks are located within Santa Clara County. **Table 13** shows that Mountain View, Palo Alto and Sunnyvale all report composting operations in place. Milpitas, Mountain View, Santa Clara and Santa Clara County parks have their materials sent to their hauler for composting. Cupertino, Morgan Hill, Mountain View and Sunnyvale responded that they grasscycle on site at some of their parks.

There are 10 community gardens throughout Cupertino, Milpitas, Morgan Hill, Mountain View, Palo Alto, and Sunnyvale, with a new garden in Santa Clara County starting in 2018. The amount of composted materials the different gardens was not reported by the cities.

There are 106 farms reported throughout Santa Clara County. The amount of composted material at farms was unknown. SCS did contact farms to see what they did with their material, and were unsuccessful getting a response.

4.4 GOLF COURSES

The survey performed with the County of Santa Clara municipalities as well as web-based research identified 24 golf courses within Santa Clara County. It is known that Blackberry Farm in Cupertino grasscycles its grass clippings. All other golf courses were unable to provide information on type and quantity of materials composted onsite. Additional follow up calls were made to golf courses to better understand the current program and its capacity, the future direction of the program, and anticipated projected growth. Unfortunately, of the 13 golf courses we contacted, none of them returned our calls. **Table 14** shows the results of the survey and phone calls.

4.5 HORSE STABLES AND BOARDING

The survey answered by the municipalities within the County of Santa Clara identified 27 horse stables and equestrian centers within the County. Of the 15 municipalities surveyed, four (4) do not have stables and seven (7) did not know what was done with the manure. Los Gatos, Milpitas, San Jose and Sunnyvale provided some information on what their stables are doing. Additional follow up calls were made in an attempt to get more information on what they are doing with their manure, however we only received one response. **Table 15**, shows the details of horse stables in Santa Clara County and their composting activities.

Table 13. Composting Operations at Parks, Community Gardens and Farms

Table 13. Composting Operations at Parks, Community Gardens, and Farms

Cities	No. of Parks	No. of Composting Operations	Amt. of Material Composted	Amt. Sent to Hauler	Amt. Grasscycled	No. of Gardens	No. of Composting Operations	Amt. of Material Composted	No. of Farms	Amt. of material Composted	Amt. sent to Hauler	Amt. Grasscycled
Campbell	9	Unknown	Unknown	Unknown	Unknown	0	N/A	N/A	1	Unknown	Unknown	Unknown
Cupertino	19	Unknown	Unknown	Unknown	Grasscycling done at all turf areas except 4 infields where clippings are hauled to Service Center to be collected for composting	1	Compost piles on site and bin service by hauler	Unknown	0	N/A	N/A	N/A
Gilroy	2	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	10	Unknown	Unknown	Unknown
Los Altos		Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Los Gatos	7	Unknown	Unknown	Unknown		0	N/A	N/A	28	Unknown	Unknown	Unknown
Milpitas	33	0	Not listed	Unknown	hauled off by to composting facility (96gal cart of yard trim/organics from Spring Valley ea. Week	1	Unknown	Not Listed	0	N/A	N/A	N/A
Monte Sereno	0	N/A	N/A	N/A	N/A	0	N/A	N/A	0	N/A	N/A	N/A
Morgan Hill	26	Unknown	Unknown	Unknown	mowing and tree trimming is performed by contractors; amt. unknown	1	mhcommunitygarden.org home page does not include email or contact phone		10	Unknown	Unknown	Unknown
Mountain View	29	2	Unknown	Unknown-debris box sent to Smart Station	115 acres	2 (3 including Los Altos?)	Unknown	Unknown	0	N/A	N/A	N/A
Palo Alto	36	2	Unknown	32 gallons	Unknown	4	4?	Unknown	0	N/A	N/A	N/A
San Jose	17	Unknown	Unknown	Unknown	Unknown	0	N/A	N/A	31	Unknown	Unknown	Unknown
Santa Clara	33	Unknown	Unknown	hauled back to yards and collected by MTWS for processing	Unknown	0 (1 in 2018)	Unknown	Unknown	0	N/A	N/A	N/A
Santa Clara County	7	Unknown	Unknown	92 cy weekly (Trash)	Unknown	0	N/A	N/A	24	Unknown	56 cy weekly (Trash)	Unknown
Saratoga	12	Unknown	Unknown	Unknown	Unknown	0	N/A	N/A	2	Garrod Farms 6-5-17 Jan Garrod called bk ~30yds month composted on-site then given to comm. Gardens and vineyards	Unknown	Unknown
Sunnyvale	23	2	Unknown	Unknown	400 acres	1	Unknown	Unknown	2	Unknown	Unknown	Unknown

Table 14. Composting Operations at Golf Courses

Cities	No. of Golf Courses	Composting Onsite	Mulch Onsite	Does Hauler pick up material?	Estimated Volume of Compost Material
Campbell	0	N/A	N/A	N/A	N/A
Cupertino	2	Blackberry grasscycles		Landscape trimmings/tree waste pickup/collected for composting	Not Listed
Gilroy	3	Unknown	Unknown	Unknown	Unknown
Los Altos	1	Unknown	Unknown	Unknown	Unknown
Los Gatos	1	Unknown	Unknown	Unknown	Unknown
Milpitas	2	Unknown	Unknown	Spring Valley Recology collects 96 gal. cart of yard trimmings	Unknown
Monte Sereno	0	N/A	N/A	N/A	N/A
Morgan Hill	2	Unknown	Unknown	Unknown	Unknown
Mountain View	1	none	none	Tree trimmings collected and sent to SMaRT Station	Unknown
Palo Alto	1 (and 1 currently under construction)	Unknown	Unknown	Unknown	Unknown
San Jose	2	Unknown	Unknown	Unknown	Unknown
Santa Clara	2	Unknown	Unknown	Unknown	Unknown
Santa Clara County RWRD	4	Unknown	Unknown	Recology - no data reported	Unknown
Saratoga	1	Unknown	Unknown	Unknown	Unknown
Sunnyvale	2	Yes	None	Yes	Grasscycle unknown

Table 15. Composting Operations at Horse Stables

Cities	No. of Horse Stables and Eq. Centers	Mulch/Compost/ or Haul	Volume of Manure
Campbell	0	N/A	N/A
Cupertino	2	Unknown	Unknown
Gilroy	3	Unknown	Unknown
Los Altos	3	Unknown	Unknown
Los Gatos	4	(Bear Creek Stables hauls off)	Bear Creek Stables ~66 cy/wk
Milpitas	3	Chaparral compost onsite; Indian Hills haul to offsite location	11 cy/wk spread on-site (Chaparral Ranch)40cy/per wk (Indian Hills Ranch)
Monte Sereno	0	N/A	N/A
Morgan Hill	1	Unknown	Unknown
Mountain View	0	N/A	N/A
Palo Alto	2	Unknown	Unknown
San Jose	4	(Lakeview Stable) partially compost and spread onsite	Unknown
Santa Clara	0	N/A	N/A
Santa Clara County RWRD	2	Unknown	Unknown
Saratoga	2	Unknown	Unknown
Sunnyvale	1 (Animal Assisted Happiness)	Haul to offsite location	Unknown

5.0 ONSITE PROCESSING TECHNOLOGIES

There are many technology options for managing organic materials in the waste stream, each striving to optimize the use of the biological conditions of the material to achieve the most uniform, mature product in a reasonable amount of time. When evaluating alternative processing methods or technologies, criteria include available space, labor requirements, feedstock, products, utilities, etc. SCS identified three primary organic materials processing technologies to provide onsite support of managing organics materials. These different technologies include mini-aerobic systems, bio-digesters, and dehydrators. Businesses and institutions would benefit from these small scale systems to help manage their food scraps, compostable paper and green waste onsite. These technologies can potentially save money and the business can use the by-products as compost or soil additives for their landscaping or gardens. It is advised that any vendors installing a technology should work with the city to obtain permits, properly site and install devices with special attention to the characteristics and quantities of liquids discharged and the energy inputs required. SCS identified seven small scale organics material processing technologies that have the potential for onsite applications. These are described in the following section. SCS selected technologies that have a proven track record of operation in the U.S, including two vendors (Totally Green and Global Composting Solutions) with operating systems in California.

5.1 SMALL SCALE PROCESSING TECHNOLOGIES

5.1.1 Mini-Aerobic Systems

A mini-aerobic system is an in-vessel technology that provides a controlled environment similar to static piles or windrows, but fully enclosed. The system mixes and aerates material to accelerate the composting process, and generates a compost material that can be applied to landscaped areas. These systems require additional curing prior to using as compost. Two companies that provide this type of system are described below: DT Environmental and Global Composting Solutions. SCS does not endorse either company or equipment, and there are other companies that provide similar equipment.

DT Environmental

DT Environmental, operating since 2009, developed a mini-aerobic system called the DTE Enviro Drum, which can be used at large campus settings such as universities, hotels, theme parks, correctional facilities, and business centers. The waste capacity for the DTE Enviro Drum can range from 8 to 60 cubic yards, depending on the selected drum size. Space requirements are approximately 8'x 54', including the mixer and other equipment components. The in-vessel composting method artificially accelerates the temperature to kill any pathogens and is maintained at 55° Celsius or higher for three



DTE Enviro Drum

consecutive days. The system requires one hour per day per load of labor time, and can manage up to two loads per day. The volume of weight reduction typically ranges from 20-80 percent, depending on feedstock characteristics. The finished compost is stacked in piles for approximately 30 days to cure. Storage requirements for the compost curing process will be dependent on the selected system and daily utilization. The DTE Enviro Drum accepts manure, food waste, bio-solids, green waste, paper and bioplastics. Benefits include versatility for customized designed needs, elimination of transport costs and tipping fees, and generation of usable soil amendment.

The DTE Enviro Drum model sizes and pricing range from:

- Model 6-20: 41'.4" Length x 12'.4" Width x 8'.6" Height
Cost of system, \$140,000-\$200,000 including installation
- Model 6-32: 53'.5" Length x 12'.4" Width x 9'.2" Height
Cost of system, \$200,000-\$250,000 including installation
- Model 8-40: 53'.5" Length x 12'.4" Width x 9'.2" Height
Cost of system, \$275,000-\$350,000 including installation

DT Environmental equipment can be customized to meet regulatory requirements, however, all permitting is managed at a local level. DT Environmental was unable to provide estimates for return on investment as this will be based on a facility's revenue source ie: avoided landfill costs, tipping costs, or compost sales.

Global Composting Solutions



Hot Rot Composting System

Global Composting Solutions developed a mini-aerobic system (HotRot) designed to process organic materials from restaurants, commercial premises, and larger facilities such as a campus setting. The HotRot aerobic system has been in operation since 2000 with units operating in California and Canada. The HotRot requires 2 hours of labor per day, and has a throughput capacity ranging from 800 to 1,102 pounds per day, depending on the selected model. These systems run continuously with a 10 to 12 day cycle, starting with the initial input of organic material, to the end of the process when the composted material is discharged. These units do not produce leachate and instead expel excess water as vapor through an exhaust air duct. HotRot benefits include a guarantee of no objectionable odors, weatherproof units, and acceptance of most types of organics materials including small bones and compostable paper. This system can allow for some other compostable products (i.e. silverware, bags), however it is recommended to shred for full degradation.

The HotRot systems are modular, fully enclosed, and range in size and cost as indicated:

- HotRot 1206: 7.15m Length x 1.40m Width x 2.70m Height (with exhaust duct removed 1.60m Height). Cost of system, \$100,000 including installation. This does not include any civil work, connection services, or permitting.
- HotRot 1811: 12.780 Length x 2.3m Width x 2.24m Height plus ancillaries. Cost of System, \$300,000 - \$350,000, this includes the feed system, discharge screw, biofilter, electrical, freight, install, commissioning and training. This does not include any civil work, connection services, or permitting.

5.1.2 Bio-Digesters

A bio-digester uses the addition of proprietary biological agents and water to accelerate decomposition. The system is designed to break down the organic material enough to deposit through the sewer system, which distinguishes them from garbage disposals. If utilizing this technology, all material goes down the sewer after process is complete. Proper set up is required to ensure the effluent material is disposed of properly. Two companies that provide this type of system are: Totally Green, Inc.; and BioHighTech Global. SCS does not endorse either company or equipment, and there are other companies that provide similar equipment.

Totally Green, Inc.

Totally Green, Inc. provides a variety of different sizes of the ORCA system, which is designed for businesses that produce high volumes of food scraps, including supermarkets, hotels, large office buildings, convention centers, stadiums, and shopping malls. Totally Green has been in operation since 2012, and has over 200 units operating in the United States, including California. The ORCA's proprietary natural microorganism solution works with water and recycled plastic bio chips to break down and digest organic waste. When filled to capacity, the ORCA models can process between 25 to 100 pounds per hour of food scraps. These systems are designed to run continuously over a 24 hour period, turning food scraps into wastewater that drains directly to the municipal sewage system with no other byproducts generated. The ORCA will only accept food waste. Contaminants including bones and avocado seeds will cause operational issues, and presorting is required.



ORCA

The ORCAs stainless steel container model sizes and pricing range from:

- OG25: 50" Length x 33.5" Width x 49" Height
\$28,000, plus \$200 monthly services
- OG50: 68.5" Length x 33.5 Width x 49" Height
\$34,000, plus \$375 monthly services
- OG100: 115" Length x 33.5" Width x 49" Height
\$39,000, plus \$425 monthly services

The ORCA monthly service fees cover the required ORCA Bio Chips & ORCA Microorganisms from Totally Green. After the initial cost of the system the typical return on investment is about 3 years or less. There is no additional permitting required to operate this system.

These models require minimal labor, with recommended feeding every two to three hours for maximum efficiency. These systems have the potential to divert up to 270 cubic yards of food scraps per year from landfills.

Bio High Tech Global

Bio High Tech Global has developed three Eco-Safe digesters which are designed for small scale (e.g. quick service restaurants) to large scale (e.g. food distribution centers) food scrap management. They have systems in 15 countries and 38 states, including California. These digesters are continual feed units that can process between 29 to 89 cubic yards of food scraps within a 24 hour period. These digesters only accept food waste, excluding large bones, mussel and clam shells and pineapple tops. The digesters will not accept packaging, general waste or cutlery. The Eco-Safe digester ranges in size from:



Eco-Safe Digester

- Eco-Safe 4: 45.75” Length x 35.25” Width x 50” Height
- Eco-Safe 8: 59.25” Length x 44.25” Width x 55.25 Height
- Eco-Safe 12: 69.25” Length x 44.25” Width x 55.25” Height

These digesters require minimal maintenance and can be continually fed as needed. These units convert food scraps into wastewater which is then drained to the municipal sewage system with no other byproducts generated. Bio High Tech Global was unresponsive to SCS’s inquires regarding information on pricing, permitting and return on investment.

5.1.3 Dehydrators

Dehydrators use a mechanical/thermal approach that effectively separates liquids from the solids. These systems can include pulping within the dehydrator, or can be coupled with stand-alone pulping and dewatering systems. The liquid portion is disposed of through the sewer system and the reduced solid portion is landfilled or diverted for recycling. Three companies that provide this type of system are: OnSite Waste Solutions; Somat; and Ecovim. SCS does not endorse any of these companies or equipment, and there are other companies that provide similar equipment.

OnSite Waste Solutions

OnSite Waste Solutions, operating since 2012, provides a Dehydration and Recovery Technology system (DaRT), which is ideal for hotels, restaurants, resorts, and colleges

throughout the U.S. These units have a built-in shredder that can process food waste ranging from 110 to 165 pounds a day depending on the selected model.

The dehydrators can run up to two cycles per day, with 9 to 10 hours, per cycle. DaRT systems required minimal labor, requiring about 15 minutes for each cycle to load, collect discharge, and clean equipment filters.

The benefits of using DaRT include 90% waste reduction with 10% of highly concentrated organic material remaining. The highly concentrated organic material should be blended 10 to 1 with other composting materials before use, due to high concentrations of nitrates, or can be sent to a local composting site. The DaRT system can accept bones and about 10-15% contamination, including small packaging containers, and compostable tableware and paper napkins. These systems heat up to 300 ° Fahrenheit, killing all pathogens, and generate approximately 20 gallons of filtered water per day. This filtered water can be collected and reused in the system by adding a small water pump and reservoir to the system. The DaRT dehydrator ranges in size and price from:

- DaRT GC-100: 57” Length x 36” Width x 51” Height
Cost of system, \$32,000
Leasing, \$600 per/month
- DaRT GC-100: 63” Length x 40” Width x 59” Height
Cost of system, \$45,000
Leasing, \$900 per/month



DaRT GC-100

The DaRT GC systems have a potential return on investment between 2 to 3 years or 4 to 5 years, depending on the facility’s current waste collection practices.

Somat

Somat has been in business since the late 1940s, and currently has 100 systems operating in the U.S., 15 of which are in California. Somat provides the DH-100w Waste Dehydrator system that can process waste for medium size foodservice operations up to very large institutions or facilities. The input capacity of the system ranges from 110 to 220 pounds per 12 to 18 hour cycle. This system requires minimal maintenance, including the labor to load each cycle and collection of the finished soil amendment material. The system accepts food scraps, cardboard and compostable disposables (e.g. paper plates), and requires an electrical connection and condensate drain. There is no venting or fresh water required to operate. The DH-100w system processes the compostable material in the decomposing chamber to kill any bacteria and reduce the waste matter by up to 92% of the original input.



DH-100w Waste Dehydrator

A Somat pulper is recommended prior to processing and can reduce the waste volume by an additional 80% and increases the waste capacity of the DH-100. The by-product produced is a dry, light and odor free sterile material that can be used as a soil additive or as an accelerant in a composting facility.

The Somat DH-100 system is 45 feet in Length, 37.5 feet in Width and 44.5 feet in Height. The cost of this system is \$38,000. The return on investment will depend upon a facility's disposal costs.

Ecovim

Ecovim systems were launched in 2008 and machines are currently operating throughout the U.S. Ecovim has developed a food dehydrating and composting machine that can process food waste for small generators (grocers and fast food restaurants) to large generators (casinos and resorts). These systems can process between 650 to 1,100 pounds of food waste per day depending on the selected model. The treatment cycle times range from 21 to 23 hours with an 80 to 90% reduction in material volume. The Ecovim unit can treat food waste including 15 percent paper and untreated cardboard. This system is simple to operate, and does not require venting or plumbing, and can convert 250 pounds of waste into 25 gallons of potable water and 25 pounds of 100% sterile bio-mass that can be used as a soil amendment or compost accelerant without any further off-site composting. The Ecovim unit sizes and cost range from:



Ecovim unit

- Eco 650w: 63.0" Length x 57.5" Width x 60.2" Height
Cost of system, \$72,000
- Eco 1100: 86.6" Length x 57.1" Width x 68.9" Height
Cost of system, \$85,000

The Ecovim systems have 3 to 5 year return on investment. This system has no permitting requirements.

5.2 ONSITE PROCESSING OPPORTUNITIES

SCS developed a list of potential locations within Santa Clara County that could implement and benefit from onsite organics material management, and would further assist the County of Santa Clara to divert organic materials. The list of facilities was developed by reviewing the survey responses from cities within Santa Clara County, as well as research performed to identify local hospitals, jails, universities, institutions, and large campus's. **Table 16** includes the businesses identified as having a high potential for generating large volumes of organic materials, and the potential ability to manage organics onsite. It is important to recognize each business should be evaluated to confirm they have the correct type and amount of material, as well as space for this type of technology.

Table 16. Potential On-site Composting Opportunities

Facility Name	Location
Colleges	
Carrington College	San Jose
De Anza Community College	Cupertino
Evergreen Valley College	San Jose
Foothill Jr. College	Los Altos
Gavilan Jr. College	Gilroy
Mission Jr. College	Santa Clara
San Jose City College	San Jose
San Jose State University	San Jose
Santa Clara University	Santa Clara
Stanford University	Palo Alto/Stanford
West Valley Jr. College	Saratoga
High-Tech	
Adobe Systems, Inc.	San Jose
Apple, Inc.	Cupertino
Central & Wolfe	Sunnyvale
Cisco	San Jose
Google	Mountain View
HP Hewlett Packard	Palo Alto
Intel Corporation	Santa Clara
Netflix	Los Gatos
Nvidia Headquarters	Santa Clara
Samsung Headquarters	San Jose
Symantec	Mountain View

Facility Name	Location
Hotels	
Courtyard by Marriott San Jose	Campbell
Courtyard by Marriott South San Jose / Morgan Hill	Morgan Hill
Embassy Suites by Hilton Milpitas Silicon Valley	Milpitas
Embassy Suites by Hilton Santa Clara Silicon Valley	Santa Clara
Fairmont Hotel	San Jose
Four Season Hotel Silicon Valley at East Palo Alto	Palo Alto
Hilton Garden Inn	Cupertino
Hilton Garden Inn	Mountain View
Hyatt Regency	Santa Clara
Juniper Hotel Cupertino, Curio Collection by Hilton	Cupertino
San Jose Marriott	San Jose
Santa Clara Marriott	Santa Clara
Spring Hill Suites by Marriott	San Jose
Event Centers/Stadiums	
Avaya Stadium	San Jose
CEFCU Stadium	San Jose
Great America Pavilion	Santa Clara
Levi's Stadium	Santa Clara
San Jose McEnergy Convention Center	San Jose
Santa Clara Convention Center	Santa Clara
SAP Center	San Jose

Facility Name	Location
Shoreline Amphitheatre	Mountain View
Stanford Stadium	Palo Alto/Stanford
Stevens Stadium	Santa Clara
Exploration Center and Amusement Park	
California's Great America	Santa Clara
NASA Ames Exploration Center	Mountain View
Hospitals	
El Camino Hospital	Mountain View
Good Samaritan Hospital	San Jose
Kaiser Permanente San Jose Medical Center and Medical Offices	San Jose
Kaiser Permanente Santa Clara Medical Center and Medical Offices	Santa Clara
O'Connor Hospital	San Jose
Regional Medical Center	San Jose
Santa Clara Valley Medical Center	Santa Clara
Stanford Children's Health, Lucile Packard Children's Hospital	Stanford
Stanford Health Care-Stanford Hospital	Stanford
Correctional Facility	
Elmwood Correctional Facility	Milpitas
Santa Clara County Jail	Santa Clara
Santa Clara Juvenile Detention Center	San Jose

6.0 BACKHAULING OF ORGANIC MATERIAL

Large organics material generators, such as grocery stores, often backhaul their organics material to their distribution centers for consolidation and processing. Understanding the volume of material that is taken outside Santa Clara County is important for planning purposes.

In order to identify the volume of material that is backhauled from large generators, our Team utilized the estimates identified in Section 2. The data and modeling tool provided backhaul generation numbers from the commercial sector in Santa Clara County. As part of the CalRecycle business sector waste characterization performed in 2014, field staff visited different business sectors throughout California, including large generators that backhaul material. As part of the CalRecycle study, field staff identified volumes of material that were being backhauled from these locations, and incorporated those numbers into the CalRecycle characterization database. SCS anticipated to use these numbers, however CalRecycle was not certain these numbers were an accurate representation of the backhauling occurring within the commercial sector. Furthermore, the numbers were not highlighted as a unique number, and the backhauling data was combined with other data and added together in one category.

The survey did not provide any information on how much backhauling was occurring, and many of the hauling companies contacted were uncertain as well. Given the limited information available, our team was not able to rely on the CalRecycle backhaul number. Furthermore, the fact that any material that was backhauled to a distribution center could not be calculated in the current waste stream (i.e. not in the generation numbers identified in Section 2 above), therefore this number does not appear to be an important factor in understanding organic materials processing in the County.

7.0 FOOD WASTE REDUCTION PROGRAMS

A variety of food waste reduction programs exist to support businesses and residents of Santa Clara County. Food banks, non-profits and innovative companies are leading the way and making it easier for individuals and businesses to reduce the amount of food waste destined for the landfill. SCS Engineers (SCS) researched local programs that offer educational efforts and tools to reduce or prevent food waste. Food banks have the capacity and labor to accept surplus food from stores and businesses and redistribute to the local community. Organizations such as Peninsula Food Runners in Santa Clara County also exist to help non-profit organizations providing food or meal assistance to connect with businesses, farmers markets and other groups who have surplus food. Innovative companies, such as matching programs and/or software solutions include a compilation of local for profit and non-profit companies, such as Replate and Copia, Chow Match, Wastenofood.org, Food Runners, Food Recovery Network, Rock and Wrap It Up, and the Food Donation Connection, to name a few. These methods address food donation opportunities by incorporating some form of communication technology to connect surplus food to agencies assisting people in need. Together, these groups and businesses are developing a long-term solution to recover food that is destined for the landfill, which can be reduced or provided to hungry people.

7.1 FOOD WASTE REDUCTION PROGRAMS IN SANTA CLARA COUNTY

Reducing the quantity of wasted food is a critical element of the solid waste hierarchy and the goal of increased diversion. If we can reduce the production of excess food, then we can lower the amount of material being landfilled and composted. In order to identify what food waste reduction programs are currently managed within Santa Clara County, and what should be added in the future, SCS identified the following activities taking place within the County:

- The cities of Mountain View, Palo Alto, San Jose and Sunnyvale have adopted zero waste policies with the goal of no waste going to the landfill by 2020-2025. For example, Mountain View's Zero Waste Vision is to recover materials for their highest and best use by 2025. This means additional efforts will be taken to recover food waste before sending it to a compost facility.
- Gleaning organizations are community led groups who harvest and donate fruits from trees, often from neighborhood backyards and local orchards. Gleaning helps reduce food waste by gathering excess or not harvested produce that would otherwise go to waste. These groups have developed a network of people who grow fruits and vegetables, and donate surplus quantities to local food banks/non-profit 501c3 organizations. Village Harvest and Garden to Table are two gleaning groups that help growers connect with food banks and the community to help improve healthy food access and reduce food waste.
- Food rescue organizations working in Santa Clara County help reduce food waste by recovering uneaten food from events or cafeterias and delivering them to soup kitchens and food banks. Most of these organizations rely heavily on volunteers for deliveries and

preparations. Peninsula Food Runners, Santa Clara University: Food Recovery Network, Stanford Project on Hunger (SPOON), Replate, and Rock and Wrap it Up are all food rescue organizations at work in Santa Clara County.

- Food rescue organizations are helping people and/or businesses locate where surplus food can be donated by using the web or mobile apps. WasteNoFood.org is a website where farms, restaurants, cafeterias and hotels can post excess food for “aid” groups to confirm what food they want prior to pick up. RecycleStuff and RecycleWhere are web based marketplaces or informational centers where users can find locations to donate food.
- Food banks such as the Second Harvest Food Bank of Santa Clara is a community-based organization that provides the food source umbrella to partner non-profit agencies assisting people. Donors can donate backyard produce, groceries, or large scale food donations. Second Harvest Food Bank has an easy to use website where people can sign up to become a donor or volunteer.
- Joint Venture Silicon Valley (<https://jointventure.org/initiatives/surplus-harvest>) is an organization that brings together businesses, government and the community to highlight issues and help resolve them through innovation. Santa Clara County and Joint Venture have been collaborating on a three-year long project to help reduce hunger and food waste in Silicon Valley by developing a regional framework that matches surplus food to authorized agencies.

In spring of 2015 the County of Santa Clara conducted a month long food waste study with Food Shift. Concurrently, the Surplus Harvest Initiative began in June 2015 as Joint Venture first partnered with Urban Harvester. Their 16-month endeavor addressed the challenges and gaps in three counties, including Santa Clara County, identifying agencies capabilities and readiness, as well as a detailed intake, technology development, food donor sources, and policy needs. Urban Harvester presented their findings and recommendations for a regional plan to Joint Venture.

In spring of 2016, Santa Clara County awarded a grant to Talent Partnerships and Joint Venture to begin a three-year tiered plan of action. To date, Joint Venture has extensively researched the landscape to understand the key stakeholders, the current food rescue activity, the barriers to rescuing more food, and the resources available. They have researched other food rescue programs throughout Santa Clara County to learn best practices and potential pitfalls. An implementation plan has been developed to bring together the disparate food rescue efforts under one umbrella initiative, a centralized "hub" of all things food rescue, so there is one-stop for information for donors and agencies alike. This initiative will be utilizing a central platform to manage the matching of donors to agencies and to provide the transportation solution, which also capturing critical metrics. Additionally, they are focusing on building capacity within the agencies to allow them greater ability to receive and distribute food.

Within the last year and a half, Joint Venture has applied for grant funding to help support the needs of food assistance agencies. They have also compiled a list of all food assistance agencies in the County and begin surveying them to understand their needs and

how to better support the agencies. Joint Venture has also selected an online platform to match donations to food assistance agencies. In addition, they have also comprised a small group of key stakeholders in the County to provide input and guidance on the efforts, and to serve as ambassadors of the initiative. Joint Venture is working on developing a partnership with city waste reduction and sustainability staff to work on these efforts. Creating a conversation about government policy is an important step that is needed in order to help reduce food waste within Santa Clara County.

- The *Food Rescue Services, Barriers, and Recommendations in Santa Clara* study completed by Food Shift on behalf of Santa Clara County outlines how food waste is being managed within the County. Several organizations and community groups have been working in the Santa Clara County area, such as Food Runners (which matches and transports food to pantries and meal assistance kitchens) and Second Harvest Food Bank (which transports, distributes on site, and distributes through their partner pantries), and are well established. As outlined in the report, common barriers are seen in Santa Clara County regarding rescuing food. The greatest barriers for food rescue organizations is the lack of infrastructure and capacity. Limited staff, transportation, and storage can impact how much food can be delivered and donated. Unpredictable donations and unreliable collections can also make it difficult for donors and rescuers to move food through their networks. An increase in capacity and collaboration among the stakeholders is needed to help reduce food waste and improve recovery efforts.

Each of the above mentioned activities increasing capacity and collaboration play a critical role in reducing waste by either not generating as much food scraps prior to disposal or finding innovative ways to move edible food to organizations that can feed hungry people. There are over 25 organizations in the Santa Clara County region providing opportunities to reduce wasted food and landfilling of food scraps.

7.2 RECOMMENDATIONS FOR ADDITIONAL EFFORTS

In order to understand the expanse of the food waste reduction activities within Santa Clara County, SCS researched each of the cities within the County to understand what food waste reduction activities occur through city staff efforts, and companies that provide food waste recovery programs.

7.2.1 City Food Waste Reduction Efforts

SCS researched food waste reduction programs for each of the fourteen cities and the County to identify existing education efforts and available tools to reduce or prevent food waste. The research was initiated with a survey distributed to the cities with the following questions.

- Other than the Countywide program, what else have you done to contribute to food waste donation and recovery?
- Is information available on the number of businesses and/or volume of material that is donated on a weekly, monthly or annual basis?

- How many locations with your jurisdiction accept donated food? Provide name and address if possible.
- Do you track the quantity of food they accept each month?
- What food waste reduction programs do you have?

Of the fifteen municipalities surveyed, three did not respond, and six said that they have not contributed to food waste donation and recovery efforts. There were six municipalities that provided information on the food waste donation and recovery efforts happening within their jurisdiction. The programs range from Save the Food media campaign, providing reusable produce bags with food storage tips to reduce waste, outreach methods via cooking classes, broadcast outreach, events with interactive tables, bill inserts, and social media. Full details of all responses are included in **Attachment C**, and information from the six active municipalities are summarized in **Table 17**.

Table 17. Food Waste Reduction Activities

City	Other than the Countywide program what else have you done to contribute to food waste donation & recovery?	Is information available on the number of businesses and/or volume of material that is donated on a weekly, monthly or annual basis?	How many locations within your jurisdiction accept donated food? Provide name/address if possible.	Do you track the quantity of food they accept each month?	What food waste reduction programs do you have?
Cupertino	Encourage donation to West Valley Community Services	Cupertino, in partnership with the franchised hauler, participates in data gathering as part of the EPA's Food Recovery Challenge. Estimated donated quantity was 130.3 tons in 2016.	1 - West Valley Community Services 10104 Vista Dr, Cupertino, CA 95014	No	We support "Save the Food" media campaign and provide reusable produce bags with food storage tips included to reduce waste.
Milpitas	No	No	No	No	Public awareness and community promotion via "Save the Food" media campaign that is pushed to City webpage and Facebook.
Mountain View	Nothing	No. We only know how many people took the home composting class offered by the County.	1 - Community Services Agency, 204 Stierlin Road, Mountain View, 94043 2 - Hopes Corner (at Trinity United Methodist Church) 3- 748 Mercy Street,	No	No specific programs, just outreach through our newsletters, social media and website, for example tagging onto the EPA Food Too Good Waste, Ad Council and BayRoc campaigns.
Palo Alto	Palo Alto has connected Piazza's Grocery Store with Second Harvest Food Bank. Palo Alto is looking to make a similar connection with Mollie Stone's Market.	No	All Saints Church Food Pantry, Jerusalem Baptist Church, Opportunity Center	No	We have worked mainly with residents - cooking classes, broadcast outreach, events with interactive tables (e.g., making EAT FIRST boxes). We have done some outreach to the business community via bill insert and a survey of restaurants, but we have no way to measure if that increased donations. Probably not.
Santa Clara County	Provide information through businesses via AB 1826 outreach visits and Green Business Newsletter.	No	Levi's stadium, Santa Clara University and the convention center are some of the venues that donate food.	No	N/A
Sunnyvale	Sunnyvale is working with Second Harvest Food Bank currently on a food rescue pilot at grocery stores.	Check with Second Harvest to get this information. They track the number of businesses and total tons collected.	Sunnyvale Community Services and Ecumenical Hunger Program participate in food rescue in Sunnyvale.	No	We will be doing more food waste reduction education as we implement our residential food scraps program city-wide in fall 2017.

7.2.2 Companies Providing Food Recovery

There are seven companies that provide food recovery options for local businesses:

- **Copia**, a San Francisco based food recovery company that uses technology to provide a solution for food waste. Users log on to their app and get matched in real-time with the most appropriate nonprofit that will accept their food. Customers also receive access to food waste trends to help improve purchasing and cut back on food waste. Copia serves most of the San Francisco Bay Area and customers in Santa Clara County include the San Francisco 49ers and Zesty Catering in San Jose.
- **Re-Plate** is another food recovery company that uses a similar technology as Copia to match business' excess food with those who are in need. Replate is a rapidly growing company in the Bay Area with operations in Silicon Valley and San Jose.
- **CropMobster** is an online community-based exchange system for food and agricultural companies who want to exchange surplus food, equipment, jobs or information. Similar to Craigslist.com, users post ads for excess foods which other users can reply to and coordinate a pickup. Santa Clara County residents can post and see ads for excess food and help reduce the amount that is wasted through donation.
- **Peninsula Food Runners** is a volunteer organization dedicated to alleviating hunger by providing free collection of excess perishable and prepared food from restaurants, caterers, bakeries, wholesalers, event planners, corporate cafeterias, farmer market vendors, and hotels. Food Runners has a growing network of 160 volunteers which pickup at more than 100 donor locations to serve over 30,000 meals a week. Donors create online accounts and are matched with nearby agencies where their food can be donated.
- **ChowMatch** is a software company based in Silicon Valley that uses matching logic to connect agencies with surplus food donated by restaurants, grocery stores, caterers, farms, and many others. The technology helps to streamline the distribution of untouched surplus food to agencies and organizations such as family shelters, homeless shelters, neighborhood-feeding programs, churches, schools, 100% affordable housing programs, and many other outreach programs. Peninsula Food Runners currently uses this technology to connect their donors within Santa Clara County to recipients in the community.
- **Village Harvest** is a nonprofit volunteer organization based in San Jose whose mission is to provide food for the hungry, and promote sustainable use of urban resources. Village Harvest works closely with food agencies and community groups in Santa Clara County to provide food banks with local healthy food that would go to waste in Bay Area backyards. Volunteers harvest and transport food, and organize events throughout the year.

7.3 FOOD RECOVERY RECOMMENDATIONS

Based on the results of the research, SCS has developed a number of recommendations for enhancing food recovery efforts in Santa Clara County:

- Develop a business recognition program to encourage businesses to reduce food waste. Santa Clara County can then reward businesses who have achieved a high percentage of food waste diversion. This will help reduce food waste and create beneficial marketing opportunities for businesses.
- Develop a social media contest for businesses showing how they reduce food waste at work. Getting the community to use hashtags when circulating information via social media may increase awareness of food waste reduction activities happening within Santa Clara County. Prizes can be offered to those who are the most creative or have the greatest impact on the environment.
- Offer workshops where people can learn and discuss opportunities to reduce food waste at home and at their workplace. Workshops should be offered annually or quarterly, and should include topics such as food waste reduction strategies, smart storage, shopping guidelines, and meal planning.
- Offer free cookbooks to help reduce food waste by guiding readers how to shop, portion, and store foods. An example of this is the “Waste Free Kitchen Handbook” by Dana Gunders. By offering free cookbooks, people can educate themselves on how to prepare and cook foods while wasting less.
- Initiate a program to connect farmers with surplus crops to food banks. Start a coalition of food banks and other organizations that are in need of food to connect with local farmers association. Establishing a network between these two groups can help bridge the gap between surplus food and people in need of food.
- Require or reach out to grocery stores to stock produce that is blemished or less than perfect. Stores can start by requesting their suppliers and farmers to send shipments of less than perfect produce and selling it at a discounted rate.
- Educate businesses and residents about the Bill Emerson Good Samaritan Donations Act, which is a federal law ensuring that donors are protected from any civil and criminal liability, as long as the product is donated in good faith.
- Assist with collaboration among the stakeholders to help reduce food waste and improve recovery efforts. Educate businesses and growers on food donation and the available federal tax deductions. There are a variety of tax incentives in the form of tax credits or deductions that are available to donating businesses. For more details, refer to the Tax Deduction for Food Donation Legal Guide. In order to be eligible for a tax deduction, the donor must meet three main requirements:

1. The donor organization must donate food to qualified domestic 501(c)(3) nonprofit organizations that use the food solely for care of the ill, the needy or infants.
2. The recipient must use the donated food in a manner consistent with the purpose constituting that organization's exempt 501(c)(3) status.
3. The recipient organization may not use or transfer the food "in exchange for money, other property, or services".

8.0 CONCLUSIONS AND RECOMMENDATIONS

The information presented in this study provides the County with an understanding of the existing and future generation of organic materials, as well as the existing and future capacity of organic materials facilities and programs. This data is critical to plan for the organic materials infrastructure that will be necessary to reduce, recover, collect, and process the anticipated volumes of materials that will be diverted as a result of new legislation and regulatory requirements. The Study conclusions and recommendations are included below.

8.1 CONCLUSIONS

The conclusions of this study are based on the research conducted on existing and projected quantities of organic material generated within the County, the available and projected needed capacity at organics processing facilities, alternative organics processing, and food rescue activities. The first priority was to understand the quantities and types of organic material accepted and processed by existing facilities. Due to expanded collections, all facilities anticipate increased quantities of compostables (mixed food and compostable paper from residential or commercial sources) and see the need to add processing capacity. Although the findings show unused permitted capacity, most interviewees reported that facilities are running close to through-put capacity and some are turning away material or transferring material out-of-county for processing. Almost all sites reportedly have plans to apply for increased permitted capacity to accept more material or expand their facility. However, the ability to expand existing operations or build new facilities is highly dependent on obtaining air quality permits.

It is estimated a total of 657,100 tons of organic materials are generated annually from both commercial and residential sectors in the County. Of the total organic materials generated, 415,800 tons (63%) are diverted and 241,300 tons (37%) are disposed.

It is anticipated that there will be a nine percent population growth over the next 15 years, which will increase organics by 250,000 tons. If you add in the 241,000 tons currently not diverted, and the anticipated increase in organics tonnage over the next 15 years, the County will need to find organics processing capacity for another 491,000 tons. This does not include additional capacity needed for organics tonnage from outside the County. With the estimated capacity from 456,000 to 639,000 tons annually, there will not be enough capacity if all organics are processed.

Assembly Bill 876 requires the County to submit organics data in the 2017 CalRecycle Annual Report. These results include 1,142,100 tons/year of current organics permitted capacity, 1,598,100 to 1,781,100 tons/year estimated organics permitted capacity in 15-years, 657,100 tons of current estimate of organics generation and 772,100 tons/year projected estimate of organics generation in 15-years.

A total of 108 organics material processing facilities located outside of Santa Clara County (within 100 miles) were identified as having the potential to process organic materials from the County. Sixty two of the facilities were classified as not available for processing materials from the County, because they either do not accept material from the public, or they are located too far

from Santa Clara County to be considered viable. Three facilities do not have available capacity and 40 facilities have some capacity available for organic materials, however the data is provided as a range, and therefore a specific number is not available.

The estimated amount of additional capacity projected to be available at organics facilities is 456,000 to 639,000 tons per year, which includes both current permitted capacity and potential expansion. Four facilities are planning some type of modification, and only three are adding new capacity: Kirby Canyon Landfill, Z-Best and ZWEDC. The facility expansions range from 500 to 650 tons per day of organic material, and material types vary from source separated food scraps, compostable material, mixed MSW, and green waste. There are no new organic materials processing facilities planned within Santa Clara County and no expansions have completed permitting and final capacity is subject to change. The SMaRT Station has a date for their anticipated modification. SMaRT Station however they are not adding volume to their approved capacity.

New organics processing technologies or other processing approaches were researched to address the gap in capacity, including the following:

Additional composting capacity: Research on backyard composting, mid-sized composting operations at schools and institutions, parks, community gardens and farms, golf courses, and horse stables was conducted but limited information was available on the disposition of their materials. Some activities are occurring, including grasscycling, and on-site composting, however due to the limited information available, the quantity of organics diverted through these measures is unknown.

Onsite processing technologies: These include small scale composting processes that could be utilized on-site by large food waste generators. Examples include dehydrators or small composters, however depending on the technology, the generator may still need to contract for the collection, removal, and composting of the end product. This solution is viable, however it will account for a small percentage of the organic materials generated by commercial businesses.

Backhauling of organic material: The survey did not provide any information on how much backhauling was happening, and many of the hauling companies contacted were uncertain as well. Given the limited information available, our team not able to rely on the CalRecycle backhaul number, and the fact that any material that was backhauled to a distribution center would not be calculated in the current waste stream (i.e. not in the generation numbers identified in Section 2 above), this number does not appear to be as important to the scheme of understanding all organics.

Another activity that was researched was food recovery. There are a number of gleaning organizations that harvest and donate fruits from trees, often from neighborhood backyards and local orchards. There are seven food rescue organizations working in Santa Clara County, including organizations that utilize websites to connect donors with recipients. A partnership that was started a few years ago between Santa Clara County and Joint Venture Silicon Valley has provided a close collaboration working on a three-year long project to help reduce hunger and

food waste in Silicon Valley by developing a regional framework that matches surplus food to authorized agencies.

8.2 RECOMMENDATIONS

Additional capacity for organic materials will be necessary over the next 15 years in order for Santa Clara County municipalities to reduce and divert their organic materials. To meet this need, it is recommended that the following steps be considered.

1. Regularly communicate with local and regional organics processors to gain an understanding of their plans and timelines for adding processing capacity.
2. Consider establishing a collaborative process with the municipalities in the County for hauling and/or processing contracts to facilitate advance planning for collection and facilities.
3. Work with CalRecycle to obtain easier access to information on facility permitting and expansion plans and proposals.
4. Monitor and track grant opportunities from CalRecycle and other agencies, and make the information available to potential grant recipients.
5. Monitor and track the quantity of organics generated from each city to gain a better understanding of the types and quantities of organic materials disposed and diverted, as well as the availability of alternative composting activities in the cities.
6. Require backhaulers to either obtain a license from cities, weigh amounts of material and report back to cities on material transported, or require them to subscribe to service from franchised hauler instead of backhauling. ?
7. Consider implementing a local organics landfill disposal ban.
8. Consider implementing enforcement measures to reduce the quantity of organic materials placed in waste receptacles.
9. Create incentives to support the transition to native landscaping that reduces organic waste.
10. Develop outreach campaigns to encourage native landscaping, grasscycling, backyard composting, and correct food purchasing.
11. Consider conducting kitchen audits to measure the quantity of waste generated from the residential sector.

Research was performed on food waste reduction, focusing on food rescue. Section 7 of this report includes recommendations for enhancing food recovery efforts in the County. The recommendations include:

- Continue to work with Joint Venture Silicon Valley to establish a comprehensive food rescue system, and track how much food is rescued and diverted.
- Require or reach out to grocery stores to stock produce that is blemished or less than perfect. Stores can start by requesting their suppliers and farmers to send shipments of less than perfect produce and selling it at a discounted rate.
- Educate businesses and residents about the Bill Emerson Good Samaritan Donations Act, which is a federal law ensuring that donors are protected from any civil and criminal liability, as long as the product is donated in good faith.
- Continue to collaborate with stakeholders to help reduce food waste and improve recovery efforts, including educating businesses and growers on food donation and available federal tax deductions.

SWIS Number	Name of Facility	Type of Facility	County	Address	City	Business Name	Miles from Santa Clara County (1555 Berger Drive, San Jose, CA 95112)	Material Accepted	Operational Status	Maximum Permitted Throughput **	Units	Permit Capacity	Units	Actual Daily/Annual Throughput *	Units	Remaining Capacity	Units
01-AA-0003	Pleasanton Garbage Service	Chipping and Grinding Activity Facility/Operations	Alameda	3110 Busch Road	Pleasanton	Pleasanton Garbage Service, Inc. PO Box 399, 3110 Busch Rd. Pleasanton, CA 94566 PH: 415-846-2042		Green Waste	Active	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	0	Not Listed
07-AA-0002	Acme Landfill	Chipping and Grinding Activity Facility/Operations	Contra Costa	950 Waterbird Way	Martinez	Acme Fill Corp. PO Box 1108 Martinez, CA 94553 PH: 925-228-7099		Green Waste	Active	1,500	Tons/day	6,195,000	Cubic Yards / not listed	0-8,000	Tons/year	0	Tons/year
07-AA-0070	Atlas Tree Service, Inc.	Chipping and Grinding Activity Facility/Operations	Contra Costa	150 Medburn Street	Concord	Atlas Tree Services, Inc. 150 Medburn St. Concord, CA 94520 PH: 925-648-2271		Green Waste	Active	50	Tons/week	200	Tons/not listed	0-8,000	Tons/year	0	Tons/year
07-AA-0066	Composting Operation (Green Waste)	Composting Facility (Green Waste)	Contra Costa	Oliveira Enterprises, Inc.	Byron	Brian H. Oliveira 8005 Bruns Rd., Byron, CA 94514 PH: 209-835-9382		Green Waste	Active	78	Tons	18,000	Cubic Yard / year	10-25,000	Tons/year	0	Tons/year
07-AA-0069	Expert Tree Service	Chipping and Grinding Activity Facility/Operations	Contra Costa	150 Old Tunnel Road	Orinda	Expert Tree Service PO Box 1256, Orinda, CA 94563 PH: 925-254-8733		Green Waste	Active	200	Tons/day	1,500	Tons/year	0-8,000	Tons/year	0	Tons/year
07-AA-0059	Fahy Tree Service	Chipping and Grinding Activity Facility/Operations	Contra Costa	2780 Goodrick Avenue	Richmond	Fahy Tree Service 19 Ranch Rd., San Rafael, CA 94903 PH: 415-472-7263		Green Waste	Active	200	Tons/day	50,000	Tons/year	10-50,000	Tons/year	0	Tons/year
07-AA-0061	Green Waste Recycle Yard	Chipping and Grinding Activity Facility/Operations	Contra Costa	2550 Garsen Tract Road	Richmond	Arboricultural Specialties, Inc. PO Box 2377 Berkeley, CA 94702 PH: 510-549-3954		Green Waste	Active	30	Tons/day	1,200	Tons/year	0-8,000	Tons/year	0	Tons/year
07-AA-0067	Hamilton Tree Service	Chipping and Grinding Activity Facility/Operations	Contra Costa	4949 Pacheco Blvd.	Martinez	Talbert Hamilton 115 Hillside Lane, Martinez, CA 94553 PH: 925-766-4302		Wood & Lumber, Green Waste	Active	200	Cubic Yard / day	36,500	Cubic Yard / year	0-8,000	Tons/year	0	Tons/year
21-AA-0060	Bolinas-Stinson Resource Recovery Project	Composting Facility (Green Waste)	Marin	25 Olema Bolinas Road	Bolinas	Bolinas-Stinson Resource Recovery, Project PO Box 390 bolinas, CA 94924 PH: 415-868-1224		Green Waste	Active	120	Cubic Yard / day	8,000	Cubic Yard / year	0-10,000	Tons/year	0	Tons/year
21-AA-0005	Marin Sanitary Service	Chipping and Grinding Activity Facility/Operations	Marin	535 Jacoby Street	San Rafael	Marin Sanitary Service Transfer Station 1050 Anderson Drive San Rafael, CA 94901 PH: 415-456-2601		Green Waste	Active	0	Cubic Yard / month	50	Cubic Yard / month	0-8,000	Tons/year	0	Tons/year
21-AA-0062	Point Reyes Compost Co.	Composting Facility (Agricultural)	Marin	14700 State Hwy 1	Point Reyes	Theodore Stray PO Box 12 Point Reyes, CA 94956 PH: 415-663-8880		Ag. Green Waste, Manure	Active	12	Cubic Yard / day	6,000	Cubic Yard / year	0-10,000	Tons/year	0	Tons/year
24-AA-0042	Agromin-Bowles Green Material Composting	Composting Facility (Green Waste)	Merced	13000 Carlucci Road	Dos Palos	Agromin 201 Kinetic Drive, Oxnard, CA 93030 PH: 209-827-3000	319 miles	Green Waste, Ag.	Active	200	Tons/day	62,000	Tons/year	Not Listed	Not Listed	0	Not Listed
24-AA-0029	Billy Wright Composting Facility	Composting Facility (Green Waste)	Merced	17173 Billy Wright Road	Los Banos	Merced Co. Regional Waste Mgmt. 7040 North Highway 59 Merced, CA 95348 PH: 209-723-4481		Green Waste	Active	300	Cubic Yard / day	9,999	Cubic Yards / not listed	Not Listed	Not Listed	0	Not Listed

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24-AA-0017	Foster Farms	Composting Facility (Agricultural)	Merced	12997 W. Highway 140	Atwater	Foster Farms Manure Storage Yard 12997 W. Highway 140 Livingston, CA 95334 PH: 209-394-5383		Ag. Mixed Organics, Manure	Active	520	Cubic Yard / day	120,000	Cubic Yard / year	10-25,000	Tons/year	0	Tons/year
24-AA-0038	Green Forrest Recycling and Chipping	Chipping and Grinding Activity Facility/Operations	Merced	19230 S. Spruce Road	Los Banos	Frank Soares PO Box 1743 Hollister, CA 95024 PH: NA	86	Green Waste	Active	0	Not Listed	0	Not Listed	0-8,000	Tons/year	0	Tons/year
24-AA-0033	Greenway	Composting Facility (Green Waste)	Merced	2983 East Washington Road	El Nido	Greenway 24596 Rd. 19 Chowchilla, CA 93610 PH: 559-351-5969		Green Waste	Active	5,000	Cubic Yard / day	10,000	Tons/year	10-25,000	Tons/year	0	Tons/year
24-AA-0020	Highway 59 Compost Facility	Composting Facility (Green Waste)	Merced	7040 N. Highway 59	Merced	Merced Co. Regional Waste Mgmt. 7040 North Highway 59 Merced, CA 95348 PH: 209-723-4481	114 miles	Green Waste	Active	12,500	Cubic Yard / day	25,000	Tons/year	25-50,000	Tons/year	0	Tons/year
24-AA-0040	Ken Stone#3	Composting Facility (Agricultural)	Merced	7333 Avenue	Merced	Kenneth Stone and Family Spread Services 7333 Childs Ave., Merced, CA 95340 PH: 209-358-3200		Ag. Manure	Active	12,500	Cubic Yards / not listed	12,500	Cubic Yards / not listed	0-10,000	Tons/year	0	Tons/year
24-AA-0024	Kenneth Stone & Family Spreading Service	Composting Facility (Agricultural)	Merced	W. of Lupin Ave. & 1/4 mile N. of Palm Ave.	Winton	Stone Family 5545 W. Shaw Winton, CA 95388 PH: 209-358-3200		Ag. Mixed Organics, Manure	Active	9,000	Cubic Yards / not listed	9,000	Cubic Yard / year	25-50,000	Tons/year	0	Tons/year
24-AA-0031	Nakashima Farms Composting #1	Composting Facility (Agricultural)	Merced	10397 West Walnut Avenue	Livingston	Nakashima Farms 10397 West Walnut Ave., Livingston, CA 95334 PH: 209-761-3118		Ag. Mixed Organics, Manure	Active	110	Cubic Yard / day	20,000	Cubic Yard / year	10-25,000	Tons/year	0	Tons/year
24-AA-0032	Nakashima Farms Composting #2	Composting Facility (Mixed)	Merced	6492 Arena Way	Livingston	Nakashima Farms 10397 West Walnut Ave., Livingston, CA 95334 PH: 209-761-3118	105 miles	Mixed Organics	Active	Not Listed	Not Listed	Not Listed	Not Listed	10-25,000	Tons/year	0	Tons/year
27-AA-0119	ArgoThrive, Inc.	Composting Facility (Mixed)	Monterey	26775 Old Stage Rd.	Gonzales	Agrothrive Inc. 26775 Old Stage Rd., Gonzales, CA 93926 PH: 831-675-2853		Mixed Organics, Food Pre-Consumer	Active	71	Tons/day	2,600	Tons/year	0-10,000	Tons/year	0	Tons/year
27-AA-0095	Eade Ranch	Composting Facility (Agricultural)	Monterey	Hwy 198 East of San Lucas	San Lucas	Gabilan Fertilizer 1091 Madison Lane, Salinas, CA 93907 PH: 831-771-0126		Manures	Active	5,000	Tons/not listed	12,500	Tons/not listed	10-25,000	Tons/year	0	Tons/year
27-AA-0096	Gabilan Fertilizer Moonglow Dairy	Composting Facility (Agricultural)	Monterey	357 Dolan Road	Moss Landing	Gabilan Fertilizer 1091 Madison Lane, Salinas, CA 93907 PH: 831-771-0126		Manures	Active	10,000	Cubic Yards / not listed	6,000	Cubic Yard / year	0-10,000	Tons/year	0	Tons/year
27-AA-0107	Monterey Mushrooms	Composting Facility (Agricultural)	Monterey	777 Maher Court	Salinas	Monterey Mushrooms 777 Maher Ct., Royal Oaks, CA 95076 PH: 831-728-8300		Ag. Mixed Organics, Manure	Active	3,000	Cubic Yard / day	156,000	Cubic Yard / year	40-80,000	Tons/year	0	Tons/year
27-AA-0108	Spawn Mate, Inc. dba Mushroom Farms	Composting Facility (Agricultural)	Monterey	415 Hall Road	Aromas	Spawn Mate, Inc. dba Mushroom Farms 415 Hall Road, Aromas, CA 95076 PH: 831-763-5300		Mixed Organics, Manures	Active	3,500	Cubic Yard / day	25,000	Cubic Yard / year	0-9,999	Tons/year	0	Tons/year
28-AA-0045	Buchli Station	Composting Facility (Agricultural)	Napa	1190 Buchli Station Road	Napa	Operator for Rombauer Vineyards 1106 Clark St., Napa, CA 94559 PH: 707-255-0785		Mixed Organics	Active	40	Tons/day	1,800	Tons/day	0-10,000	Tons/year	0	Tons/year
28-AA-0002	Clover Flat Resource Recovery Park	Composting Facility (Green Waste)	Napa	4380 Silverado Trail	Calistoga	Clover Flat Landfill, Inc. 1285 Whitehall Lane, St. Helena, CA 94574 PH: 707-942-4473		Food Wastes, Green Waste	Active	2,500	Cubic Yards / not listed	2,500	Cubic Yards / not listed	0-10,000	Tons/year	0	Tons/year
28-AA-0037	Joseph Phelps Vineyards	Composting Facility (Agricultural)	Napa	200 Taplin Road	St. Helena	Phelps, Joseph 2000 Taplin Rd., St. Helena, CA 94574 PH: 707-963-2745		Mixed Organics, Green Waste, Manures	Active	100	Cubic Yard / day	2,000	Cubic Yards / not listed	0-10,000	Tons/year	0	Tons/year
28-AA-0041	Opus One	Composting Facility (Agricultural)	Napa	1144 Oakville Crossroad	Oakville	Opus One Winery PO Box 6 Oakville, CA 94562 PH: 707-948-2433		Green Waste, Mixed Organics	Active	350	Cubic Yard / day	1,000	Cubic Yard / year	0-10,000	Tons/year	0	Tons/year

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28-AA-0026	Upper Valley Disposal Service	Composting Facility (Green Waste)	Napa	1285 Whitehall Lane	St. Helena	Upper Valley Disposal Service 1285 Whitehall Lane, St. Helena, CA 94574 PH: 707-963-7988		Green Waste	Active	34,000	Tons/year	34,000	Tons/year	10-25,000	Tons/year	0	Tons/year
28-AA-0033	Yount Mill Vineyards	Composting Facility (Agricultural)	Napa	1141 Oakville Crossroad	Spanish Flat	Yount Mill Composting PO Box 434 Oakville, CA 94562 PH: 707-944-0857		Mixed Organics	Active	0	Not Listed	0	not listed	0-10,000	Tons/year	0	Tons/year
35-AA-0029	Clean Green Recycling	Chipping and Grinding Activity Facility/Operations	San Benito	5890 San Felipe Road	Hollister	CGR-Clean Green Recycling PO Box 2435 Hollister, CA 95024 PH: 408-234-1785		Green Material	Active	200	Cubic Yard / day	62,400	Cubic Yard / year	10-50,000	Tons/year	0	Tons/year
35-AA-0026	Compro Soil Amendments Inc.	Composting Facility (Agricultural)	San Benito	5501 Frazier Lake Road	Hollister	Compro, Inc. PO Box 4609 Salinas, CA 93912 PH: 831-443-5700		Ag., Manure	Active	17,100	Tons/year	17,000	Tons/year	25-50,000	Tons/year	0	Tons/year
35-AA-0021	Herbert Compost Operation	Composting Facility (Agricultural)	San Benito	5501 Frazier Lake Road	Hollister	Herbert Compost Operation 1941 Fallon Road, Hollister, CA 95023 PH: 831-637-9571		Ag. Green Waste, Manure	Active	50	Tons/day	5,000	Tons/year	0-10,000	Tons/year	0	Tons/year
35-AA-0001	John Smith Road Landfill	Chipping and Grinding Activity Facility/Operations	San Benito	2650 John Smith Road	Hollister	Waste Solutions Group of San Benito, LLC 3 Waterway Square Place The Woodlands, TX 77380 PH: 408-283-8500		Green Material	Active	Not listed for specific activity	N/A	N/A	N/A	0-8,000	Tons/year	0	Tons/year
35-AA-0025	Phil Foster Ranch Composting Operation	Composting Facility (Green Waste)	San Benito	3065 Santa Ana Valley Road	Hollister	Phil Foster Ranch, Composting PO Box 249 San Juan Bautista, CA 95045 PH: 831-632-2806		Green Waste	Active	680	Tons/day	2,040	Tons/year	0-10,000	Tons/year	0	Tons/year
38-AA-0015	Bay View Green Waste Mgt. Company (Private not Public)	Chipping and Grinding Activity Facility/Operations	San Francisco	1300 Carrol Way	San Francisco	Bhas, Sanjay 360 Upland Rd., Redwood City, CA 94062 PH: 650-222-0174		Green Waste	Active	8,000	Tons/year	10,000	Tons/year	0-8,000	Tons/year	0	Tons/year
39-AA-0046	Haley Farms Compost Operation	Composting Facility (Agricultural)	San Joaquin	5793 West Delta Avenue	Tracy	Haley Farms 1030 Ladd Road Modesto, CA 95356 PH: 209-835-1549		Mixed Organics, Ag., Manure	Active	400	Cubic Yard / year	0	Cubic Yards / not listed	0-10,000	Tons/year	0	Tons/year
41-AA-0188	Davey Tree Company	Chipping and Grinding Activity Facility/Operations	San Mateo	131 Industrial Way	Brisbane	Davey Tree Service 131 Industrial Way, Brisbane, CA 94005 PH: 415-468-9180		Green Waste	Active	160	Cubic Yard / day	5,760	Cubic Yard / year	0-8,000	Tons/year	0	Tons/year
Not Listed	PGANDE Martin Service Ctr.	Chipping and Grinding Activity Facility/Operations	San Mateo	731 Schwerin Street	Daly City	PGANDE Martin Service Ctr 731 Schwerin St., Daly City, 94014 PH: 209-329-6785		Green Waste	Active	Not Listed	Not Listed	Not Listed	Not Listed	0-8,000	Tons/year	0	Tons/year
41-AA-0196	Redwood Debris Box Green Waste Operation	Chipping and Grinding Activity Facility/Operations	San Mateo	1 Beeger Road	Redwood City	Redwood Building Materials 350 Lang Rd., Burlingame, CA 94010 PH: 650-465-1944	PH:	Green Waste	Active	200	Tons/day	15,000	Tons/year	8-40,000	Tons/year	0	Tons/year
44-AA-0009	Ben Lomond LF Wood Waste Chipping Op.	Composting Facility (Green Waste)	Santa Cruz	9835 Newell Creek Rd.	Ben Lomond	County of Santa Cruz 701 Ocean St., Rm 410 Santa Cruz, CA 95060 PH: 831-454-5156		Green Waste, Wood Waste	Active	12,500	Cubic Yards / not listed	12,500	Cubic Yards / not listed	0-8,000	Tons/year	0	Tons/year
44-AA-0001	City of Santa Cruz Resource Recovery Fac	Composting Facility (Green Waste)	Santa Cruz	605 Dimeo Lane	Santa Cruz	City of Santa Cruz 809 Center St., Rm 201 Santa Cruz, CA 95060 PH: 831-420-5160		Green Waste	Active	12,500	Cubic Yards / not listed	12,500	Cubic Yards / not listed	0-8,000	Tons/year	0	Tons/year
44-AA-0002	City Of Watsonville Landfill	Composting Facility (Green Waste)	Santa Cruz	730 San Andreas Road	Watsonville	City of Watsonville 250 Main St. Watsonville, CA 95077 PH: 831-728-6046		Green Waste	Active	12,500	Cubic Yards / not listed	12,500	Cubic Yards / not listed	0-8,000	Tons/year	0	Tons/year
44-AA-0014	Fliz Fresh Mushroom Farm Compost Op.	Composting Facility (Agricultural)	Santa Cruz	211 Lee Road	Watsonville	Fliz Fresh Mushroom Farm Compost Op. 211 Lee Rd., Watsonville, CA 95076 PH: 831-728-0969		Ag. Green Waste	Active	9,000	Cubic Yard / day	468,000	Cubic Yard / year	100-300,000	Tons/year	0	Tons/year
44-AA-0015	Glaum Egg Ranch- Watsonville	Composting Facility (Agricultural)	Santa Cruz	100 Marsh Lane	Watsonville	Glaum Egg Ranch, LLP 3100 Valencia Rd., Aptos, CA 95003 PH: 831-688-3898		Ag. Manure	Active	4,380	Cubic Yards / not listed	4,380	Cubic Yards / not listed	0-10,000	Tons/year	0	Tons/year
44-AA-0013	Rodoni Farms Agricultural Composting Op.	Composting Facility (Agricultural)	Santa Cruz	395 Dimeo Lane	Santa Cruz	M. Rodoni & Co. 538 Arroyo Seco Santa Cruz, CA 95060 PH: 831-426-0666		Ag. Green Waste	Active	500	Cubic Yard / day	6,000	Cubic Yards / not listed	0-10,000	Tons/year	0	Tons/year
44-AA-0004	Buena Vista Drive Sanitary Landfill	Composting Facility (Green Waste)	Santa Cruz	150 Roundtree Lane (Office Address)	Watsonville	County of Santa Cruz 701 Ocean St., Rm 410 Santa Cruz, CA 95060 PH: 831-454-5156		Green Waste, Wood Waste	Active	12,500	Cubic Yards / not listed	12,500	Cubic Yards / not listed	0-8,000	Tons/year	0	Tons/year
49-AA-0408	(Graton) Grant Community Services Wastewater Treatment, Reclamation and Disposal Facility	Bio solids Composting at POTWs	Sonoma	250 Ross Lane	Graton	Bob Rawson PO Box 524 Graton, CA 95444 PH: 707-823-3713		Bio solids/Sludge	Active	44	Cubic Yard / Month	600	Cubic Yard / year	0-10,000	Tons/year	0	Tons/year
49-AA-0393	Atlas Tree Waste Recycling	Chipping and Grinding Activity Facility / Operations	Sonoma	6303 Sebastopol Road (Hwy 12)	Sebastopol	Atlas Tree Surgery 1544 Ludwig Avenue, Santa Rosa, CA 95407 PH: 707-523-4399		Green Waste, Wood Waste	Active	200	Cubic Yard / day	50,000	Cubic Yard / year	Not Listed	Not Listed	0	Not Listed
49-AA-0260	Central Compost Site	Composting Facility (Green Waste)	Sonoma	500 Meacham Road	Petaluma	2300 County Center Dr., Ste. B-100 Santa Rosa, CA 95403 PH: 707-565-3579		Green Waste	Active	300	Tons/day	300	Tons/day	0-8000	Tons/year	0	Tons/year
49-AA-0392	Daniel O. Davis, Inc.	Chipping and Grinding Activity Facility/Operations	Sonoma	1051 Todd Road	Santa Rosa	Daniel O. Davis, Inc. 1051 Todd Road, Santa Rosa, CA 95407 PH: 707-585-1903	PH:	Green Waste	Active	1,500	Tons/month	18,000	Tons/year	8-40,000	Tons/year	0	Tons/year
49-AA-0395	Dolcini Brothers Composting Operation Ag	Composting Facility (Agricultural)	Sonoma	7689 Lakeville Hwy.	Petaluma	Dolcini Brothers 2500 Petaluma Blvd., North Petaluma, CA 94952 PH: 707-763-5775		Manures	Active	500	Cubic Yard / day	50,000	Cubic Yard / year	10-25,000	Tons/year	0	Tons/year
49-AA-0369	Grab N' Grow	Composting Facility (Agricultural)	Sonoma	2759 Llano Road	Santa Rosa	Solland Co., Inc. 3450 A Regional Parkway Santa Rosa, CA 95403 PH: 707-525-1100		Agricultural, Green Waste, Manure	Active	690	Cubic Yard / day	90,000	Cubic Yard / year	10-25,000	Tons/year	0	Tons/year
49-AA-0394	Reichert Duck Farm	Composting Facility (Agricultural)	Sonoma	3770 Middle Two Rock Road	Petaluma	Reichert Duck Farm, Inc. 3770 Middle Two Rocks Road, Petaluma, CA 94952 PH: 707-762-6314		Manures	Active	200	Cubic Yard / day	6,000	Cubic Yard / year	0-10,000	Tons/year	0	Tons/year
49-AA-0412	Sonoma Valley Organics	Chipping and Grinding Activity Facility / Operations	Sonoma	1180 Fremont Drive	Sonoma	Sonoma Valley Organics 20418 5th East, Sonoma, CA 95476 PH: 707-996-7555		Green Waste	Active	60	Cubic Yard / day	0	not listed	Not Listed	Not Listed	0	Not Listed
50-AA-0049	3D Ag, LLC	Composting Facility (Agricultural)	Stanislaus	5230 Patterson Road	Oakdale	3D Ag, LLC PO Box 1229 Riverbank, CA 95367 PH: 209-614-3889		Green Waste, Manure	Active	12,500	Cubic Yards / not listed	31,920	Cubic Yards / Year	10-25,000	Tons/year	0	Tons/year

SWIS Number	Name of Facility	Type of Facility	County	Address	City	Business Name	Miles from Santa Clara County (1555 Berger Drive, San Jose, CA 95112)	Material Accepted	Operational Status	Maximum Permitted Throughput **	Units	Permit Capacity	Units	Actual Daily/Annual Throughput *	Units	Remaining Capacity	Units
50-AA-0048	CA Soils, Inc	Composting Facility (Green Waste)	Stanislaus	3401 Gaffery Road	Vernalis	CA Soils, Inc PO Box 345 Westley, CA 95387 PH: 209-835-9530		Green Waste	Active	250	Cubic Yards / not listed	60,000	Cubic Yards / Year	0-10,000	Tons/year	0	Tons/year
50-AA-0024	Central Valley Agricultural Grinding, Inc	Composting Facility (Green Waste)	Stanislaus	5707 Langworth Road	Riverbank	Barry, Mike and Konzen, Paul 5507 Langworth Road Oakdale, CA 95361 PH: 209-869-1721		Green Waste	Active	350	Cubic Yard / day	0	not listed	8-40,000	Tons/year	0	Tons/year
50-AA-0050	Eleanor Ranch	Composting Facility (Green Waste)	Stanislaus	5954 Eleanor Road	Oakdale	Tom Dunlop PO Box 1229 Riverbank, CA 95367 PH: 209-614-3889		Green Waste, Ag, Wood Waste	Active	12,500	Cubic Yards / not listed	95,000	Cubic Yards / Year	0-10,000	Tons/year	0	Tons/year
24-AA-0023	Valley Fresh Foods, Inc.	Composting Facility (Agricultural)	Stanislaus	1220 Hall Road	Denair	Not Listed		Mixed Organics, Manures	Active	Not Listed	Not Listed	Not Listed	Not Listed	10-25,000	Tons/year	0	Tons/year
39-AA-0037	Delicato Vineyards	Composting Facility (Agricultural)	San Joaquin	12001 S. Hwy 99	Manteca	Delicato Vineyards 12001 South Highway 99, Manteca, CA 95336 PH: 209-824-3600	68	Green Waste	Active	36	Tons/day	4,000	Tons/year	0-10,000	Tons/year	9,964	Tons/year
39-AA-0051	Harvest-Lathrop	Composting Facility (Green Waste)	San Joaquin	916 Frewert Road	Lathrop	Harvest-Lathrop 920 West Frewert Road Lathrop, CA 95330 PH: 209-464-8701	64	Ag, C&D, Food, Green Waste	Active	500	Tons/day	100,000	Cubic Yards / not listed	50-100,000	Tons/year	99,500	Tons/year
01-AA-0007	Davis Street Transfer Station	Chipping and Grinding Activity Facility/Operations	Alameda	2615 Davis Street	San Leandro	2615 Davis St., San Leandro, CA 94577 PH: 510-657-2425	38	Green Waste, Food Scraps, Organics from MSW	Active (composting Planned)	5,600	Tons / not listed	9,600	Tons/day	80-240,000	Tons/year	Potentially at Capacity	Tons/year
27-AA-0109	Converted Organics of California, LLC	Composting Facility (Mixed)	Monterey	31677 Johnson Canyon Road	Gonzales	Converted Organics of California, LLC 31677 Johnson Canyon Rd. Gonzales, CA 93926	82	Green Waste, Food Waste	Active	250	Tons/day	2,300	Tons/day	Not Listed	Not Listed	Unknown	Not Listed
39-AA-0055	Green Man Materials	Composting Facility (Green Waste)	San Joaquin	2800 S. El Dorado Street	Stockton	Green Man Recycling, Inc. 3030 S. Hwy 99 Stockton, CA 95215 PH: 209-464-8701	67	Green Waste	Planned	N/A	N/A	N/A	N/A	N/A	N/A	Unknown	N/A
39-AA-0044	Valley Landscaping	Composting Facility (Green Waste)	San Joaquin	1320 East Harney Lane	Lodi	Valley Landscaping 12900 North Lower Sacramento, Lodi CA 95242 PH: 209-334-3659	85	Green Waste	Planned	None	N/A	N/A	N/A	N/A	N/A	Unknown	N/A
01-AA-0299	East Bay Municipal Utility District	Bio solids Composting at POTWs (Anaerobic Digestion)	Alameda	2020 Wake Avenue	Oakland	East Bay Municipal Utilities District 2020 Wake Ave., Oakland, CA 94607 PH: 510-287-1542	41	Bio solids, Food Scraps	Active	250	Tons/day	36,500	Tons/year	25-49,999	Tons/year	Unknown but potential	Tons/year
01-AA-0289	Altamont Resource + Recovery Facility	Composting Facility (Green Waste)	Alameda	10840 Altamont Pass Road	Livermore	Waste Mgmt. of Alameda Co. 172-98th Ave., Oakland, CA 94603 Ph: 510-613-8710	38	Green Waste, Food Scraps, Organics from MSW	Planned	N/A	N/A	N/A	N/A	N/A	N/A	Unknown but potential	N/A
01-AA-0317	Bio Fuels Systems Inc	Chipping and Grinding Activity Facility/Operations	Alameda	10840 Altamont Pass Road	Livermore	Bio Fuels Systems 1250 Ames Ave., Ste 205 Milpitas, CA 95035 PH: 925-455-5908	38	Green Waste	Active	200	Tons/year	72,800	Tons/year	40-80,000	Tons/year	Unknown but potential	Tons/year
01-AA-0325	Composting Facility (Altamont Landfill)	Composting Facility (Mixed)	Alameda	10840 Altamont Pass Road	Livermore	Waste Mgmt. of Alameda Co. 10840 Altamont Pass Rd. Livermore, CA 94551 Ph: 925-455-7323	38	Mixed MSW	Planned	N/A	N/A	N/A	N/A	N/A	N/A	Unknown but potential	N/A
01-AA-0308	Vision Recycling	Chipping and Grinding Activity Facility/Operations	Alameda	30 Greenville Road	Livermore	TWDC Industries CORP - Vision Recycling 41900 Boscell Rd., Fremont, CA 94538 PH: 510-429-1300	35	Green Waste	Active	200	Tons/year	62,000	Tons/year	10-50,000	Tons/year	Unknown but potential	Tons/year
01-AA-0322	Vision Recycling Green Waste Composting	Composting Facility (Green Waste)	Alameda	30 Greenville Road (B)	Livermore	TWDC Industries CORP - Vision Recycling 41900 Boscell Rd., Fremont, CA 94538 PH: 510-429-1300	35	Green Waste	Active	12,500	Cubic Yards / Year	50,000	Cubic Yard / year	Not Listed	Not Listed	Unknown but potential	Not Listed
07-AA-0044	WCCSLF Organic Materials Processing	Composting Facility (Mixed)	Contra Costa	1 Parr Blvd.	Richmond	West Contra Costa Sanitary Landfill Inc. 3260 Blume Dr. St. 115, Richmond, CA 94806 PH: 510-262-1660	55	Wood and Lumber, Food Pre-Consumer, Green Waste (accepts from public), Manures, Mixed C&D	Active	1,134	Tons/day	0	Cubic Yard / day	50-100,000	Tons/year	Unknown but potential	Tons/year
21-AA-0001	Redwood Landfill	Composting Facility (Mixed)	Marin	8950 Redwood Hwy	Novato	Redwood Landfill, Inc. PO Box 793 Novato, CA 94948 PH: 415-892-2851	76	Green Waste, Food Pre-Consumer, Mixed Organics, Bio solids/Sludge, Wood/Lumber	Active	170	Tons/day	60,000	Cubic Yard / year	25-50,000	Tons/year	Unknown but potential	Tons/year
21-AA-0063	West Marin Compost	Composting Facility (Agricultural)	Marin	6290 Nicasio Valley Road	Nicasio	Lunny Grading and Paving, Inc. PO Box 730 Nicasio, CA 94946 PH: 415-662-9849	76	Green Waste, Manures (Accepts from public)	Active	200	Tons/day	20,000	Tons/year	10-25,000	Tons/year	Unknown but potential	Tons/year
24-AA-0039	D.A.T.T.	Composting Facility (Agricultural)	Merced	on Washington Rd., 3.8 miles W. of Hwy 59	El Nido	DATT 1224 P St. Newman, CA 95360 PH: 209-862-1618	105	Ag, Manure	Active	12,500	Cubic Yards / not listed	12,500	Cubic Yards / not listed	0-10,000	Tons/year	Unknown but potential	Tons/year
24-AA-0019	Stone Family El Nido Composting Facility	Composting Facility (Agricultural)	Merced	Vineyard Way at Grant Road	Merced	Stone Family 5545 W. Shaw Winton, CA 95388 PH: 209-358-3200	106	Ag, Manure	Active	40,000	Cubic Yards / not listed	40,000	Cubic Yard / year	10-50,000	Tons/year	Unknown but potential	Tons/year
27-AA-0102	Central Coast Compost LLC	Composting Facility (Green Waste)	Monterey	N. of Iverson Rd. and Johnson Cyn Rd.	Gonzales	Central Coast Composting LLC 391 Harnes Rd, Watsonville, CA 95076 PH: 831-809-6900	82	Manures, Green Waste, Mixed Organics	Active	350	Tons/day	15,000	Cubic Yard / year	50-100,000	Tons/year	Unknown but potential	Tons/year
27-AA-0085	Gabilan Ag Services	Composting Facility (Mixed)	Monterey	14201 Del Monte Blvd.	Marina	Keith Day Co. Inc. DBA Gabilan Fertilizer 1091 Madison Lane, Salinas, CA 93907 PH: 831-771-0126	64	Green Waste, Mixed Organics, Food Pre-Consumer (Accepts from public)	Active	500	Tons/day	200,000	Cubic Yard / year	50-100,000	Tons/year	Unknown but potential	Tons/year
27-AA-0086	Guziks Good Humus	Composting Facility (Green Waste)	Monterey	27921 Iverson Road	Gonzales	The Good Humus Man 24505 Vireas Del Valle, Salinas, CA 93908 PH: 408-484-2626	79	Ag, Green Waste, Manure	Active	15,000	Tons/year	20,000	Tons/not listed	50-100,000	Tons/year	Unknown but potential	Tons/year
27-AA-0122	Johnson Canyon Landfill Compost	Composting Facility (Green Waste)	Monterey	31400 Johnson Canyon Road	Gonzales	Vision Recycling 41900 Boscell Rd., Fremont, CA 94538 PH: 510-429-1300	77	Composting	Active	12,500	Cubic Yard / day	26,000	Tons/year	10-25,000	Tons/year	Unknown but potential	Tons/year
27-AA-0005	Johnson Canyon Sanitary Landfill	Chipping and Grinding Activity Facility/Operations	Monterey	31400 Johnson Canyon Road	Gonzales	Salinas Valley Solid Waste Authority Box 2159 Salinas, CA 93901 PH: 831-755-1300	77	Green Waste	Active	1,574	Tons/day	13,834,328	Cubic Yard / not listed	0-10,000	Tons/year	Unknown but potential	Tons/year
27-AA-0010	Monterey Peninsula Landfill	Composting Facility (Mixed)	Monterey	14201 Del Monte Blvd.	Marina	Monterey Regional Waste Mgmt. District 14201 Del Monte Blvd., Marina, CA 93933 PH: 831-384-5313	67	Food Wastes, Green Waste, Wood Waste, Bio solids/Sludge	Active	0	Not Listed	0	not listed	25-50,000	Tons/year	Unknown but potential	Tons/year
27-AA-0094	Randazzo Enterprises	Chipping and Grinding Activity Facility/Operations	Monterey	13550 Blackie Road	Castroville	Randazzo Enterprises, Inc. 13550 Blackie Road, Castroville, CA 95012 PH: 831-633-4420	58	Green Waste	Active	175	Tons/day	5,250	Tons/month	8-40,000	Tons/year	Unknown but potential	Tons/year
27-AA-0101	Salinas Mushroom, Inc.	Composting Facility (Agricultural)	Monterey	531 Eckhart Road	Salinas	Salinas Mushroom, Inc. PO Box 294 Chualar, CA 93925 PH: 831-758-1242	67	Manures	Active	300	Cubic Yard / day	1,500	Cubic Yard / not listed	0-8,000	Tons/year	Unknown but potential	Tons/year
27-AA-0121	SmartFerm Pilot Research Composting AD	Composting Facility (Research)	Monterey	14201 Del Monte Blvd.	Marina	Monterey Regional Waste Mgmt. District PO Box 1670 Marina, CA 93933 PH: 831-384-3567	64	Food Wastes, Green Waste	Active	75	Tons/day	5,000	Tons/year	1-24,999	Tons/year	Unknown but potential	Tons/year
28-AA-0030	City of Napa Materials Diversion Facility	Composting Facility (Mixed)	Napa	820 Levittin Way	Napa	Napa Recycling & Waste Services, LLC PO Box 239 Napa, CA 94559 PH: 707-255-5200	72	Green Waste, (Accept from public), wood/lumber, Food Pre-Consumer	Active	90,000	Cubic Yards / not listed	400	Tons/day	25-50,000	Tons/year	Unknown but potential	Tons/year
38-AA-0001	San Francisco Solid Waste Transfer and Recycling CTR	Composting Facility (Green Waste)	San Francisco	501 Tunnel Avenue	San Francisco	Recology Properties Inc. 50 California St. 24th Flr., San Francisco, CA 94111 PH: 415-875-1000	72	Other Organics Mgmt.: Food, Green Waste	Active	3,000	Tons/day	5,000	Tons/day	40-80,000	Tons/year	Unknown but potential	Tons/year
39-AA-0045	Clean Planet, Inc.	Chipping and Grinding Activity Facility/Operations	San Joaquin	250 Port Road 23	Stockton	Clean Planet, Inc. PO Box 32314 Stockton, CA 95213 PH: 209-472-7422	71	Green Waste	Active	200	Tons/day	12,500	Cubic Yards / not listed	10-50,000	Tons/year	Unknown but potential	Tons/year
39-AA-0020	Forward Resource Recovery Facility	Composting Facility (Mixed)	San Joaquin	9999 N. Austin Road	Manteca	Forward, Inc./Allied Waste North America 9999 S Austin Road, Manteca CA 95336 PH: 209-982-4298	72	Mixed Organics	Active	1100	Tons/day	4,180	Tons/day	50-100,000	Tons/year	Unknown but potential	Tons/year

SWIS Number	Name of Facility	Type of Facility	County	Address	City	Business Name	Miles from Santa Clara County (1555 Berger Drive, San Jose, CA 95112)	Material Accepted	Operational Status	Maximum Permitted Throughput **	Units	Permit Capacity	Units	Actual Daily/Annual Throughput *	Units	Remaining Capacity	Units
39-AA-0057	Green Earth Recovery	Composting Facility (Green Waste)	San Joaquin	20500 Holly Drive	Tracy	Yayo Enterprises PO Box 2643 Union City, CA 94587 PH: 510-760-0977	50	Green Waste	Active	280	Cubic Yard / day	65,000	Cubic Yard / year	Not Listed	Not Listed	Unknown but potential	Not Listed
39-AA-0026	Scotts Regional Composting Facility	Composting Facility (Green Waste)	San Joaquin	23390 E Flood Road	Linden	O.M. Scotts and Sons Company 23390 Flood Rd., Linden, CA 95236 PH: 209-887-3845	87	Green Waste	Active	500	Tons/day	75,000	Tons/year	50-100,000	Tons/year	Unknown but potential	Tons/year
39-AA-0050	SKS Enterprises	Composting Facility (Agricultural)	San Joaquin	23709 East Brandt Road	Clements	SKS Enterprises PO Box 1109 Ripon, CA 95366 PH: 209-983-0642	92	Green Waste	Active	20	Cubic Yard / day	7,040	Cubic Yard / year	0-10,000	Tons/year	Unknown but potential	Tons/year
39-AA-0024	Tracy Material Recovery T.S.	Composting Facility (Mixed)	San Joaquin	30703 S. Macarthur Drive	Tracy	Repetto M PO Box 93, Tracy, CA 95378 PH: 209-835-0601	55	Green Waste (accepts from public)	Active	1,038	Tons/week	69	Cubic Yards / not listed	25-50,000	Tons/year	Unknown but potential	Tons/year
41-AA-0002	Corinda Los Trancos Landfill (Ox Mountain)	Chipping and Grinding Activity Facility/Operations	San Mateo	12310 San Mateo Road	Half Moon Bay	Browning Ferris Industries of CA, Inc. 12310 San Mateo Rd. (Hwy 92) Half Moon Bay, CA 94109 PH: not listed	40	Green Waste	Active	0	Not Listed	0	not listed	0-8,000	Tons/year	Unknown but potential	Tons/year
49-AA-0407	Carneros River Ranch	Composting Facility (Agricultural)	Sonoma	3900 Hwy 37	Petaluma	Carneros River Ranch 275 Sears Point Road Petaluma, CA 94952 PH: 707-592-3104	81	Green Waste, Manures	Active	55	Cubic Yard / day	20,000	Cubic Yard / year	0-10,000	Tons/year	Unknown but potential	Tons/year
49-AA-0368	Laguna Sub regional Compost Facility	Bio solids Composting at POTWs	Sonoma	4301 Llano Road	Santa Rosa	City of Santa Rosa Util Dept-Llano Dr 4300 Llano Road Santa Rosa, CA 95407 707-543-3374	93	Bio solids/Sludge	Active	410	Cubic Yard / day	30,800	Cubic Yard / year	10-25,000	Tons/year	Unknown but potential	Tons/year
49-AA-0403	Poncia Fertilizer	Composting Facility (Agricultural)	Sonoma	597 Wilfred Avenue	Santa Rosa	Andy Poncia PO Box 718, Cotati, CA 94931 PH: 707-481-8052	92	Green Waste, Manures	Active	2,000	Cubic Yard / month	8,000	Cubic Yard / year	0-10,000	Tons/year	Unknown but potential	Tons/year
49-AA-0397	Tierra Vegetables	Chipping and Grinding Activity Facility / Operations	Sonoma	224 Mark W Station Road	Santa Rosa	Tierra Vegetables 399 Shiloh Business Ct., Ste 311 Windsor, CA 95492 PH: 707-837-8366	101	Green Waste, Organics-Mixed/Other Compostable	Active	10	Cubic Yard / day	1,000	Cubic Yard / year	0-8,000	Tons/year	Unknown but potential	Tons/year
50-AA-0048	CA Soils, Inc	Composting Facility (Mixed)	Stanislaus	3401 Gaffery Road	Vernalis	Central Pacific Holdings, Inc. DBA DPS PO Box 265 Westley, Ca 95387 PH: 209-835-2571	68	C&D-Green Waste	Active	175	Tons/day	63,000	Tons/year	25-49,999	Tons/year	Unknown but potential	Tons/year
50-AA-0018	City Of Modesto Co-Compost Project	Composting Facility (Mixed)	Stanislaus	7001 Jennings Road	Modesto	City of Modesto / County of Stanislaus	78	Mixed Organics, Green Waste, Food Pre-Consumer	Active	43332	Cubic Yards / not listed	43,332	Cubic Yards / not listed	50-100,000	Tons/year	Unknown but potential	Tons/year
50-AA-0016	Gilton Resource Recovery Composting Fac.	Composting Facility (Mixed)	Stanislaus	800 S. McClure Road	Modesto	Gilton Resource Recovery Facility, Inc. 755 S. Yosemite Avenue Oakdale, CA 95361 PH: 209-527-3781	85	Mixed Organics	Active	471	Tons/day	471	Tons/day	25-49,999	Tons/year	Unknown but potential	Tons/year
50-AA-0015	Recology Blossom Valley Organics N Hamme	Composting Facility (Green Waste)	Stanislaus	6131 Hammet Road	Modesto	Recology Blossom Valley Organics N. Hamm PO Box 128 Westley, CA 95387 PH: Not Listed	71	Green Waste	Active	125	Cubic Yards / not listed	125.00	not listed	8-40,000	Tons/year	Unknown but potential	Tons/year
50-AA-0015	Recology Blossom Valley Organics N Hamme	Composting Facility (Green Waste)	Stanislaus	6131 Hammet Road	Modesto	Recology Blossom Valley Organics N. Hamm PO Box 128 Westley, CA 95387 PH: Not listed	71	Green Waste	Active	125	Tons/day	250	Tons/day	8-40,000	Tons/year	Unknown but potential	Tons/year
50-AA-0020	Recology Blossom Valley Organics N Verna	Composting Facility (Mixed)	Stanislaus	3909 Gaffery Road	Vernalis	Recology Blossom Valley Organics N. Vern PO Box 128 Westley, CA 95387 PH: None listed	65	Food, Green Waste, Mixed Organics	Active	2,000	Tons/day	300,000	Cubic Yards / not listed	300,000-above	Tons/year	Unknown but potential	Tons/year

Table 1

Summary of Facility Type by County													
Facility Type	Alameda	Contra Costa	Marin	Merced	Monterey	Napa	San Benito	San Francisco	San Joaquin	San Mateo	Santa Cruz	Sonoma	Stanislaus
Anaerobic Digestion	1												
Biosolids Composting at POTWs (Publicly Operated Treatment Works)	1											2	
Composting Facility (Agricultural)			2	6	5	4	2		3		3	5	2
Composting Facility (Green Waste)	2	1	1	4	3	2	1	1	5		4	1	5
Composting Facility (Mixed) - A facility that composts sewage sludge, animal material, or green material, in addition to mixed solid waste	1	1	1	1	4	1			2				4
Composting Facility (Research)					1								
Chipping and Grinding Activity Facility/Operations	4	6	1	1	2		2	1	1	4		4	
TOTAL	9	8	5	12	15	7	5	2	11	4	7	12	11

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Table 2

Summary of Facilities by Material Type by County													
Material Type	Alameda	Contra Costa	Marin	Merced	Monterey	Napa	San Benito	San Francisco	San Joaquin	San Mateo	Santa Cruz	Sonoma	Stanislaus
Bio Solids/Sludge	1		1		1							2	
Food Scraps	3	2	1		6	2		1	1				2
Green Waste	6	8	5	5	8	5	4	2	9	4	6	8	9
Manure			2	6	7	1	2		1		1	5	2
Mixed MSW	3		1	1									
Mixed Organics				4	5	4		1	2			1	4
Wood / Lumber		1				1			1		2	1	1

Outcome: The City of Palo Alto was the only jurisdiction that had any information on how many residents backyard compost. Although the estimation will be high for other cities, we used this to get an estimate of number of households that participate.

Cities	Population for City (provided by City)	Households (United States Census Bureau 2011-2015)	% of Households that Backyard Compost	No. of Households that Backyard Compost	Annual Average Pounds per Household of Food Scraps**	Estimated Overall Pounds of Food Scraps that are Backyard Composted Annually	Anticipated Growth % in Program
Campbell	42,584	16,042	10%	1,604	0.24	385	Unknown
Cupertino	60,189	20,422	10%	2,042	0.24	490	Unknown
Gilroy	51,701	14,989	10%	1,499	0.24	360	Unknown
Los Altos	30,177	10,877	10%	1,088	0.24	261	Unknown
Los Altos Hills	7,922	3,047	10%	305	0.24	73	Unknown
Los Gatos	30,000	12,146	10%	1,215	0.24	292	Unknown
Milpitas	69,783	20,792	10%	2,079	0.24	499	Unknown
Monte Sereno	3,485	1,211	10%	121	0.24	29	Unknown
Morgan Hill	40,872	13,460	10%	1,346	0.24	323	Unknown
Mountain View	76,260	32,714	10%	3,271	0.24	785	Unknown
Palo Alto	75,000	26,087	10%	2,609	0.24	626	Unknown
San Jose	1,042,094	314,297	10%	31,430	0.24	7,543	Unknown
Santa Clara	120,245	43,433	10%	4,343	0.24	1,042	Unknown
Santa Clara County RWRD	87,764	26,052	10%	2,605	0.24	625	Unknown
Saratoga	30,000	10,800	10%	1,080	0.24	259	Unknown
Sunnyvale	148,372	55,094	10%	5,509	0.24	1,322	Unknown
TOTAL in County	1,916,448	605,421	10%	62,146	0.24	14,915	

* Palo Alto was the only city to provide data; in absence of additional City data, Palo Alto's 10% is being used.

** Cascadia Consulting Average

Outcome: 6 cities state schools have organics collection through their hauler, and none of them knew if the school had onsite composting. Most tonnage that is taken by the hauler is reported, not sure if there is more tonnage out there that is being composted on-site, if there is it estimated to be a small

Cities	Number of Schools in Jurisdiction	Number of Schools with onsite Composting	Number of Schools that have Organics Collected by Hauler	Total Volume of Material	Notes
Campbell	36	0	3	Unknown	(2) 95 gal/wk, 190 gal/wk, 4yd/wk
Cupertino	27	Unknown	Unknown	Unknown	
Gilroy	Unknown	Unknown	Unknown	Unknown	
Los Altos	Unknown	Unknown	Unknown	Unknown	
Los Gatos	29	0	5	Unknown	3 (95 gal/wk) 2 (1.5-2yd/week)
Milpitas	14	0	Unknown	Unknown	
Monte Sereno	1	0	1	3yds and 95 gal/week	
Morgan Hill	15	0	0	Unknown	
Mountain View	11	Unknown	2	Unknown	2 schools-diverting food/soiled paper-pkup by hauler. 5 schools use yard trimmings carts for garden, not food.
Palo Alto	35 (17 private)	0	18	Unknown	No one at City has a good record of who is doing what. Even if some of the schools are doing some composting on site, it is very limited.
San Jose	92	City was uncertain (37 gardens)	9	Unknown	
Santa Clara	1	Unknown	Unknown	Unknown	
Santa Clara County	3	2	Unknown	Unknown	
Saratoga	25	0	0	Unknown	
Sunnyvale	31	0	9	Unknown	

Table 12. Onsite Composting at Large Institutions

Cities	No. of Institutions in Jurisdiction*	Name of Institution	On-Site Composting?	No on-site, what else are they doing with compost?	Total Volume of Material? Entire amt. from Cafeteria? Only parts of material? Need % and information entered in NOTES column
Campbell	0	N/A	N/A	N/A	N/A
Cupertino	3	DeAnza Community College	No	Recology Services	~8 tons/month
Gilroy	1	Gavilan College	Unknown	Unknown	6-.2-17 left v/m w/ Jeff Gopp
Los Altos	1	Foothill College	Unknown	Unknown	closed after 12pm Fridays (6.2.17); 6-5-17 need to call back w/ auto system; left v/m with Andrea Hanstein-pub. Relations/admiration
Los Gatos	0	N/A	N/A	N/A	N/A
Milpitas	1	California Science and Technology University	No	Landscaper	Not sure
Monte Sereno	0	N/A	N/A	N/A	N/A
Morgan Hill	1	Gavilan College	Unknown	Unknown	6-.2-17 left v/m w/ Jeff Gopp
Mountain View	0	N/A	N/A	N/A	N/A
Palo Alto		Palo Alto University	No	Landscaper	Not sure
San Jose	14	San Jose City College	Unknown	Unknown	N/A?
San Jose		San Jose State	No	Hauling Company	not sure
San Jose		University of Phoenix	No	Landscaper	Not sure
San Jose		USF College	No	Landscaper	Not sure
San Jose		Cogswell College	No	Landscaper	Not sure
San Jose		Henley Putnam University	No	Landscaper	Not sure
San Jose		Everest College	No	Landscaper	Not sure
San Jose		San Jose - Evergreen Community College	Unknown	Unknown	
San Jose		William Jessup University	No	Landscaper	Not sure
San Jose		Carrington College	No	Landscaper	Not sure
San Jose		DeVry University	No	Landscaper	Not sure
San Jose		JFK University	No	Landscaper	Not sure
San Jose		Silicon Valley University	No	Landscaper	Not sure
San Jose		Pepperdine University Executive Program	No	Landscaper	Not sure
Santa Clara	6	Santa Clara University	No	Mission Trail Waste Systems	Not sure
Santa Clara		Golden Gate University	No	Landscaper	Not sure
Santa Clara		Golden State Baptist College	No	Landscaper	Not sure
Santa Clara		Mission College	No	Mission Trail Waste Systems	Not sure
Santa Clara		California College of Communications	No	Landscaper	Not sure
Santa Clara County	0	N/A	N/A	N/A	N/A
Saratoga	1	West Valley Junior College	Unknown	Unknown	closed on Fridays (6.2.17); 6-5-17 cannot get thru automated system (11min wait time) ; left v/m with Kim Aufhauser-park mgmt.
Stanford	4	Stanford	No	Peninsula Sanitary Services Inc. Hauls Material to Newby	Not sure
Sunnyvale	2	Art Institute of California Sunnyvale (closing), Foothill De Anza Community College, Herguan university, TBD	No	New site, no material; within 6 months they will be utilizing City landscape bins	

* The number of known institutions were added in this column, only the larger institutions were documented in the table

Table 13. Composting Operations at Parks, Community Gardens, and Farms

Cities	No. of Parks	No. of Composting Operations	Amt. of Material Composted	Amt. Sent to Hauler	Amt. Grasscycled	No. of Gardens	No. of Composting Operations	Amt. of Material Composted	No. of Farms	Amt. of material Composted	Amt. sent to Hauler	Amt. Grasscycled
Campbell	9	Unknown	Unknown	Unknown	Unknown	0	N/A	N/A	1	Unknown	Unknown	Unknown
Cupertino	19	Unknown	Unknown	Unknown	Grasscycling done at all turf areas except 4 infields where clippings are hauled to Service Center to be collected for composting	1	Compost piles on site and bin service by hauler	Unknown	0	N/A	N/A	N/A
Gilroy	2	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	10	Unknown	Unknown	Unknown
Los Altos		Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Los Gatos	7	Unknown	Unknown	Unknown	Unknown	0	N/A	N/A	28	Unknown	Unknown	Unknown
Milpitas	33	0	Not listed	Unknown	hauled off by to composting facility (96gal cart of yard trim/organics from Spring Valley ea. Week	1	Unknown	Not Listed	0	N/A	N/A	N/A
Monte Sereno	0	N/A	N/A	N/A	N/A	0	N/A	N/A	0	N/A	N/A	N/A
Morgan Hill	26	Unknown	Unknown	Unknown	mowing and tree trimming is performed by contractors; amt. unknown	1	mhcommunitygarden.org home page does not include email or contact phone		10	Unknown	Unknown	Unknown
Mountain View	29	2	Unknown	Unknown-debris box sent to Smart Station	115 acres	2 (3 including Los Altos?)	Unknown	Unknown	0	N/A	N/A	N/A
Palo Alto	36	2	Unknown	32 gallons	Unknown	4	4?	Unknown	0	N/A	N/A	N/A
San Jose	17	Unknown	Unknown	Unknown	Unknown	0	N/A	N/A	31	Unknown	Unknown	Unknown
Santa Clara	33	Unknown	Unknown	hauled back to yards and collected by MTWS for processing	Unknown	0 (1 in 2018)	Unknown	Unknown	0	N/A	N/A	N/A
Santa Clara County	7	Unknown	Unknown	92 cy weekly (Trash)	Unknown	0	N/A	N/A	24	Unknown	56 cy weekly (Trash)	Unknown
Saratoga	12	Unknown	Unknown	Unknown	Unknown	0	N/A	N/A	2	Garrod Farms 6-5-17 Jan Garrod called bk ~30yds month composted on-site then given to comm. Gardens and vineyards	Unknown	Unknown
Sunnyvale	23	2	Unknown	Unknown	400 acres	1	Unknown	Unknown	2	Unknown	Unknown	Unknown

Outcome: 2 cities knew their golf courses composted on-site. Four cities state their hauler takes material, others were not certain what they were doing with material. SCS attempted to call golf courses to seek more information, but no one returned our call.

Cities	No. of Golf Courses	Composting Onsite?	Mulch Onsite?	Does Hauler pick up material?	Estimated Amt. of Compost Material?	Internal Notes:
Campbell	0	N/A	N/A	N/A	N/A	
Cupertino	2	Blackberry grasscycles	Unknown	Landscape trimmings/tree waste pkup/collected for composting	Unknown	Deep Cliff Golf Course, Blackberry Farm Golf Course
Gilroy	3	Unknown	Unknown	Unknown	Unknown	Gilroy Golf Course 6-5-17 left v/m for Super, Julian, Eagle Ridge Golf Course, Gavilan College Golf Course
Los Altos	1	Unknown	Unknown	Unknown	Unknown	Los Altos Country Club closed on Monday, 6-5-17
Los Gatos	1	Unknown	Unknown	Unknown	Unknown	La Rinconada Country Club 6-5-17 left v/m with Kevin Green
Milpitas	2	Unknown	Unknown	Spring Valley Recology collects 96 gal. cart of yard trimmings	Unknown	Spring Valley Golf Course 6-5-17 left v/m fro Jeff Rockwood, GM, Summitpointe Golf Club 6-5-17 left message for facility with Chad
Monte Sereno	0	N/A	N/A	N/A	N/A	
Morgan Hill	2	Unknown	Unknown	Unknown	Unknown	Coyote Creek Golf Club 6-5-17 left v/m for Michael Fish, GM
Mountain View	1	None	None	Ttree trimmings collected and sent to Smart station	Unknown	Shoreline Golf Links 6-5-17 left v/m with Matt Wisely Green Super, Golf Club Moffett Field 6-5-17 left v/m w/ Gary Pearce, GM
Palo Alto	1 (and 1 currently under construction)	Unknown	Unknown	Unknown	Unknown	Palo Alto Hills Golf Country Club, Palo Alto Golf Course 6/5/17 left v/m for Dirk Zander, GM
Stanford	1	No	No	Yes	Unknown	
San Jose	2	Unknown	Unknown	Unknown	Unknown	Golf Club at Boulder Ridge 6-5-17 closed, San Jose Municipal Golf Course 6/5/17 left v/m for Bob McGrath, GM, Almaden Golf & Country Club, Santa Teresa Golf Club, Cinnabar Hill Golf Club, The Ranch Golf Club
Santa Clara	2	Unknown	Unknown	Unknown	Unknown	Pruneridge Golf Course 6-5-17 left v/m general mailbox for Super, Santa Clara Golf and Tennis Club
Santa Clara County	4	Unknown	Unknown	Recology - no data reported	Unknown	
Saratoga	1	Unknown	Unknown	Unknown	Unknown	Saratoga Country Club 6/5/17 closed on Monday
Sunnyvale	2	Yes	No	Yes	Grasscycle / unknown	Sunnyvale Golf Course Owned and operated by the City of Sunnyvale, Sunken Gardens Golf Course

Outcome: 2 cities knew what their stables were doing with manure and were able to provide the volume of material. SCS called stables to get understand where the manure is going, however did not receive calls back, therefore unable to predict how much is composted on-site or off-site.

Cities	No. of Horse Stables and Eq. Centers	Mulch/Compost/ or Haul?	Volume of Manure (May need to call to see what they do?)	Vol. of material needed to be taken? Or is it already counted in haulers numbers?	Internal Notes:
Campbell	0	N/A	N/A	N/A	
Cupertino	2	Unknown	Unknown	Unknown	Whispering Creek Eq. Cntr 6-5-17 lft v/m. w/ Richard Hong, Brookside Stables
Gilroy	3	Unknown	Unknown	Unknown	California Stables, Silver Creek Stables, South Bay Horse Ranch
Los Altos	3	Unknown	Unknown	Unknown	Westwind Comm. Barn, Pagemill Pastures lft v/m 6-5-17 for Giselle, Windy Hill Equestrain
Los Gatos	4	(Bear Creek Stables hauls off)	Bear Creek Stables ~66 cy/wk	Unknown	Bear Creek Stables 6-5-17 lft v/m, JBL Stables, Los Gatos Farms, Fox Equine Rescue & Youth Horsemanship Center
Milpitas	3	Chaparral compost onsite; Indian Hills haul to offsite location	11 cy/wk spread on-site (Chaparral Ranch)40cy/per wk (Indian Hills Ranch)		Chaparral Ranch 6-5-17 Susan,talking w/ partner and calling me back w/ info, Indian Hills horse Ranch, TGIF Farms
Monte Sereno	0	N/A	N/A	N/A	
Morgan Hill	1	Unknown	Unknown	Unknown	Coyote Canyon Ranch 6-5-17 lft v/m for Tyler
Mountain View	0	N/A	N/A	N/A	
Palo Alto	2	Unknown	Unknown	Unknown	Portola Pastures,
Stanford	1	Haul	1456 tons	In hauler numbers	
San Jose	4	(Lakeview Stable) partially compost and spread onsite	Unknown	Unknown	Lakeview Stable 6-5-17 lft v/m with Jan, Cooksy Family Stables 6/5/17 lft v/m , Alum Rock Riding Academy, Prevost Ranch and Gardens
Santa Clara	0	N/A	N/A	N/A	
Santa Clara County	2	Unknown	Unknown	Unknown	
Saratoga	2	N/A	N/A	N/A	See Farms tab entry for Garrod Farms; Saratoga Equestrian (closed on Monday 6-5-17)
Sunnyvale	1 (Animal Assisted Happiness)	Haul to offsite location	Unknown	Unknown	

Attachment C

City	Other than the Countywide program what else have you done to contribute to food waste donation & recovery?	Is information available on the number of businesses and/or volume of material that is donated on a weekly, monthly or annual basis?	How many locations within your jurisdiction accept donated food? Provide name/address if possible.	Do you track the quantity of food they accept each month?	What food waste reduction programs do you have?
Campbell	None	N/A	Unknown	No	None
Cupertino	Encourage donation to West Valley Community Services	Cupertino, in partnership with the franchised hauler, participates in data gathering as part of the EPA's Food Recovery Challenge. Estimated donated quantity was 130.3 tons in 2016.	1 - West Valley Community Services 10104 Vista Dr, Cupertino, CA 95014	No	We support "Save the Food" media campaign and provide reusable produce bags with food storage tips included to reduce waste.
Gilroy	No response	No response	No response	No response	No response
Los Altos	No response	No response	No response	No response	No response
Los Altos Hills	No response	No response	No response	No response	No response
Los Gatos	None	N/A	Unknown	No	None
Milpitas	No	No	No	No	Public awareness and community promotion via "Save the Food" media campaign that is pushed to City webpage and Facebook.
Monte Sereno	None	N/A	Unknown	No	None
Morgan Hill	Nothing yet	No	Don't know	No	None

City	Other than the Countywide program what else have you done to contribute to food waste donation & recovery?	Is information available on the number of businesses and/or volume of material that is donated on a weekly, monthly or annual basis?	How many locations within your jurisdiction accept donated food? Provide name/address if possible.	Do you track the quantity of food they accept each month?	What food waste reduction programs do you have?
Mountain View	Nothing	No. We only know how many people took the home composting class offered by the County.	1 - Community Services Agency, 204 Stierlin Road, Mountain View, 94043 2 - Hopes Corner (at Trinity United Methodist Church) 3- 748 Mercy Street, Mountain View, 94041. There might be more, but these are the two I am aware of.	No	No specific programs, just outreach through our newsletters, social media and website, for example tagging onto the EPA Food Too Good Waste, Ad Council and BayRoc campaigns.
Palo Alto	Palo Alto has connected Piazza's Grocery Store with Second Harvest Food Bank. Palo Alto is looking to make a similar connection with Mollie Stone's Market. Stanford donates food.	No	All Saints Church Food Pantry, Jerusalem Baptist Church, Opportunity Center	No	We have worked mainly with residents - cooking classes, broadcast outreach, events with interactive tables (e.g., making EAT FIRST boxes). We have done some outreach to the business community via bill insert and a survey of restaurants, but we have no way to measure if that increased donations. Probably not.
San Jose	None	N/A	Unknown	No	None
Santa Clara	Provide information through businesses via AB 1826 outreach visits and Green Business Newsletter.	No	Levi's stadium, Santa Clara University and the convention center are some of the venues that donate food.	No	N/A
Santa Clara County	Our Franchise Agreements include food waste collection	No	Unknown	Not at this Time	Other than food waste collection, we do not have any additional food waste reduction programs
Saratoga	None	N/A	Unknown	No	None
Sunnyvale	Sunnyvale is working with Second Harvest Food Bank currently on a food rescue pilot at grocery stores.	Check with Second Harvest to get this information. They track the number of businesses and total tons collected.	Sunnyvale Community Services and Ecumenical Hunger Program participate in food rescue in Sunnyvale.	No	We will be doing more food waste reduction education as we implement our residential food scraps program city-wide in fall 2017.

New Rules for Restaurants in Santa Cruz County



Frequently asked questions:

Why is the County doing this?

To reduce litter, protect the environment, and to reduce contamination in our local compost operation.

Does this take effect in the cities?

Not yet. Just in the unincorporated areas of the county.

How do I know if a product meets the standards?

Check the web site www.bpiworld.org.

If my product says “biodegradable,” “compostable,” or has a recycling symbol on it, is that good enough?

No, many products are advertised this way that do not meet the standards.

Where can I get new supplies?

Most food service supply companies can help. Coast Paper in Santa Cruz is a good local source. Or go to www.bpiworld.org.

What if I don’t use up all of my current supplies by January? Can I get an extension?

The new rules take effect January 1. Excess supplies can often be returned to the supplier. Businesses with unusual circumstances can contact the County.

I get all my supplies from the corporate warehouse (for chains). What do I do?

The rules apply to chains as well as local businesses. Full compliance is expected.

How can I start compost collection service?

Contact GreenWaste Recovery at 426.2711 or customerservice@greenwaste.com

What are the penalties for violations?

Fines from \$100 to \$500.

Where can I get more information?

Online at www.santacruzcountyrecycles.org, or call the County at 454-2160.

ORDINANCE NO. _____
AN ORDINANCE OF THE COUNTY OF SANTA CRUZ
AMENDING CHAPTER 5.46 OF THE COUNTY CODE PERTAINING TO
THE USE AND SALE OF POLYSTYRENE FOAM

Chapter 5.46
ENVIRONMENTALLY ACCEPTABLE MATERIALS

Sections:

- 5.46.010 Findings and intent.**
- 5.46.020 Definitions.**
- 5.46.030 Prohibited Food Service Ware and Products.**
- 5.46.035 Non-food Packaging Material.**
- 5.46.040 Required Biodegradable/Compostable or Recyclable Disposable Food Service Ware**
- 5.46.050 Implementation; county contracts and leases.**
- 5.46.060 Exemptions.**
- 5.46.070 Enforcement.**
- 5.46.080 Violations.**
- 5.46.090 Severability.**
- 5.46.100 No conflict with federal or state law.**
- 5.46.110 Preemption.**

5.46.010 Findings and intent.

The Board of Supervisors finds and declares:

- A. The County of Santa Cruz has a duty to protect the natural environment, our economy, and the health of its citizens.
- B. Products made from expanded polystyrene foam (commonly called Styrofoam) are not biodegradable, returnable or recyclable. Polystyrene foam easily breaks up into smaller pieces and because it is lightweight, is carried by the wind even when it has been disposed of properly.
- C. As litter, polystyrene foam is highly durable, persisting and detracting from the appearance of an area longer than any other type of litter. There is a prevalence of polystyrene foam debris littering our parks and public places, streets and roads, waterways, storm drains and beaches. This litter ultimately floats, or is blown, into the Monterey Bay. This litter exists at a financial cost to residents and an environmental cost to our natural resources.
- D. The County of Santa Cruz is situated at the edge of the Monterey Bay National Marine Sanctuary. Marine animals and birds often confuse

polystyrene foam pieces as a food source which, when ingested, can impact the digestive track which often leads to death.

- E. The U.S. EPA has stated that the physical properties of polystyrene foam are such that “the material can have serious impacts on human health, wildlife, the aquatic environment and the economy.” According to the U.S. Food and Drug Administration, there is medical evidence to suggest that styrene, a primary component of polystyrene foam, leaches from polystyrene foam containers into food and drink. The general public, especially the non-English speaking community, is not typically warned of any potential hazard from styrene. A 1986 EPA study detected Styrene in the fat tissue of every man, woman and child tested.
- F. Discarded polystyrene constitutes a significant portion of the County of Santa Cruz waste stream. Laws, policies and regulations pertaining to material which is difficult to recycle have become a vital component in the efforts to reduce the amount of disposed waste.
- G. It is not economically feasible to recycle polystyrene in Santa Cruz County. Eliminating the use of polystyrene foam and other non-compostable, and nonrecyclable items will maximize the operating life of our landfills and will lessen the economic and environmental costs of waste management for businesses and citizens of Santa Cruz County.
- H. Food waste, including food related packaging, makes up more than thirty percent of the county of Santa Cruz waste stream and the county of Santa Cruz has adopted a policy and program goal of establishing municipal level composting to manage this portion of the waste stream. Countywide composting will help the county to achieve its zero waste goal, including seventy-five percent landfill diversion by the year 2010. If polystyrene foam is found within compost feedstock, the compost is rendered unmarketable and unusable because the application of such compost degrades the soil.
- I. At the present time, over fifty businesses in the county of Santa Cruz engage in organics recycling and it has been demonstrated that the use of biodegradable or compostable food service ware can reduce waste disposal costs when the products are taken to composting facilities as part of an organics recycling program rather than disposed in a landfill. Compost produced from biodegradable products can be used as a soil amendment for farms, landscaping and gardens thereby moving towards a healthier zero waste system.
- J. Biodegradable/compostable and recyclable take-out food packaging such as cups, plates, hinge containers, cutlery and straws are made from organic materials such as paper, sugarcane stalk, corn waste and potato starch.

These products are available locally and are competitively priced. (Ord. 4920 § 2 (part), 4/8/08)

- K. According to local environmental organizations, despite the passage of the County's Environmentally Acceptable Packaging Materials Ordinance in 2008, polystyrene foam is still one of the most abundant types of litter found during beach cleanups.
- L. According to the California Department of Resources Recycling and Recovery (CalRecycle) polystyrene's overall environmental impacts were the second highest of any product, behind only aluminum,
- M. Styrene is a suspected carcinogen and neurotoxin which potentially threatens human health.
- N. Alternative products exist for almost all uses of polystyrene foam.
- O. Due to these concerns nearly 100 cities have banned polystyrene foam food service ware including several California cities, and many local businesses and several national corporations have successfully replaced polystyrene foam and other non-biodegradable food service ware with affordable, safe, biodegradable products.
- P. Restricting the use of polystyrene foam products will further protect the public health and safety of the residents of the County of Santa Cruz, the County's natural environment, waterways and wildlife, would advance the County's goal of limiting greenhouse gas impacts, and contribute toward the County's goal of Zero Waste.

5.46.020 Definitions.

Unless otherwise expressly stated, whenever used in this chapter the following terms shall have the meanings set forth below:

“Affordable” means purchasable by the Food Vendor for same or less purchase cost than the non-Biodegradable, non-Polystyrene Foam alternative.

“ASTM Standard” means meeting the standards of the American Society for Testing and Materials (ASTM) International standards D6400 or D6868 for biodegradable and compostable plastics.

“Biodegradable” means the entire product or package will completely break down and return to nature, i.e., decompose into elements found in nature within a reasonably short period of time after customary disposal.

“Compostable” means all materials in the product or package will break down into, or otherwise become part of, usable compost (e.g., soil-conditioning material,

mulch) in a safe and timely manner in an appropriate composting program or facility, or in a home compost pile or device. Compostable Disposable Food Service Ware includes ASTM-Standard Bio-Plastics (plastic-like products) that are clearly labeled, preferably with a color symbol, such that any compost collector and processor can easily distinguish the ASTM Standard Compostable plastic from non-ASTM Standard Compostable plastic. For the purposes of this chapter the term biodegradable shall have the same meaning as compostable. This chapter uses the terms biodegradable and compostable interchangeably and in all cases whether the terms are used separately, in the disjunctive or in the conjunctive they shall always be interpreted and applied consistent with the definition of the term “compostable.”

“County” or “County of Santa Cruz” means all that territory within the unincorporated area of the county of Santa Cruz, state of California.

“County contractors and lessees” means any person or entity that has a contract with the county for public works or improvements to be performed, for a franchise, concession or lease of property, for grant monies or goods and services or supplies to be purchased at the expense of the county, or to be paid out of monies deposited in the treasury or out of trust monies under the control or collected by the county.

“County facilities” means any building, structure or vehicles owned or operated by the county of Santa Cruz, its agent, agencies, departments and franchisees.

“County facility food provider” means any entity that provides prepared food in county facilities.

“Disposable food service ware” is interchangeable with “to go” packaging and includes all containers, bowls, plates, trays, cartons, cups, lids, straws, stirrers, forks, spoons, knives, napkins and other items designed for one-time use for prepared foods, including without limitation, service ware for takeout foods and/or leftovers from partially consumed meals prepared by food providers. The term “disposable food service ware” does not include items composed entirely of aluminum or polystyrene foam coolers and ice chests that are intended for reuse.

“Food provider” means any business, organization, entity, group or individual, and including retail food establishments, located in the county that offers food or beverage to the public.

“Person” means an individual, trust, firm, joint stock company, corporation including a government corporation, partnership, or association.

“Polystyrene foam” means blown polystyrene and expanded and extruded foams (sometimes called Styrofoam™) which are thermoplastic, petrochemical materials utilizing a styrene monomer and processed by any number of techniques including, but not limited to, fusion of polymer spheres (expandable bead polystyrene), injection molding, foam molding, and extrusion-blown molding (extruded foam polystyrene).

Polystyrene foam is generally used to make cups, bowls, plates, trays, clamshell containers, meat trays and egg cartons. The term “polystyrene” also include clear or solid polystyrene which is know as “oriented polystyrene.”

“Prepared food” means food or beverages, which are served, packaged, cooked, chopped, sliced, mixed, brewed, frozen, squeezed or otherwise prepared on the food provider’s premises or within the county of Santa Cruz. For the purposes of this chapter, prepared food does not include packaging for raw, butchered meats, fish and/or poultry sold from a butcher case or similar retail appliance. Prepared food may be eaten either on or off the premises, also known as “takeout food.”

“Recyclable” means material that can be sorted, cleansed, and reconstituted using recycling collection programs available in Santa Cruz County for the purpose of using the altered form in the manufacture of a new product. Recycling does not include burning, incinerating, converting, or otherwise thermally destroying solid waste.

“Retail food establishment” means all sales outlets, stores, shops, vehicles or other places of business located within the county of Santa Cruz which operate primarily to sell or convey foods or beverages directly to the ultimate consumer, which foods or beverages are predominantly contained, wrapped or held in or on packaging. Retail food establishment shall include, but not be limited to, any place where food is prepared, mixed, cooked, baked, smoked, preserved, bottled, packaged, handled, stored, manufactured and sold or offered for sale, including, but not limited to, any fixed or mobile restaurant, drive-in, coffee shop, cafeteria, short-order cafe, delicatessen, luncheonette, grill, sandwich shop, soda fountain, hotel, motel, movie house, theatre, bed and breakfast inn, tavern, bar, cocktail lounge, nightclub, roadside stand, take-out prepared food place, industrial feeding establishment, catering kitchen, mobile food preparation unit, commissary, grocery store, public food market, produce stand, food stand, or similar place in which food or drink is prepared for sale or for service on the premises or elsewhere, and any other establishment or operation where food is processed, prepared, stored, served or provided for the public; and any organization group or individual which provides food or beverage as part of its service or in conjunction with a special event it sponsors. (Ord. 4920 § 2 (part), 4/8/08)

“Special Event” means an applicant for any special events permit issued by the County or any County employee(s) responsible for any organized special event.

“Retail vendor” means any store or other business that sells goods or merchandise located or operating within the unincorporated area of the County of Santa Cruz.

5.46.030 Prohibited disposable food service.

A. Retail food establishments shall not sell, hand out, give away, distribute or otherwise make available for public or customer use prepared food in disposable food service ware that contains polystyrene foam.

B. County facility food providers may not provide prepared food in disposable food service ware that contains polystyrene foam.

C. County departments may not purchase, acquire or use disposable food service ware that contains polystyrene foam.

D. County contractors and lessees may not use disposable food service ware that contains polystyrene foam. (Ord. 4920 § 2 (part), 4/8/08)

5.46.031 Prohibited retail sales

No retail vendor or special event in the unincorporated area of the County of Santa Cruz may sell, rent or otherwise provide any product which is composed entirely or primarily of polystyrene foam, except as exempted in section 5.46.060 below. This specifically includes but is not limited to cups, plates, bowls, clamshells and other products intended primarily for food service use, as well as coolers, pool or beach toys, packing peanuts or other packaging materials.

5.46.035 Non-food packaging material.

It shall also be a policy goal of the county that business establishments located outside the county of Santa Cruz shall not package any non-food product in any package which utilizes polystyrene foam both block polystyrene or packing peanuts; or purchase, obtain, keep, distribute or sell for home or personal use, or give, or otherwise provide to customers any packaging which utilizes polystyrene foam. The county shall promote and encourage, on a voluntary basis, the elimination of all polystyrene foam packaging. (Ord. 4920 § 2 (part), 4/8/08)

5.46.040 Required biodegradable/compostable or recyclable disposable food service.

A. All retail food establishments utilizing any disposable food service ware shall use a biodegradable/compostable or recyclable product, unless there is no affordable product available as determined by the director of public works in accordance with this subsection and Section 5.46.060(B). Not later than thirty days before the operative date of this chapter, and after a public hearing, the director of public works shall adopt a list of available suitable affordable biodegradable/compostable or recyclable alternatives for each product type. The director of public works shall regularly update the list.

B. All county facilities and departments using any disposable food service ware shall use biodegradable/compostable or recyclable disposable food service ware unless there is no affordable biodegradable or compostable product available as determined by the director of public works in accordance with subsection A of this section.

C. County contractors and lessees using any disposable food service ware shall use biodegradable/compostable or recyclable disposable food service ware in city/county facilities while performing under a county contract or lease unless there is no affordable biodegradable or compostable product available as determined by the director of public works in accordance with subsection A of this section. (Ord. 4920 § 2 (part), 4/8/08)

5.46.050 Implementation; county contracts and leases.

A. The public works director is authorized to promulgate regulations, guidelines and forms and to take any and all other actions reasonable and necessary to enforce this chapter.

B. All county contracts and leases, shall contain the following minimum language: “Contractor agrees to comply fully with and be bound by all of the provisions of the food packaging ordinance as set forth in the Santa Cruz County Code Chapter 5.46 including the remedies provided, and implementing guidelines and rules. The provisions of this chapter are incorporated herein by reference and made a part of this agreement as though fully set forth. This provision is a material term of this agreement. By entering into this agreement, the contractor agrees that if it breaches this provision, the county will suffer actual damages that will be impractical or extremely difficult to determine; further, contractor agrees that the sum of one hundred dollars liquidated damages for the first breach, two hundred dollars liquidated damages for the second breach in the same year, and five hundred dollars liquidated damages for subsequent breaches in the same year is a reasonable estimate of the damage that the county will incur based on the violation, established in light of the circumstances existing at the time this agreement was made. Such amounts shall not be considered a penalty, but rather agreed monetary damages sustained by the county because of contractor’s failure to comply with these provisions.” (Ord. 4920 § 2 (part), 4/8/08)

5.46.060 Exemptions.

A. There are no exemptions that allow for the use of polystyrene foam disposable food service ware.

B. The Board of Supervisors may exempt a retail vendor or special event from the requirements of this chapter for a one year period upon showing that this chapter would create an undue hardship or practical difficulty not generally applicable to other persons in similar circumstances. The director of public works shall put the decision to grant or deny a waiver in writing and it shall be final.

C. A retail vendor or special event granted an exemption must re-apply prior to the end of the one year exemption period and demonstrate continued undue hardship, if it wishes to have the exemption extended. Extensions may only be granted for intervals not to exceed one year.

D. An exemption application shall include all information necessary for the county to make its decision, including but not limited to documentation showing the factual support for the claimed exemption. The director may require the applicant to provide additional information to determine facts regarding the exemption application.

E. The director may approve the exemption application, in whole or in part, with or without conditions.

F. Foods prepared or packaged outside the county and sold inside the county are exempt from the provisions of this chapter. Purveyors of food prepared or packaged outside the county are encouraged to follow the provisions of this chapter.

G. Products which pose a small risk of becoming litter or in which polystyrene foam is included for insulating or flotation purposes and is completely encased in more durable material are exempt from the provisions of this ordinance. Examples include surfboards, boats, life preservers, construction materials, craft supplies and durable coolers not principally composed of polystyrene.

H. Packaging for meat is exempt from the provisions of this chapter.

I. Packaging for medical devices and for harvesting and storage of grapes is exempt from the provisions of this chapter.

5.46.070 Enforcement.

Enforcement of this chapter shall be as follows:

A. The Director of Public Works, or designee, shall have primary responsibility for enforcement of this chapter and shall have authority to issue citations for violation of this chapter. The director, or designee, is authorized to establish regulations or administrative procedures to obtain compliance with this chapter, including, but not limited to, inspecting any vendor's premises to verify compliance in accordance with applicable law.

B. Anyone violating or failing to comply with any of the requirements of this chapter or of any regulation or administrative procedure authorized by it shall be guilty of an infraction.

C. The county attorney may seek legal, injunctive, or any other relief to enforce this chapter and any regulation or administrative procedure authorized by it.

D. The remedies and penalties provided in this chapter are cumulative and not exclusive of one another.

E. The county may inspect any retail vendor's or special event's premises to verify compliance with this chapter. (Ord. 4920 § 2 (part), 4/8/08)

5.46.080 Violations.

Violations of this chapter shall be enforced as follows:

A. For the first violation, the Director of Public Works, or the Director's designee, upon determination that a violation of this chapter has occurred, shall issue a written warning notice to the retail vendor or special event promoter specifying that a violation of this chapter has occurred, along with the appropriate penalties in the event of future violations. The vendor will have thirty days to comply.

B. The following penalties will apply for subsequent violations of this chapter:

1. A fine not exceeding one hundred dollars for the first violation thirty days after the first warning.
2. A fine not exceeding two hundred dollars for the second violation sixty days after the first warning.
3. A fine not exceeding five hundred dollars for the third violation ninety days after the first warning, and for every thirty days not in compliance.

C. Vendors or special events who violate this chapter in connection with commercial or noncommercial special events shall be assessed fines as follows:

1. A fine not exceeding two hundred dollars for an event of one to two hundred persons.
2. A fine not exceeding four hundred dollars for an event of two hundred one to four hundred persons.
3. A fine not exceeding six hundred dollars for an event of four hundred one to six hundred persons.
4. A fine not exceeding one thousand dollars for an event of six hundred one or more persons. (Ord. 4920 § 2 (part), 4/8/08)

5.46.090 Severability.

The provisions of this chapter are declared to be severable and if any provision, sentence, clause, section or part of this chapter is held illegal, invalid, unconstitutional or inapplicable to any person or circumstances, such illegality, invalidity or unconstitutionality or inapplicability shall not affect or impair any of the remaining provisions, sentences, clauses, sections or parts of this chapter or their application to persons and circumstances. (Ord. 4920 § 2 (part), 4/8/08)

5.46.100 No conflict with federal or state law.

Nothing in this chapter shall be interpreted or applied so as to create any requirement, power or duty in conflict with any federal or state law. (Ord. 4920 § 2 (part), 4/8/08)

5.46.110 Preemption.

The provisions of this chapter shall be null and void on the day that California statewide legislation or federal legislation goes into effect, incorporating either the same or substantially similar provisions as are contained in this chapter, or in the event that a pertinent California state or federal administrative agency issues and promulgates regulations, preempting such action by the county of Santa Cruz. The board of supervisors shall determine by ordinance whether or not identical or substantially similar statewide legislation has been enacted for the purposes of triggering the provisions of this section. (Ord. 4920 § 2 (part), 4/8/08)



County of Santa Cruz

COUNTY ADMINISTRATIVE OFFICE

701 OCEAN STREET, SUITE 520, SANTA CRUZ, CA 95060-4073

(831) 454-2100 FAX: (831) 454-3420

SUSAN A. MAURIELLO, J.D., COUNTY ADMINISTRATIVE OFFICER

PRESS RELEASE

Date: August 25, 2016
Release: Immediately
Contact: Jason Hoppin
Communications Manager
831-454-3401

COUNTY BOARD EXPANDS SUSTAINABILITY ORDINANCE

Demonstrating a renewed commitment to environmental stewardship, the Santa Cruz County Board of Supervisors has taken further steps to help local food service businesses become more sustainable, while reducing litter and cutting the waste flowing into local landfills.

Under new rules that go into effect January 1, 2017, local restaurants and other food service businesses must comply with heightened standards for the use of biodegradable and compostable materials. On that date, all to-go packages, utensils, straws, stir sticks, cups and lids must be certified as fully compostable.

“The County passed its Sustainable Packaging Ordinance back in 2007,” said Tim Goncharoff, County resource planner. “But we’ve learned since then that a lot of the products marketed as compostable or biodegradable really aren’t. And that’s created real problems with our composting program, especially as we’re about to roll it out to many more local businesses.”

Santa Cruz County has long been an early adopter of environmentally friendly practices and policies, and was among the first jurisdictions to implement curbside recycling, ban polystyrene to-go containers and single-use plastic bags, and prohibit the sale of polystyrene toys and other items. The Board also passed a Zero Waste Plan to eventually eliminate landfill waste.

The new rules close a loophole with current regulations, which lack strict definitions of what is considered “biodegradable.” The result was that many products still need to be screened from food waste and in some cases led to food waste being sent to the landfill rather than composted.

The changes are also needed to comply with AB 1826, which expanded California’s Mandatory Commercial Organics Recycling (MORE) law to include a greater number of



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SUSAN A. MAURIELLO, J.D., COUNTY ADMINISTRATIVE OFFICER

participating businesses. More than 50 Santa Cruz County businesses in the unincorporated area participate in organic waste composting, while local waste hauler GreenWaste Recovery is working with local businesses to double that figure.

Advances in technology and the growth of the biodegradable market have led to many options for local businesses. An independent testing lab, the Biodegradable Products Institute, now certifies products that fully break down in commercial composting operations. A full list of products and sources is available at www.bpiworld.org.

Additionally in 2017, plastic straws and stir sticks, as well as cups lined with plastic and lids made of #6 polystyrene, will no longer be allowed as they cannot be effectively recycled. Small plastics in particular pose a danger to a variety of marine life.

The County will contact food service businesses in the unincorporated area by mail and in person to educate business owners about the new requirements, share samples of acceptable products and to alert business owners about the changes.

For more information, contact County Recycling and Solid Waste Services at (831) 454-2160 or go to the County web site at www.santacruzcountyrecycles.org.



County of Santa Cruz

DEPARTMENT OF PUBLIC WORKS

701 OCEAN STREET, ROOM 410, SANTA CRUZ, CA 95060-4070
(831) 454-2160 FAX (831) 454-2385 TDD (831) 454-2123

JOHN J. PRESLEIGH
DIRECTOR OF PUBLIC WORKS

October 13, 2016

SUBJECT: INFORMATION ABOUT SANTA CRUZ COUNTY'S NEW FOOD SERVICE REQUIREMENTS

Dear Local Business Owners and Managers:

The County Board of Supervisors recently approved new rules for all food service businesses and special events in the unincorporated areas of Santa Cruz County. To protect the environment, reduce litter and to encourage the recycling and composting of food service waste, the following rules will take effect as of January 1, 2017.

All to-go food service ware provided to customers in the unincorporated areas of Santa Cruz County must be recyclable or compostable, as certified by the Biodegradable Products Institute.

This includes:

- No plastic straws (paper is acceptable)
- No plastic stir sticks (wood is fine)
- All cups (hot or cold) must be certified compostable
- All to-go cutlery must be certified compostable
- No Styrofoam
- No No.6 polystyrene products (including hot cup lids)
- All to-go containers must be recyclable or certified compostable

These rules apply to restaurants, grocery stores, farmers markets, food trucks, special events and any other business or event where food is sold to go.

Why are we doing this?

In 2008, the County of Santa Cruz Board of Supervisors approved an ordinance adding Chapter 5.46 "ENVIRONMENTALLY ACCEPTABLE PACKAGING MATERIALS," to the County Code. This ordinance required that all retail food establishments utilizing any disposable food service ware shall use a biodegradable/compostable or recyclable product.

INFORMATION ABOUT SANTA CRUZ COUNTY'S NEW FOOD
SERVICE REQUIREMENTS

Page -2-

Since that time, there have been a number of changes which have had an impact on the food service industry, on the products available for their use and on the requirements for recycling and waste reduction. Among these is the passage in 2015 of AB 1826, which requires many more businesses to separate their organic waste for composting. GreenWaste Recovery is in the process of signing up additional businesses for organic waste collection. Contact GreenWaste Recovery at (831) 426-2711 to learn more about this.

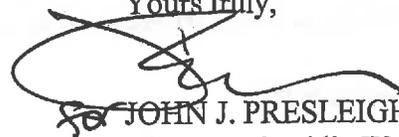
In preparation for the expansion of organic waste collection, the County has been assessing the progress of the existing program and making plans for a new local organics processing facility which we hope to have up and running within the next two to three years. Among the issues we have discovered one has stood out significantly: contamination of the waste stream.

For some years, many companies have offered products labeled "Biodegradable" or "Compostable." Until recently there have been few standards for such products. In practice some have broken down in composting operations and others have not. Other products, such as cups, are often coated with plastic which cannot be effectively separated from the paper, making it impossible to either recycle or compost. Hot cup lids are most often made of polystyrene, for which there is almost no recycling market. Plastic straws and stir sticks are difficult to recycle because of their small size, slipping through the sorting machinery. Many products must be screened out from the food waste collected, and some loads are so contaminated they can only be landfilled. We need to do better.

Recently a solution has emerged. The nonprofit "Biodegradable Products Institute" (BPI) conducts independent tests of the compostability of food service products advertised for such use. These are posted on their web site, www.BPIworld.org. Because of the maturation of the industry, there are now a wide variety of all types of food service products available from numerous different suppliers at competitive prices. Numerous local restaurants and other businesses have already made the switch.

Please talk to your food service supplier about available products. Many suitable products are available from major distributors. To be sure a product meets the requirements; check the web site of the Biodegradable Products Institute, www.bpiworld.org. For more information, contact County Recycling and Solid Waste Services at (831) 454-2160 or go to the County web site at www.santacruzcountyrecycles.org.

Yours truly,


for JOHN J. PRESLEIGH
Director of Public Works
Colt Esenwein

TAG:yv

New Rules for Food Service in Santa Cruz County



To protect the environment, reduce litter and to encourage the recycling and composting of food service waste, the following rules have been approved by the Santa Cruz County Board of Supervisors.

As of January 1, 2017:

All to-go food service ware provided to customers in the unincorporated areas of Santa Cruz County must be recyclable or compostable, as certified by the Biodegradable Products Institute.

This includes:



- No plastic straws (paper is acceptable)
- No plastic stir sticks (wood is fine)
- All cups (hot or cold) must be certified compostable
- All to-go cutlery must be certified compostable
- No Styrofoam
- No #6 polystyrene products (including hot cup lids)
- All to-go containers must be recyclable or certified compostable



These rules apply to restaurants, grocery stores, farmers markets, food trucks, special events and any other business or event where food is sold to go.

Talk to your food service supplier about available products. Many suitable products are available from major distributors. To be sure a product meets the requirements, check the web site of the Biodegradable Products Institute, www.bpiworld.org.

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Keeping Compostables Stream Compostable

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All to-go food serviceware must be compostable or recyclable in the unincorporated areas of Santa Cruz County.

Tim Goncharoff

BioCycle May 2017, Vol. 58, No. 4, p. 25



Paper straws replaced plastic (left). Clamshells and cutlery must be certified compostable (middle). Plastic stir sticks, polystyrene lids and plastic-coated cups are prohibited (right).

After lunch at Main St. Elementary School in Soquel, California, the kids line up to recycle. Under the watchful eye of a teacher, they scoop food scraps into the compostables bin, drop paper and plastic into recycling, and put what little is left over into the bin marked "landfill." They learn about waste reduction in the classroom beginning in kindergarten, and by third grade, many are teaching their parents the finer nuances of recycling.

Early in the morning, the chefs at Dominican Hospital in Santa Cruz harvest what's ripe in their organic garden. Fresh greens for salads, herbs for seasoning, potatoes and squash for soup, flowers for the tables. In the cafeteria, bins for food scraps sit next to those for trash and recycling, and everyone knows what goes where.

At Café Cruz in Soquel, a busy high-end restaurant, chef and owner Steve Wilson keeps one eye on the managed chaos of the kitchen and another on the rapidly filling dining room. Wilson is devoted to turning out excellent food, outstanding service and as sustainable a dining experience as possible.

Three times a week a packer truck rumbles through the streets of Santa Cruz County, California, stopping at these and more than 50 other locations. Restaurants, grocery stores, hotels and schools all contribute kitchen scraps, soiled paper and the remains of meals to the mix. At the end of the route, the truck drives about 40 miles to the Monterey Regional Waste Management District's dry fermentation digester in Marina (Monterey County), which processes the organics to extract energy, feeding it into the local grid. A few weeks later the digestate is removed from the fermenter and composted with yard trimmings in a nearby windrow. After a few more weeks of decomposition, the compost is sold to local farmers, gardeners, vintners and landscapers.

Santa Cruz County was an early adopter of commercial food waste collection, beginning its program in 2006. More than 100 sites now participate, ranging from big resorts and the county's two hospitals to supermarkets,

restaurants and coffee shops. In 2016, more than 1,000 tons of food waste were collected. The program is a success by any measure. But now the State of California has upped the ante.

As part of its battle against climate change, California passed AB 1826 in 2014, which requires all large generators of organic waste (primarily food scraps and green waste) to separate it from their trash for diversion. The requirements are phased in over a few years, eventually pulling in almost all businesses producing any significant amount of organic waste. The effective date for generators producing greater than 8 cubic yards/week of yard trimmings and food waste was April 1, 2016. Of the current 100-plus generators on the program, about half had to comply with AB 1826 by that date; the other half participate voluntarily.

In 2016, the state took another significant step with the passage of SB 1383, requiring a 75 percent reduction in statewide disposal of organic waste by 2025. Communities around California are scrambling to set up programs like the one in Santa Cruz County.

New Rules For Restaurants

Santa Cruz County's 10 years of experience with commercial food waste has clued it in to some of the program challenges. Frequently, restaurants' organics bins contain paper cups, plastic straws, forks, spoons, lids and all the other flotsam that goes with eating on the go. The recycling bins also have the same paper cups, plastic forks, plastic stir sticks and more. But how much of this is really recyclable? How much is compostable? And how can we tell?

Santa Cruz County made an attempt at addressing the problem with passage of an "Environmentally Sustainable Packaging Ordinance," enacted in 2008. This law specifically banned the use of polystyrene foam in food service, and further required that "all to-go food serviceware shall be compostable or recyclable." The ordinance was a great success, as far as it went. While it includes provisions for fines, nothing more than a little arm-twisting was required, and this only rarely. Polystyrene foam all but disappeared.

But what exactly "compostable or recyclable" meant in 2008 wasn't all that clear. These were the days when some "biodegradable" spoons were melting in customers' soup, while others were found to be made of petroleum-based plastics and were not biodegradable or compostable at all. What about a paper cup lined with PET? Recyclable, compostable or neither? And then there were all the products made of technically recyclable materials like polyethylene, but which were handicapped by their size, shape or weight.

As Santa Cruz County prepared to drastically expand its collection of organics, it recognized that a solution to all of these potential contaminants was needed. In 2016, the Santa Cruz County Board of Supervisors approved a rule clarifying the existing ordinance, which became effective January 1, 2017 (Figure 1). The rule requires all to-go food serviceware provided to customers in the unincorporated areas of Santa Cruz County must be recyclable or compostable. If compostable, manufacturers' assurances were not enough. Certification of the product would be required by the Biodegradable Products Institute (BPI).

BPI promotes the use and recycling of biodegradable materials via composting. Certified labs verify claims for compostability of food service products, and those that meet the standards are listed on BPI's website, products.bpiworld.org. Products of all types from cups to bowls to cutlery, from many different manufacturers, are listed on the site, providing options for business owners and assurance for program operators reluctant to rely on manufacturers' claims alone.

The list of problematic products is long and diverse. Aside from polystyrene foam, which is banned in almost all forms, some plastic products are challenging, not because of their composition, but due to their shape and size. Plastic straws and stir sticks tend to slip through the gaps in automated sorting machines, making them tough to recycle. Santa Cruz County bans those items, but allows paper straws and wooden stirrers, for example. Plastic-coated paper cups can be replaced by cups that are solid paper and thick enough to contain both hot and cold liquids while being fully compostable. Multiple bags, bowls, plates and clamshells made entirely of paper or plant fiber are now available.

After announcing the new rules last summer, Santa Cruz county officials conducted extensive outreach to local businesses. Since the official rollout on January 1, more than 200 food service businesses in Santa Cruz County have made the switch. Ranging from small coffee shops to giant resorts, all have had to source new supplies in the last several months, but the process has gone smoothly. Area food service suppliers were brought into the circle early in the process, to allow them time to stock up and inform their customers. As is often the case, local managers of chain outlets from Starbucks to Jack-in-the-Box, referred county staff to corporate offices in distant cities, where reactions ranged from "You're doing what now?" to "You guys again, huh?"

But everyone has successfully made the transition, and some see this as a helpful kickstart to a more sustainable direction they planned to pursue anyway. Sara Tikilis, manager of a local coffee shop, said: "We always try to be as green as we can. We really only had to change a few products. It was easy, and our customers love it!"

Tim Goncharoff is an environmental planner in Santa Cruz County, California.

New Rules for Restaurants in Santa Cruz County

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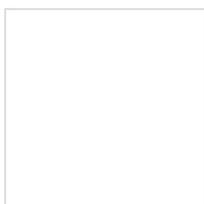
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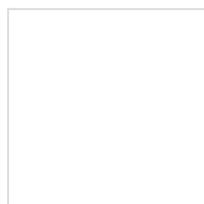
For more information, contact County Recycling and Solid Waste Services at (831) 454-2160 or go to the County web site at www.santacruzcountyrecycles.org.

Figure 1. Santa Cruz County serviceware rule

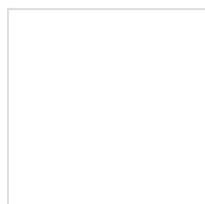
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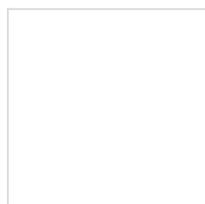
Food Scraps Service For Urban Dwellers



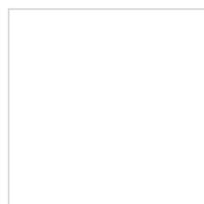
Composting Roundup



Anaerobic Digest



Testing For Persistent Herbicides In Feedstocks And Compost



Smooth Transition To Food Waste Composting

Linkwithin



Tags: [Food waste](#), [Sustainability](#)

This entry was posted on Monday, May 1st, 2017 at 3:35 pm and is filed under [Uncategorized](#). You can follow any responses to this entry through the [RSS 2.0](#) feed. Both comments and pings are currently closed.

Comments are closed.

County of Santa Clara

Recycling and Waste Reduction Commission of Santa Clara County
Recycling and Waste Reduction Division

1555 Berger Drive, Building 2, Suite 300
San Jose, CA 95112-2716
(408) 282-3180 FAX (408) 280-6479
www.ReduceWaste.org



2017-2018 LEGISLATIVE POLICIES AND PRIORITIES **INTEGRATED WASTE MANAGEMENT**

The County supports:

1. Improved Integrated Waste Management Programs including efforts to promote sustainable resource management; a reduction in greenhouse gases generated from the use of material resources and the collection and disposal of wastes; the standardization of the use of terms; local government authority to direct waste to permitted facilities; local jurisdiction compliance with state waste diversion mandates; and improved accuracy of the State-mandated reporting.
2. **Expanded Product Stewardship and Producer Responsibility** that reduces the amount and toxicity of solid waste generated and shifts physical and financial responsibility to the producers of products for the recovery and disposal of problem wastes through manufacturer implemented take-back programs for products such as pharmaceuticals, sharps, fluorescent lamps, and household batteries.
3. Securing local Integrated Waste Management program **funding and financing**; local solid waste franchising and fee-setting authority; compensation for the collection, recycling, and disposal of waste; and alternative funding sources.
4. Expansion of **Recycling, Composting, and Organics programs and facilities** to strengthen markets for recyclable materials and finished bio-products, encourage the production and purchase of products containing recycled-content materials, and implement a statewide recycling information network.
5. Banning disposal of **organics**.
6. **Energy recovery from landfill gas**, wood wastes, and other source-separated biomass.
7. Performance standards and use of **alternative cover for landfills**, limited to the quantities required, to protect public health and safety and minimize nuisances.
8. Legislation to further address **litter control** and abatement problems in California including enforcement, outreach campaigns, a reduction in single-use containers, other problem containers, and the cleanup of littered areas.
9. Regulations that prohibit the release of **radioactive or radiation-contaminated materials** into the recycling stream.
10. Requirements that products containing hazardous waste be designed, manufactured, and used in ways that avoid harm to workers and the environment and shall be managed and recycled using proper processes and procedures according to environmental regulations and Department of Toxic Substances Control guidelines.

Commissioners: James R. Griffith – Chair, Linda J. LeZotte – Vice-Chair, Mary-Lynne Bernald, Lan Diep, Susan M. Landry, Pat Showalter, Rod Sinks, Mike Wasserman, Kathy Watanabe

11. Elimination of local government **liability under Superfund for the disposal of ordinary municipal waste**, expedited de minimis settlements for hazardous material generated by local government operations, and allocation of costs on the basis of toxicity rather than the volume of municipal waste. Superfund reform should also provide a level of protection to third party investors, lenders, and developers of Brownfield sites.

12. Preventing adoption of state and federal laws and global treaties that preempt local government from protecting public health and the environment.

12.13. [Legislation and regulations that support Countywide Food Rescue efforts.](#)

End of Session TAC Legislative Summary

October 2017

Page 1

- **AB 332** (Bocanegra) – Would allow local agency to temporarily close a highway or street to curb illegal dumping.
SWANA LTF – Watch
Passed Assembly 77-0 on April 20, 2017
Passed Senate 38-0 on June 12, 2017
Assembly concurred in Senate amendments 78-0 on June 15, 2017
Signed by Governor on June 28, 2017
- **AB 954** (Aguiar-Curry) – Would require state to promote the voluntary implementation of uniform standards for use of quality date and safety date labels on food products (**CAW**)
SWANA LTF – Work with author
CAW - Support
Passed Assembly 76-0 on May 30, 2017
Passed Senate 33-6 on September 11, 2017
Assembly concurred in Senate amendments 79-0 on September 13, 2017
Signed by Governor on October 14, 2017
- **AB 1132** (Garcia) – Would authorize APCOs to issue abatement orders for odors prior to holding a public hearing
SWANA LTF – Support if amended
Passed Assembly 55-13 on May 22, 2017
Passed Senate 35-2 on July 17, 2017
Assembly concurred in Senate amendments 61-0 on July 20, 2017
Signed by Governor on August 7, 2017
- **AB 1158** (Chu) – Carpet Recycling (**NSAC-sponsored**)
SWANA LTF – Support
Passed Assembly 73-2 on May 30, 2017
Passed Senate 30-10 on September 12, 2017
Assembly concurred in Senate amendments 52-22 on September 15, 2017
Signed by Governor on October 14, 2017
- **AB 1219** (Eggman) – Would further limit non-profit organization liability for food donations (**CAW**)
SWANA LTF – Support
CAW - Support
Approved by Assembly 74-0 on May 4, 2017
Approved by Senate 38-0 on August 24, 2017
Approval action rescinded on September 5, 2017
Approved by Senate 39-0 on September 11, 2017
Assembly concurred in Senate amendments 79-0 on September 13, 2017
Signed by Governor on October 9, 2017
- **AB 1294** (Berman) – Environmental marketing claims for plastic food containers (**CAW**)
SWANA LTF – Support
CAW - Support
Approved by Assembly 76-0 on May 4, 2017
Approved by Senate 40-0 on September 14, 2017
Assembly concurred in Senate amendments on September 15, 2017
Signed by Governor on October 11, 2017

End of Session TAC Legislative Summary

October 2017

Page 2

- **AB 1572** (Aguilar-Curry) – SRRE review schedule
SWANA LTF – Support
Passed Assembly 77-0 on May 30, 2017
Passed Senate 39-0 on July 13, 2017
Signed by Governor on July 31, 2017
- **SB 258** (Lara) – Cleaning Product Right to Know Act of 2017
SWANA LTF – Support
Passed Senate 22-15 on May 30, 2017
Passed Assembly 55-15 on September 12, 2017
Senate concurred in Assembly amendments 27-13 on September 13, 2017
Signed by Governor on October 15, 2017
- **SB 448** (Wieckowski) – Audits of special districts – inactive districts to be dissolved
SWANA LTF –
Passed Senate 33-0 on May 31, 2017
Passed Assembly 76-0 on August 31, 2017
Senate concurred in Assembly amendments 40-0 on September 5, 2017
Signed by Governor on September 27, 2017
- **SB 458** (Weiner) – Beverage container recycling: pilot projects (urgency bill, 2/3 vote required)
SWANA LTF – Watch
Passed Senate 39-0 on July 13, 2017
Passed Assembly 77-0 on September 13, 2017
Senate concurred in Assembly amendments 39-0 on September 14, 2017
Signed by Governor on October 10, 2017

County of Santa Clara

Seventeenth Amendment to the Countywide Nondisposal Facility Element

September 2017

CalRecycle Review & Approval

Submitted: September 2017

Approved:

**SEVENTEENTH AMENDMENT TO THE COUNTY OF SANTA CLARA
COUNTYWIDE NONDISPOSAL FACILITY ELEMENT**

The Countywide Nondisposal Facility Element (NDFE) was originally adopted by the Board of Supervisors on December 13, 1994. The First Amendment was adopted on June 3, 1997, replacing and superseding the original document. The Second Amendment was adopted on August 5, 1997, and it replaced and superseded the NDFE and the First Amendment. On September 15, 1998, on December 7, 1999, on May 9, 2000, on December 13, 2003, on August 25, 2009, on February 23, 2010, on March 15, 2011, on November 11, 2011, the Third, Fourth, Fifth, Sixth, Seventh, Eighth, Ninth and Twelfth Amendments were adopted. Following revised adoption rule, the Thirteenth Amendment, the Fourteenth Amendment, the Fifteenth Amendment and the Sixteenth Amendment were updated by CalRecycle in January 2014, March 2014, June 2014 and March 2016. This NDFE may be adopted by other jurisdictions.

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**SEVENTEENTH AMENDMENT TO THE
COUNTY OF SANTA CLARA
COUNTYWIDE NONDISPOSAL FACILITY ELEMENT**

Introduction

California Public Resources Code (PRC) Sections 41730 et seq., require California cities and counties to prepare and adopt a Nondisposal Facility Element (NDFE) for all existing or proposed nondisposal facilities which will be needed to implement local Source Reduction and Recycling Elements. A nondisposal facility is any solid waste facility required to obtain a solid waste facility permit except a disposal facility or transformation facility (PRC Section 40151).

In 1994, the County of Santa Clara's Integrated Waste Management Program prepared the Countywide NDFE for adoption by the cities of: Campbell, Cupertino, Gilroy, Los Altos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, San Jose, Santa Clara, Saratoga, and Sunnyvale; the towns of Los Altos Hills and Los Gatos; and the County of Santa Clara Unincorporated Area. The City of Palo Alto prepared and adopted its own NDFE. In March 1997, the First Amendment to the Countywide NDFE was prepared by the IWM Program for use by jurisdictions as necessary. The Second Amendment was approved in July 1997; the Third in September 1998; the Fourth in December 1999; the Fifth in May 2000; the Sixth in December 2003; the Seventh in August 2009; and the Eighth in February 2010; and the Ninth Amendment (which was a collection of the Ninth, Tenth and Eleventh combined) in March 2011; and the Twelfth Amendment in November 2011. With the change in amending NDFEs pursuant to AB341 (Chapter 4.5, Statutes of 2011, Chesbro, AB341), CalRecycle updated the NDFE to include the Thirteenth in January 2014; the Fourteenth in March 2014; the Fifteenth in June 2014 and the Sixteenth in March 2016.

The Countywide NDFE identifies transfer stations, material recovery facilities, yard waste composting facilities, and landfills necessary to implement local waste diversion goals.

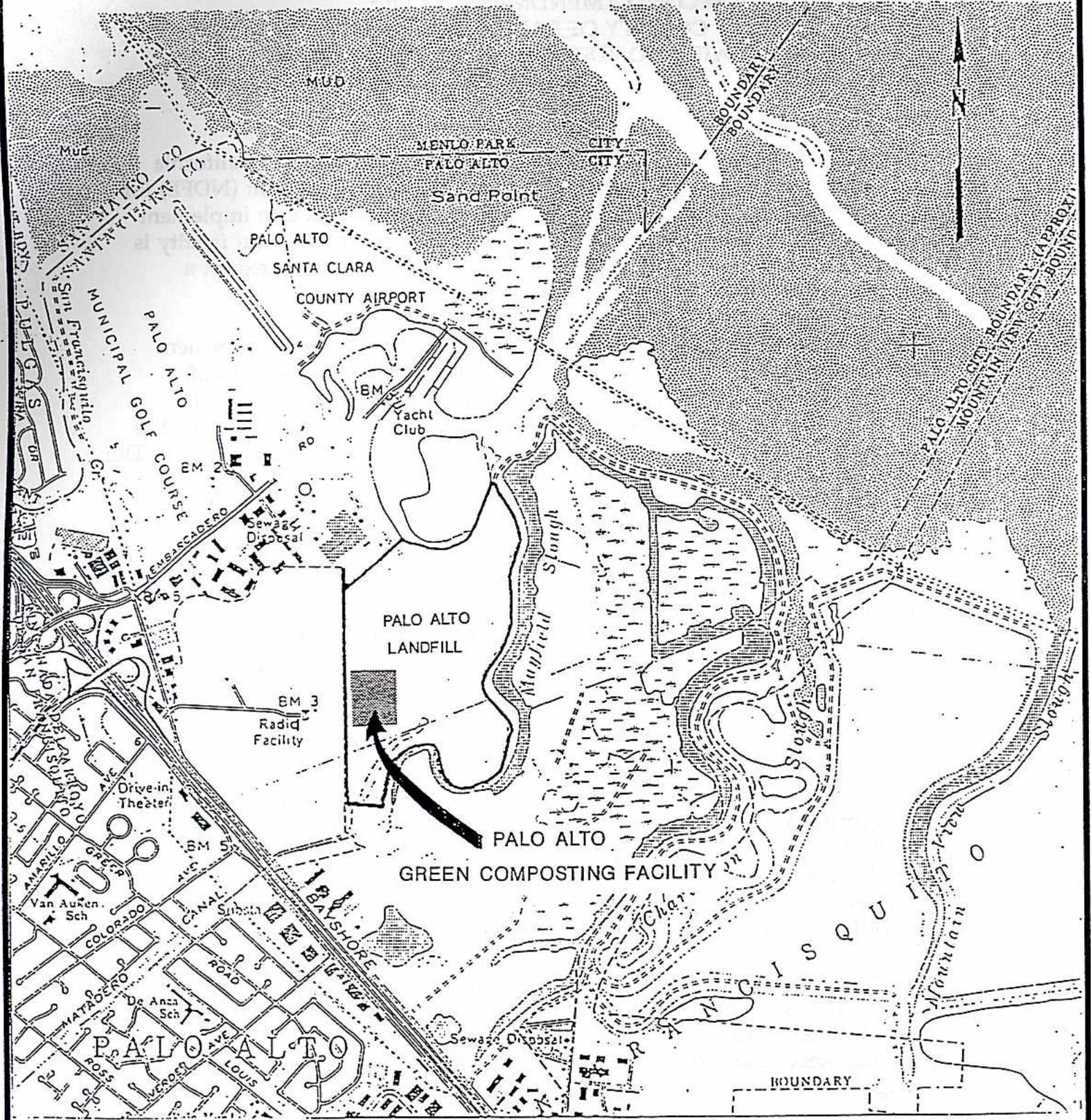
The Sixteenth Amendment to the Countywide NDFE

Sunnyvale Food Materials Transfer/Processing Operations is in the process to apply for a Registration Tier permit from the County of Santa Clara Local Enforcement Agency (LEA). This Seventeenth Amendment to the Countywide NDFE (Amendment) is necessary in order for the LEA to find the proposed facilities in conformance and for the permit applications to be accepted as complete.

Maps and fact sheets for these facilities are attached as pages 70 – 71 of the amended NDFE.

Due to the change in amending NDFEs pursuant to AB341 (Chapter 4.5, Statutes of 2011, Chesbro, AB 341) there are no longer specific regulatory requirements for public noticing or approval that a jurisdictions must follow. As indicated by PRC Section 41735 (a), adoption of the Amendment is not subject to environmental review under the California Environmental Quality Act (CEQA). The Amendment supersedes and replaces the Sixteenth Amendment as the NDFE for the County of Santa Clara Unincorporated Area. It may be adopted by other jurisdictions.

FIGURE 1



DRAWN BY:
 DATE:
 CHECK'D BY:
 DATE:

GREEN COMPOSTING FACILITY
 LOCATION MAP

APPROVED BY:
 PE NO. _____
 DATE: _____

SCALE: NONE

City of Palo Alto

DRAWING NO.

**Fact Sheet #1
City of Palo Alto Green Composting Facility
Palo Alto, California**

TYPE OF FACILITY:

The Palo Alto Green Composting Facility (Facility) is owned and operated by the City of Palo Alto (City). The Facility began operation in 1977 with the goal of extending the life of the Palo Alto Landfill by diverting yard waste brought to the landfill. The Facility accepts yard waste from City residents, non-residents, private gardeners, City crews, tree and landscape contractors working for the City, and county and state crews working on freeway landscaping within City limits. In 1990, the City began operating a full-scale curbside yard waste collection program for its residents. Acceptable yard waste includes leaves, grass clippings, plant and shrub trimmings, ivy, and tree parts. Once delivered to the Facility, the yard waste is ground up, cured in windrows, screened after completion; and stored on-site before being transported to markets. The finished compost is used as a topsoil amendment in the City's landfill closure and is being sold to nurseries on the open market for retail sale to the public.

FACILITY CAPACITY:

15,211 tons per year of green waste were accepted for processing at the Facility during 2001. In accordance with the Facility's standardized composting facility permit, it has an estimated annual operation capacity of 17,000 tons (about 47 tons per day) with a peak loading capacity of 130 tons per day.

ESTMATED DIVERSION RATE:

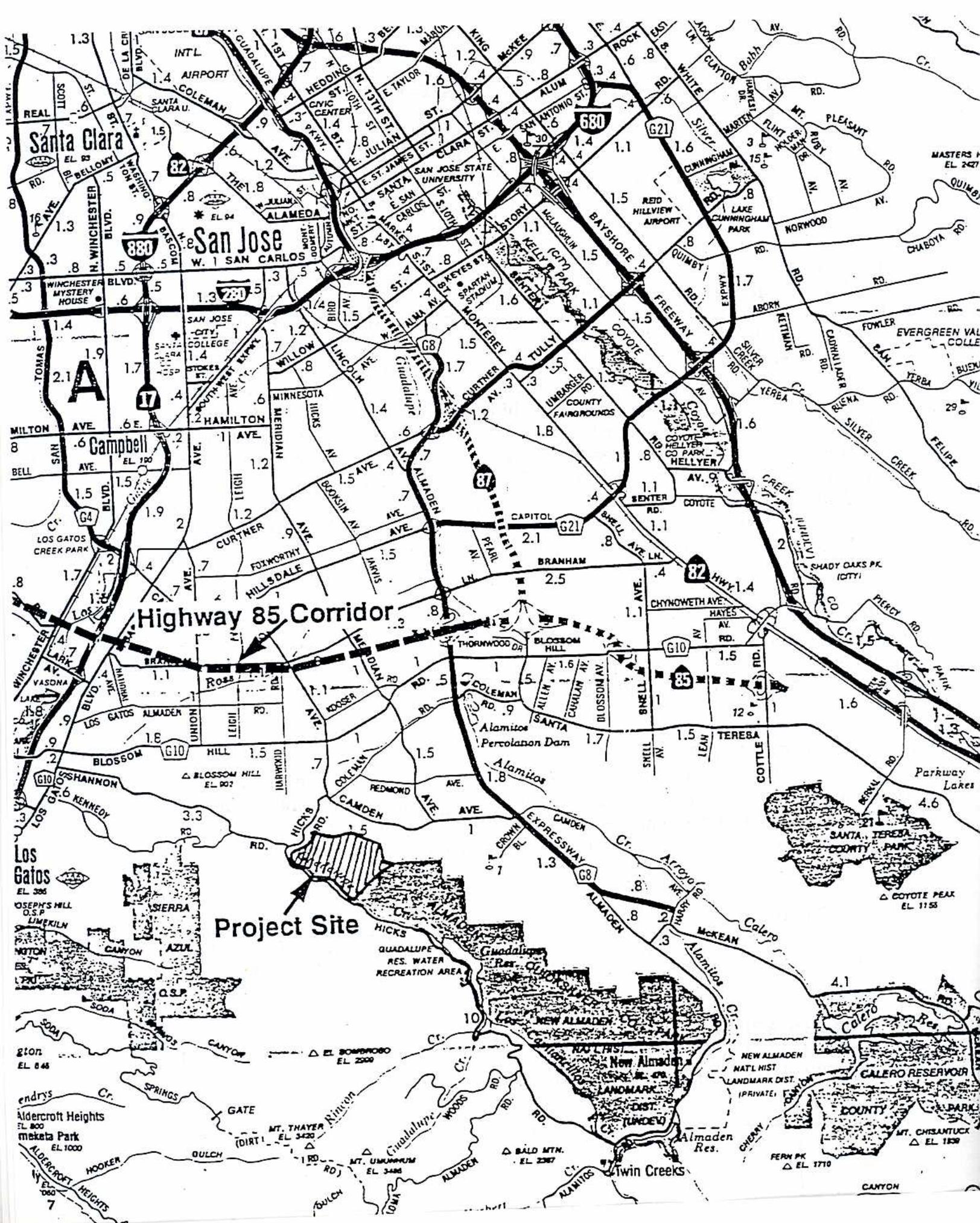
In 2001, total waste generated in the City was 197,130 tons. Based on these figures, the 2001 diversion rate for the facility was approximately 8% of the total City waste stream.

JURISDICTIONS SERVED:

The Facility serves the County of Santa Clara. However, the Facility is primarily used by residents, businesses, and organizations that reside within the City of Palo Alto's limits.

FACILITY LOCATION:

The Facility is located in Santa Clara County within the footprint of the City of Palo Alto Landfill at 2380 Embarcadero Road, Palo Alto (see the attached map).



Highway 85 Corridor

Project Site

Fact Sheet #2
Guadalupe Landfill
Material Recovery and Compost Processing Facility
San Jose, California

TYPE OF FACILITY:

The Guadalupe Landfill (Facility) is owned and operated by Guadalupe Rubbish Disposal Company, Incorporated. The Facility began operations as a sanitary landfill in 1956. The permitted Class III landfill has ongoing material recovery and compost processing operations. The Facility receives waste from all over Santa Clara County. Material recovery operations are conducted on the active face of the landfill. The composting processing facility area is currently undergoing environmental review and permitting procedures. The proposed compost facility would consist of a 7-acre yard and wood waste processing area and an 11-acre windrow composting area. The Facility currently accepts yard waste and clean wood waste from residential self-haulers, gardeners and landscapers, governmental landscape maintenance and road crews, and franchised and non-franchised municipal waste haulers. Once delivered to the Facility, yard waste is ground up and sold immediately to land application markets. The proposed compost facility permit would allow yard waste to be ground up, cured aerobically in windrows, screened after completion, and transported to markets. Wood waste is kept separate, ground up, and transported to wood fuel markets. All materials are received on a tipping fee basis. The Facility also recycles construction and demolition debris (soil, concrete, and asphalt) which is used on-site as construction materials and daily landfill cover.

FACILITY CAPACITY:

The Facility has a maximum permitted disposal capacity of 3,375 tons per day. In 1993, the Facility landfilled approximately 356 tons per day. In the currently proposed permit, the maximum processing capacity of the compost facility is 672 tons of yard and wood waste per day.

ESTMATED DIVERSION RATE:

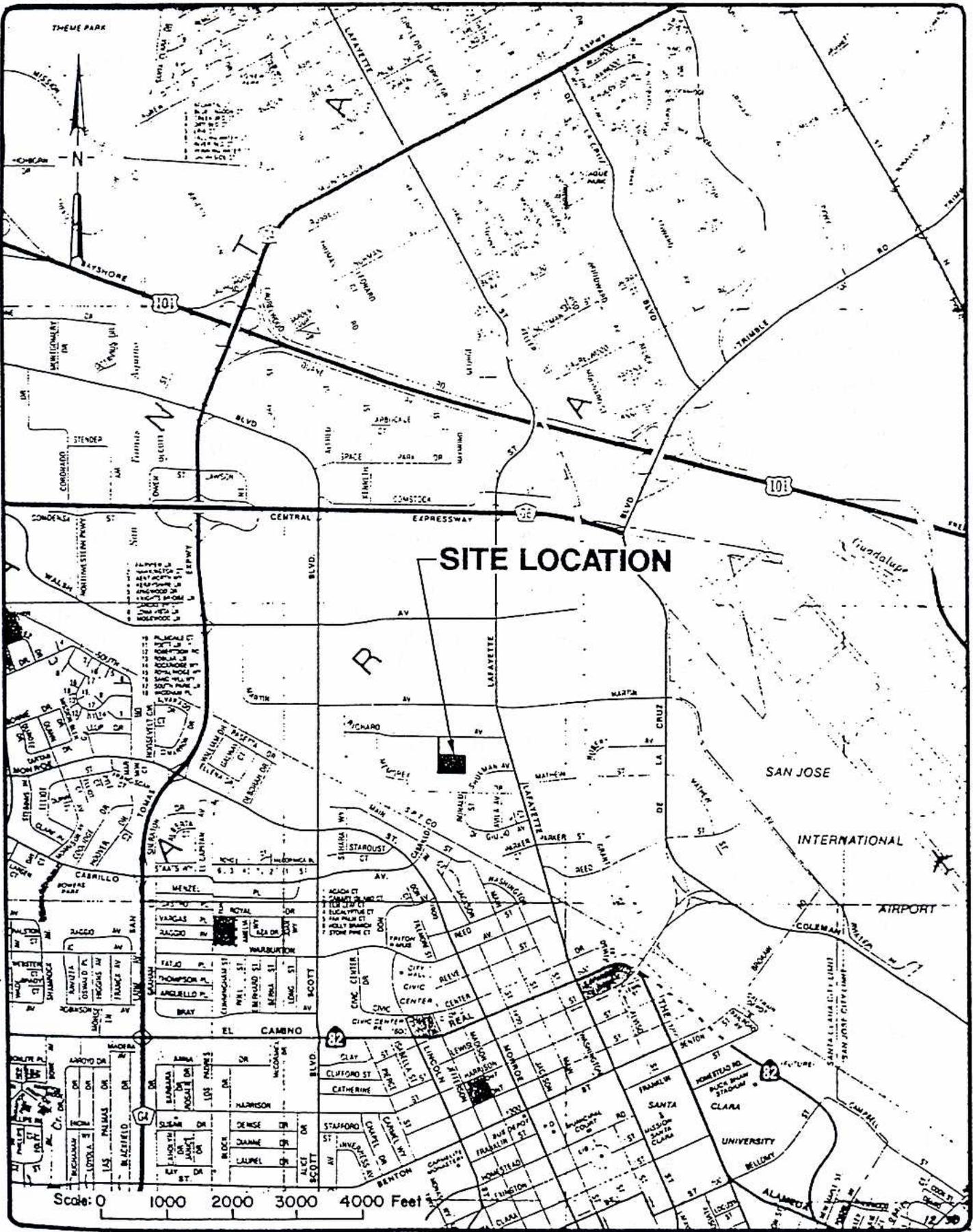
In 1993, the Facility had a diversion rate of approximately 39.6% (129,919 tons of the 328,361 tons received at the landfill gate).

JURISDICTIONS SERVED:

The Facility serves all of Santa Clara County.

FACILITY LOCATION:

The Facility is located in Southwestern San Jose, off Guadalupe Mines Road, in a canyon immediately north of Guadalupe Mines (see the attached map).



SITE LOCATION

SAN JOSE

INTERNATIONAL

AIRPORT



EMCON
Associates

MISSION TRAIL WASTE SYSTEMS
1100 RICHARD AVENUE
SANTA CLARA, CALIFORNIA

FIGURE

2

PROJECT NO.
479-02.02

SITE LOCATION MAP

**Fact Sheet #3
Material Recovery Systems Facility
Santa Clara, California**

TYPE OF FACILITY:

The Material Recovery Systems Facility (Facility) is owned by Rinauro Investment Properties and operated by Material Recovery Systems Incorporated. The Facility began operation in December of 1991. The Facility is a permitted 21,252 square foot (half-acre) transfer station that began operation in December of 1991. Prior to August 1996, the Facility received material from the City of Santa Clara's (City) curbside residential and multi-family recycling programs, the general public and commercial business. The Facility currently receives and processes recyclable materials from commercial/industrial businesses and the general public. The Facility accepts the following materials: construction and demolition debris, wood waste, glass, metals, plastics, paper, and any other commercial and industrial solid wastes. Materials are conveyer-fed through a sorting line and into a conveyer-fed baler. Materials recovered are shipped to brokers and markets which use them for manufacturing into new products. Residual materials and debris are transported and landfilled at a permitted facility.

FACILITY CAPACITY:

The Facility is permitted to process a maximum of 375 tons of waste per day. The Facility currently processes an average of 80 tons per day.

ESTMATED DIVERSION RATE:

The current diversion rate for the Facility is approximately 20%. Prior to August 1996 the Facility had a diversion rate of approximately 40%.

JURISDICTIONS SERVED:

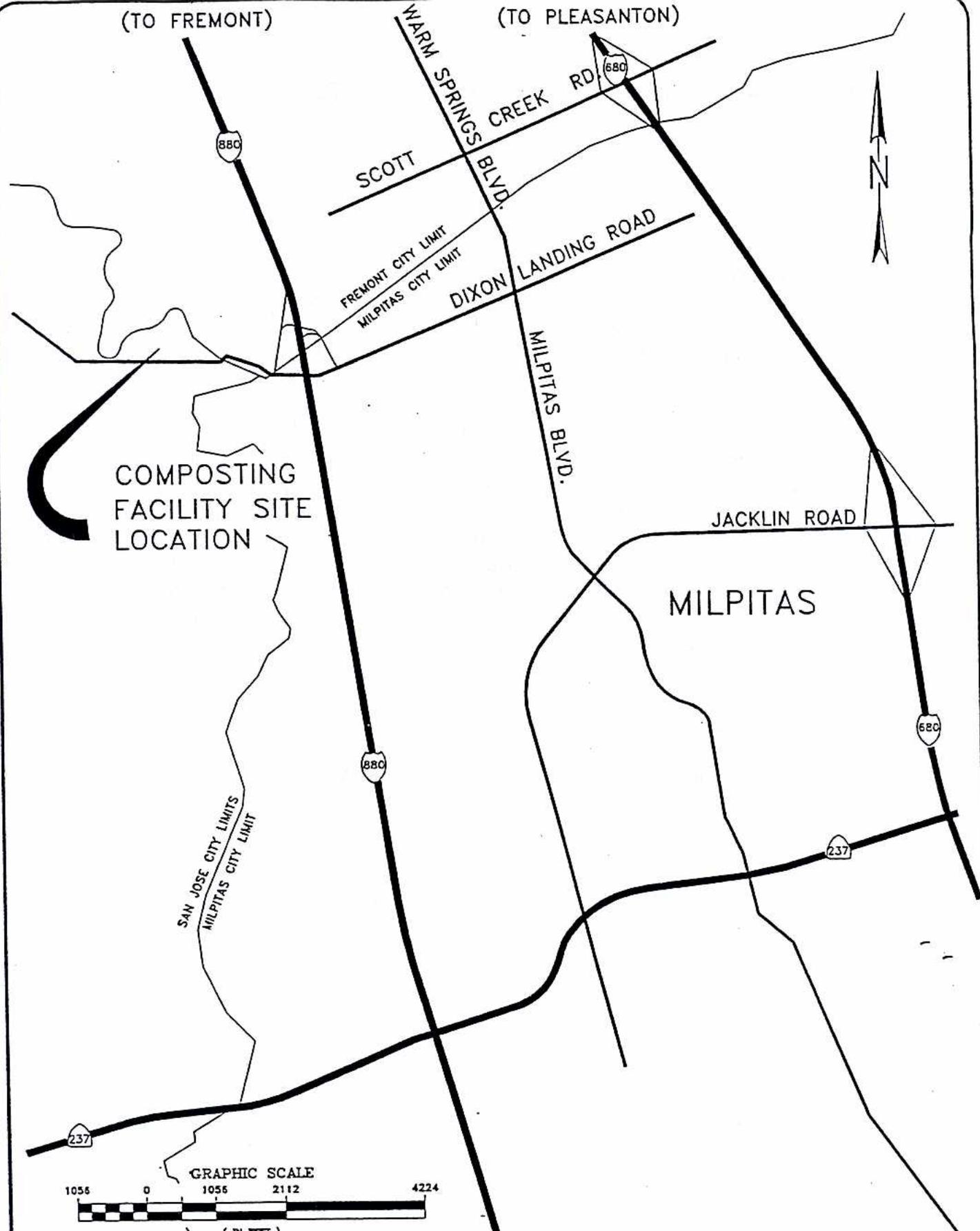
The Facility serves all of Santa Clara County.

FACILITY LOCATION:

The Facility is located at 1060 Richard Avenue, in an industrially zoned area of the City of Santa Clara (see the attached map). The Facility can be accessed from either 1060 Richard Avenue or 1313 Memorex Drive in Santa Clara.

(TO FREMONT)

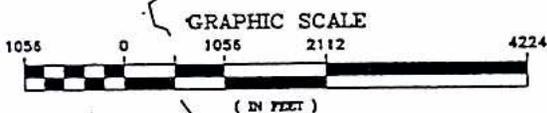
(TO PLEASANTON)



COMPOSTING FACILITY SITE LOCATION

MILPITAS

SAN JOSE CITY LIMITS
MILPITAS CITY LIMIT



(TO SAN JOSE)

JAMES A. WYSE INC.
WASTE MANAGEMENT CONSULTANTS

NEWBY ISLAND RECYCLERY
BROWNING-FERRIS INDUSTRIES, INC.
SAN JOSE, CALIFORNIA

SITE LOCATION MAP

FIGURE
1
PROJECT NO.
130-1.3

**Fact Sheet #4
Newby Island Compost Facility
San Jose, California**

TYPE OF FACILITY:

The Newby Island Compost Facility (Facility) is owned and operated by Browning Ferris Industries. The permitted Facility began operation in 1994, and consists of a 2-acre pre-processing area and a 10-acre windrow composting pad. The Facility accepts yard waste and clean wood waste from residential self-haulers, private gardeners and landscape contractors, municipal and state government landscape maintenance and road crews, and franchised and non-franchised municipal yard waste haulers. Once delivered to the Facility, yard waste is ground up, cured aerobically in windrows, screened after completion, and transported to markets. Some yard waste is ground up and sold immediately to land application markets. Wood waste is kept separate, ground up, and transported to wood fuel markets.

FACILITY CAPACITY:

The Facility is permitted to process a maximum of 500 tons of yard and wood waste per day. The Facility is currently processing approximately 300 tons of yard and wood waste per day.

ESTMATED DIVERSION RATE:

The Facility is currently diverting 99% (approximately 297 tons per day) of the material received for processing.

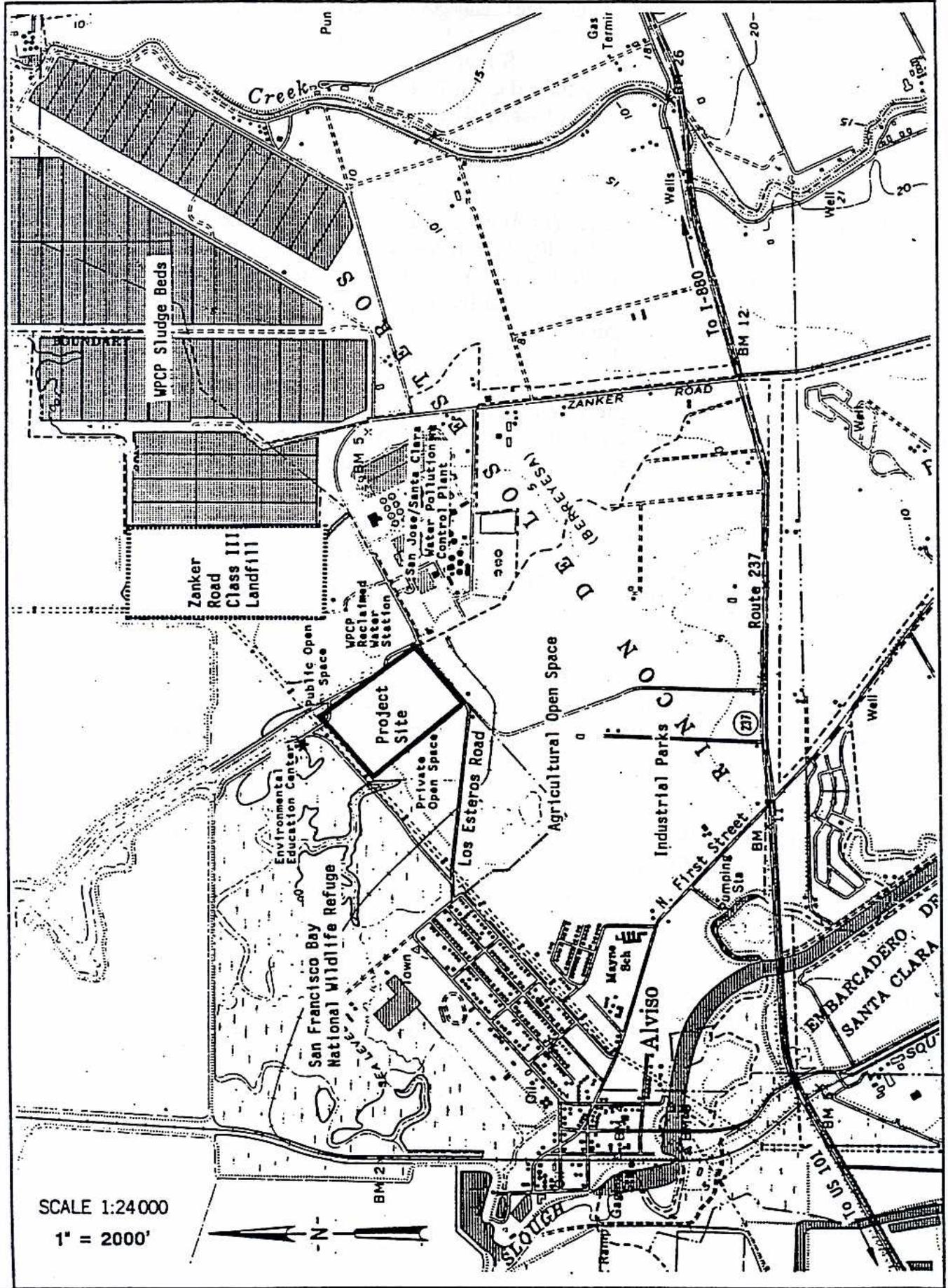
JURISDICTIONS SERVED:

The Facility currently serves all of Santa Clara County and portions of Alameda, Contra Costa and San Mateo counties. The Facility processes curbside yard waste for several jurisdictions in Santa Clara County.

FACILITY LOCATION:

The Facility is located adjacent to the Newby Island Landfill and the Recyclery at Newby Island, at 1601 Dixon Landing Road in north San Jose, just west of Highway 880 (see the attached map).

FIGURE I-5 -- SITE LOCATION AND VICINITY ROADWAYS



Fact Sheet #5
Zanker Material Processing Facility
San Jose, California

TYPE OF FACILITY:

The Zanker Material Processing Facility (Facility) is a resource recovery and landfill site located at 675 Los Esteros Road in San Jose, California. The 46-acre landfill site is located on an 88-acre parcel of land previously owned by Owens Corning Fiberglas Corporation. The site was used exclusively since 1956 for the disposal of manufacturing wastes from the Owens Corning manufacturing plant in Santa Clara, California. Zanker Road Resource Management, Ltd. (ZRRML) is currently the operator of the Facility on the site.

The site had historically been designated as a “candidate solid waste facility” and a “nonconforming land use” by the City of San Jose (City). In September of 1996, the City rezoned the property from M-1 (light manufacturing) to PD (planned development) to allow for the siting of the Facility. The City also certified an environmental impact report for the Facility, completing the environmental review process. ZRRML has obtained permits for the Facility from the City Department of Planning, Building, and Code Enforcement, the California Integrated Waste Management Board, the San Francisco Bay Regional Water Quality Control Board, and the Bay Area Air Quality Management District. The Facility has been in operation since 1999.

The Facility includes resource recovery operations for processing mixed construction and demolition material into secondary products such as road base, biomass fuel, landscape products (wood chips, wood fines, etc.), as well as metals, cardboard, and clean fill. The facility is open to the public for receipt of waste material and for the sale of finished products.

FACILITY CAPACITY:

The Facility has a permitted gate capacity of 1,250 tons per day, and a maximum disposal capacity of 350 tons per day. It is estimated that the Facility landfills an average of 65 tons per day.

ESTIMATED DIVERSION RATE:

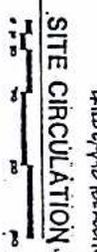
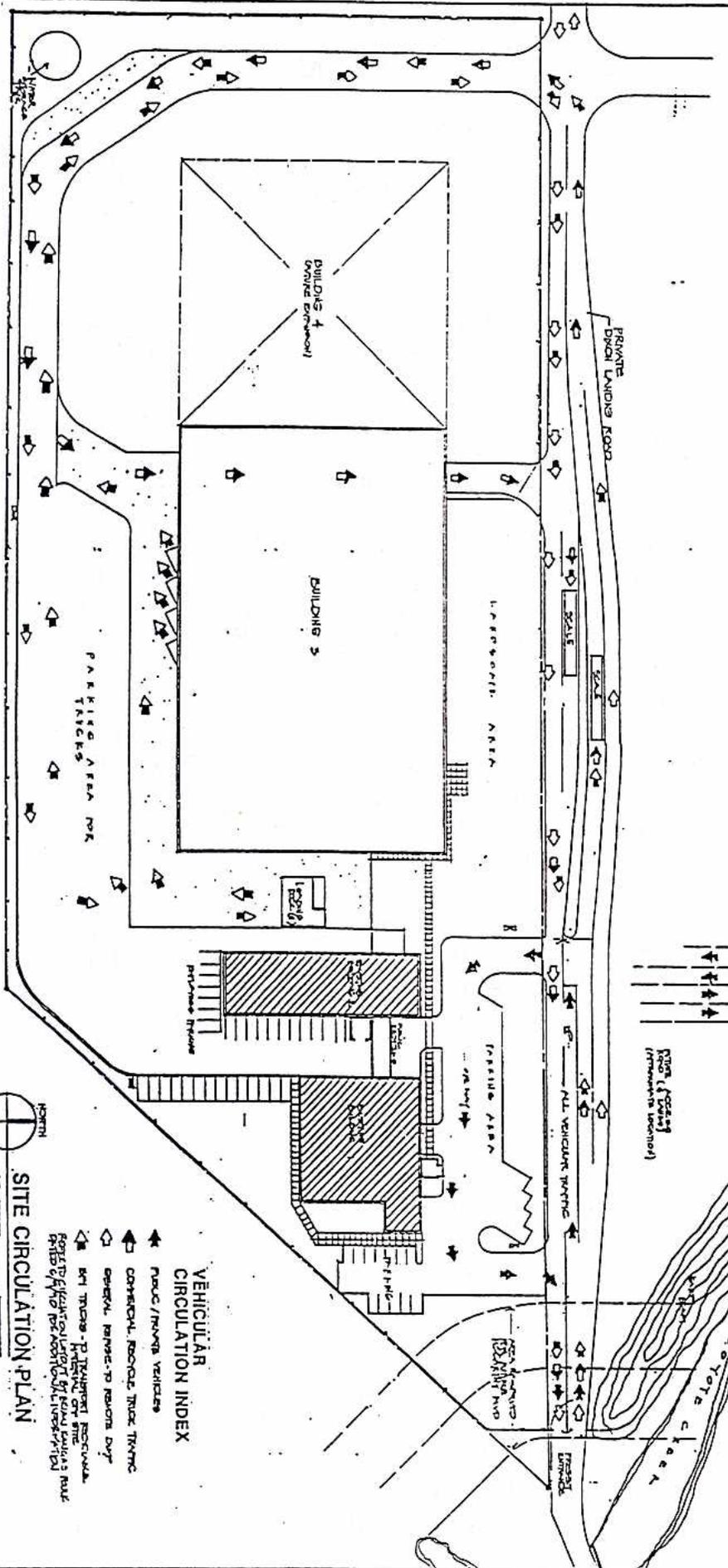
The Facility diverts, on an average, more than 85 percent of waste accepted at the gate.

JURISDICTIONS SERVED:

The Facility serves all of Santa Clara County and all neighboring counties.

FACILITY LOCATION:

The Facility is located at 675 Los Esteros Road in north San Jose, near the Zanker Road Landfill and the San Jose/Santa Clara Water Pollution Control Plant (see the attached map).



SITE CIRCULATION PLAN

VEHICULAR CIRCULATION INDEX

- PUBLIC / TRUCKS VEHICLES
- CONVENTIONAL, RECREAL TRUCK TRAFFIC
- SPECIAL, RAINFALL TO RESUME DRY
- BICYCLES - P. TRAILING, RECREAL
- PEDESTRIAN CIRCULATION (BY FOOT, BICYCLES, ROLLER SKATING, ETC.)
- FUTURE CIRCULATION FOR ADDITIONAL INVESTIGATION

REV 9/10

<p>PD 3A D:\3A</p>		<p>DATE: 08-11-10 SITE CIRCULATION PLAN</p>	<p>Beman & Shultz Architects 2000 Zeller Park Drive San Jose, California 95128 408.737.0100</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> <tr> <td>1</td> <td>ISSUED FOR PERMITS</td> <td>08/11/10</td> </tr> <tr> <td>2</td> <td>REVISED</td> <td>08/11/10</td> </tr> <tr> <td>3</td> <td>REVISED</td> <td>08/11/10</td> </tr> </table>	NO.	DESCRIPTION	DATE	1	ISSUED FOR PERMITS	08/11/10	2	REVISED	08/11/10	3	REVISED	08/11/10
NO.	DESCRIPTION	DATE														
1	ISSUED FOR PERMITS	08/11/10														
2	REVISED	08/11/10														
3	REVISED	08/11/10														

**Fact Sheet #6
The Recyclery at Newby Island
San Jose, California**

TYPE OF FACILITY:

The Recyclery at Newby Island (Facility) is an 80,000 square foot materials recovery facility owned and operated by Browning Ferris Industries. The permitted Facility began operation in 1991, and includes both a manual sorting system and a semi-automated sorting system. The Facility processes both commingled (mixed) and source separated loads from residential and commercial recycling programs. The Facility also diverts loads of clean wood waste to other parts of the site to be processed and sold as Pro-Chip Mulch or wood fuel.

FACILITY CAPACITY:

The Facility is permitted to process a maximum of 1,600 tons per day. The Facility is currently processing approximately 1,000 tons per day.

ESTMATED DIVERSION RATE:

The Facility is currently diverting 90% (approximately 900 tons per day) of the material received for processing.

JURISDICTIONS SERVED:

The Facility serves all of Santa Clara County and portions of Alameda, Contra Costa and San Mateo counties. The Facility processes curbside and commercial recyclables for several jurisdictions in Santa Clara County. The buy-back and public education center is open to the general public.

FACILITY LOCATION:

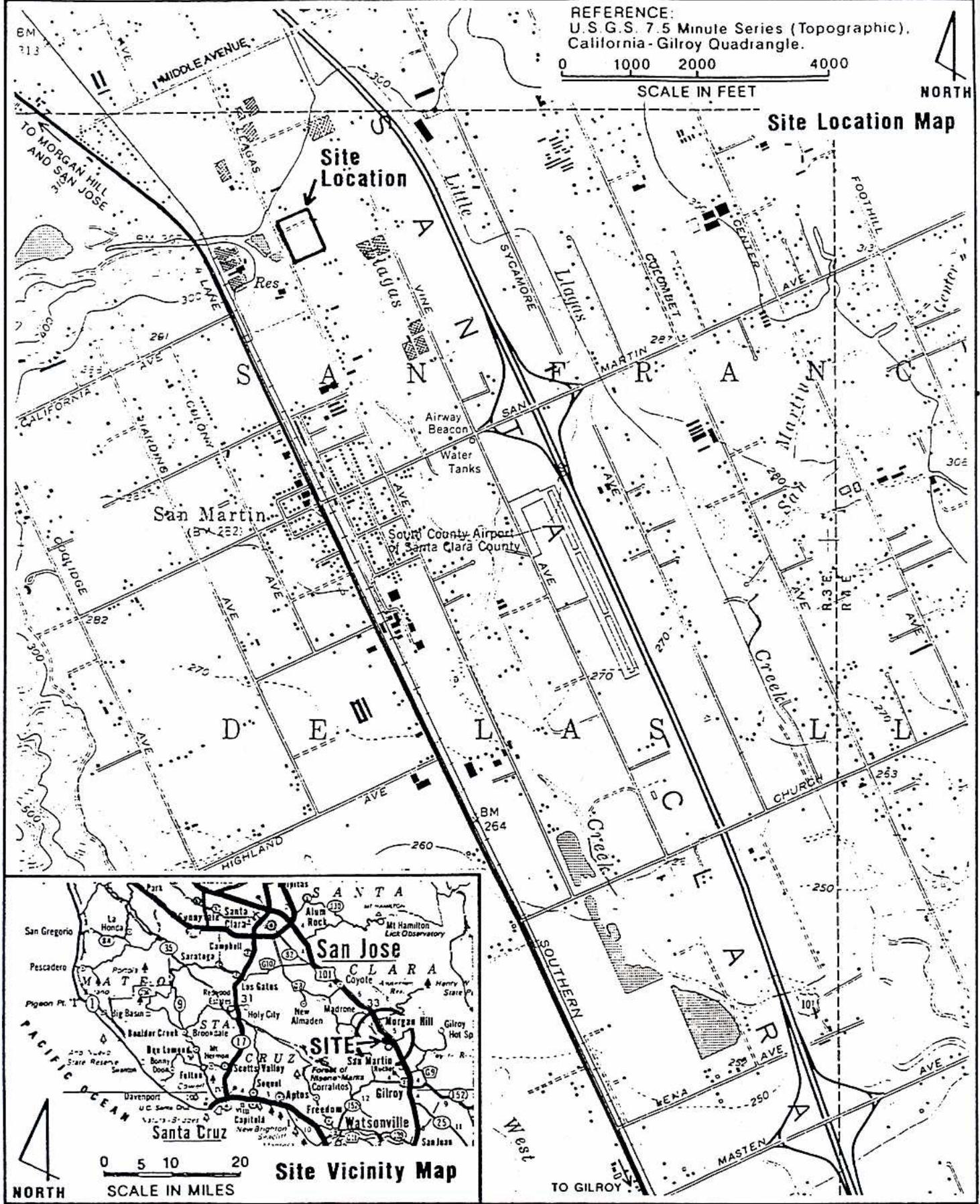
The Facility is adjacent to the Newby Island Landfill and is located at 1601 Dixon Landing Road in north San Jose, just west of Highway 880, near the southeastern end of the San Francisco Bay, (see the attached map).

REFERENCE:
U.S.G.S. 7.5 Minute Series (Topographic),
California-Gilroy Quadrangle.

0 1000 2000 4000
SCALE IN FEET



Site Location Map



Harding Lawson Associates
Engineering and
Environmental Services

Site Location Map
Report of Station Information
San Martin Transfer Station
Santa Clara County, California

PLATE
1

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED DATE
RPS	21371.2	<i>KML</i>	11/92	

Fact Sheet #7
San Martin Transfer and Recycling Station
San Martin, California

TYPE OF FACILITY:

The San Martin Transfer and Recycling Station (Facility) is owned and operated by Recology South Valley. The permitted 8-acre Facility began operations in 1968 along with the San Martin Landfill, and continued to operate after the landfill closed in 1971. The Facility accepts residential and commercial refuse, recyclables, organics, inerts and construction and demolition debris. Used motor oil and home-generated sharps are accepted from the public. Oil is limited to five gallons per container and 15 gallons per delivery. All materials are accepted through the scalehouse. The Facility salvages recyclable materials from the incoming waste stream. Wastes are handled separately from source separated recyclables and organics. Wastes are loaded into transfer trailers and hauled to a permitted solid waste disposal facility. Recyclables and organics are hauled to alternative processing or composting facilities.

FACILITY CAPACITY:

The facility is permitted to process a maximum of 500 tons of solid waste per day. The facility has no permit limits on the quantity of recyclable (curbside, inert, organics, cardboard, etc.) materials processed. The Facility currently processes approximately 250 tons of material per day. This facility is proposed to be closed in 2013 and will be replaced by the Pacheco Pass Transfer Station.

ESTIMATED DIVERSION RATE:

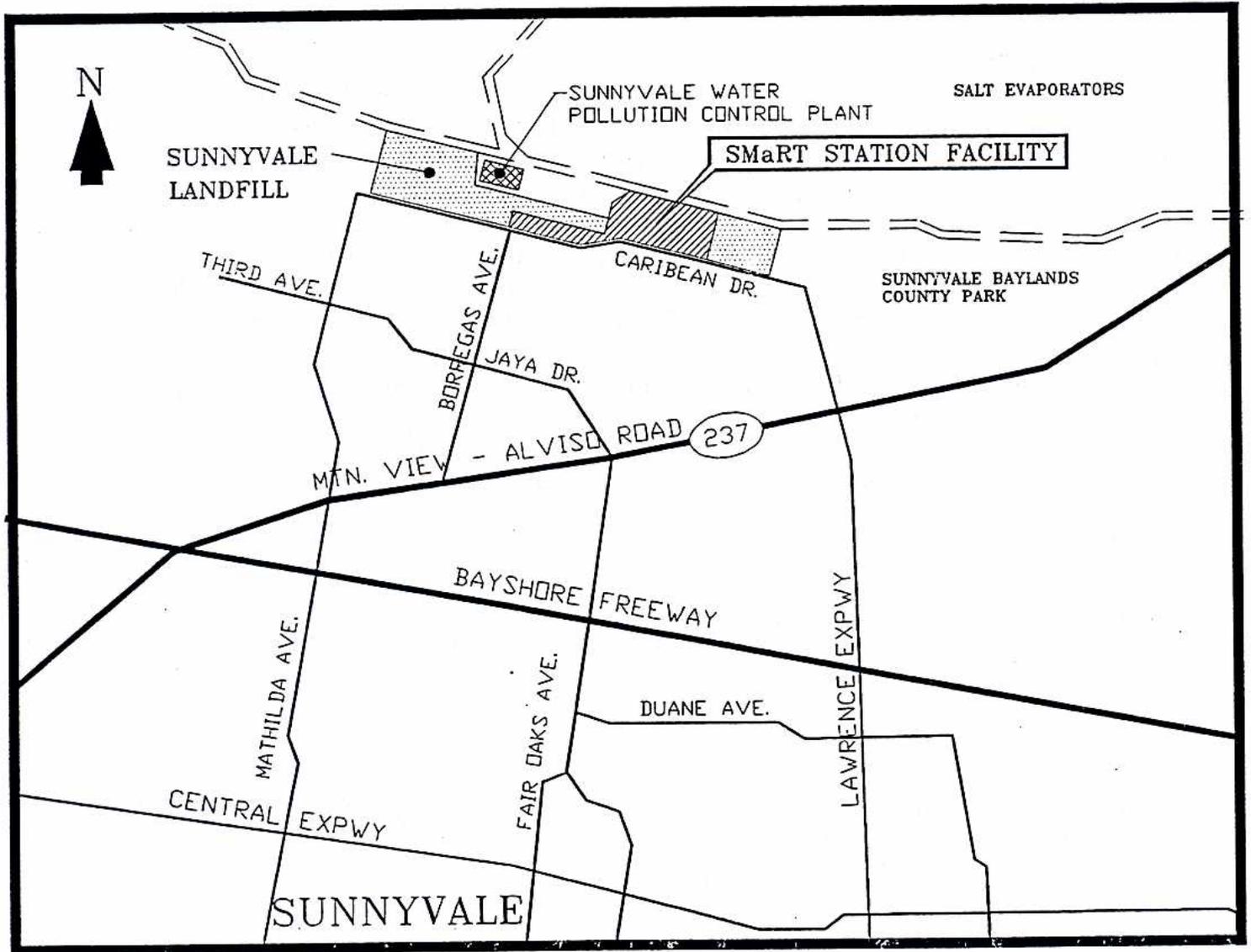
The Facility currently diverts over 50% of the incoming material each day. Non-recyclable materials are transferred to a permitted disposal site.

JURISDICTIONS SERVED:

The Facility serves all of Santa Clara County. The Facility primarily serves the cities of Gilroy and Morgan Hill, the community of San Martin, other unincorporated areas of southern Santa Clara County and portions of northern San Benito County.

FACILITY LOCATION:

The Facility is located at 14070 Llagas Avenue, in the unincorporated community of San Martin in southern Santa Clara County (see attached map).



LOCATION MAP

DRAWN BY: JA DATE: CHECK'D BY: DATE:	SMaRT STATION FACILITY LOCATION MAP	APPROVED BY: _____ PE NO. _____ DATE: _____
SCALE: NONE	City of Palo Alto	DRAWING NO.

Fact Sheet #8
The Sunnyvale Materials Recovery and Transfer Station
Sunnyvale, California

TYPE OF FACILITY:

The Cities of Palo Alto and Mountain View are partners with the City of Sunnyvale for the development and operation of the Sunnyvale Materials Recovery and Transfer (SMaRT) Station (Facility). Sunnyvale managed the design and construction, and oversees the operation of the Facility. Palo Alto and Mountain View pay a proportionate share of the construction and operating costs based on the amount of municipal solid waste delivered to the Facility by the cities designated haulers. Completed in 1993, the permitted Facility is being used by the three cities to meet the state mandated goal of 50% waste reduction by the year 2000. When in full operation (scheduled for 1994), the Facility's primary function will be as a materials recovery facility. The Facility will receive and process curbside recyclables from the cities of Sunnyvale and Mountain View and will include a buyback recycling center. The Facility will also receive and process loads of municipal solid waste and recover materials from the incoming waste stream for the three participating cities. Recovered materials will be sent to brokers and markets which will use them for compacted, loaded, and hauled 27 miles south to the Kirby Canyon Recycling and Disposal Facility in south San Jose.

FACILITY CAPACITY:

The facility is permitted to process a maximum of 1500 tons of material per day. The facility currently processes approximately 900 tons of material per day. Allocation quantities for delivery of waste to the Facility are shown in Exhibit A.

ESTIMATED DIVERSION RATE:

Based on the terms of the agreement between the City of Sunnyvale and the Facility operator, the guaranteed diversion rate for the Facility is 25%. However, this guarantee is subject to adjustment based on the quantities of recyclable materials present in the municipal solid waste delivered to the Facility.

JURISDICTIONS SERVED:

The Facility serves all of Santa Clara County. The Facility primarily serves the cities of Sunnyvale, Palo Alto and Mountain View.

FACILITY LOCATION:

The Facility is located in Santa Clara County, on City of Sunnyvale-owned property, northeast of the intersection of Caribbean Drive and Borregas Avenue, adjacent to the Sunnyvale Landfill, the Sunnyvale Water Quality Control Plant and the San Francisco Bay (see attached map).

SUNNYVALE MATERIAL RECOVER AND TRANSFER STATION

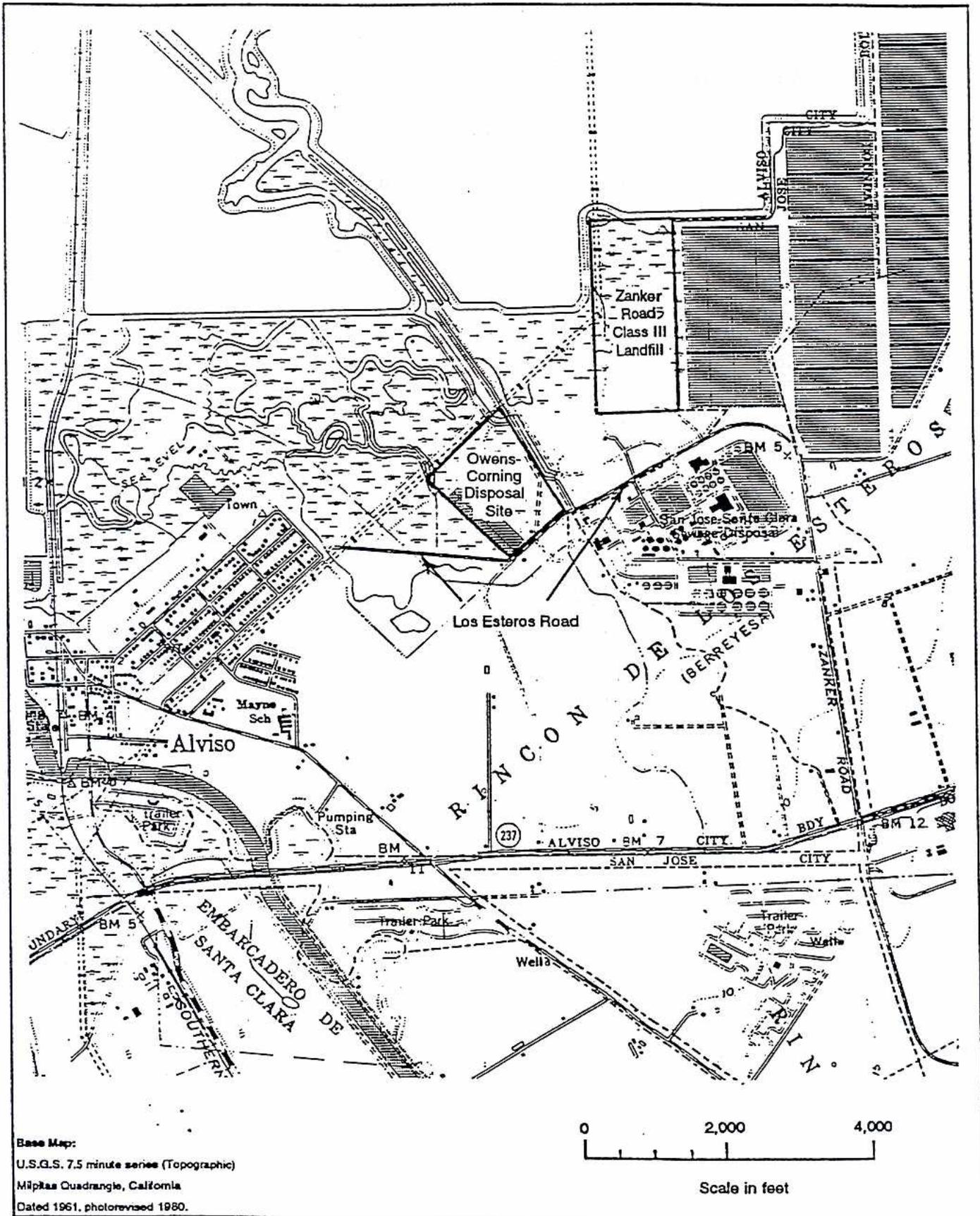
EXHIBIT A

Annual City Minimum Tonnage Commitment

YEAR	Sunnyvale	Mountain View	Palo Alto	TOTAL
1993*	72,465	39,403	26,011	137,879
1994	140,361	66,957	52,207	259,525
1995	135,7(X)	67,469	52,475	255,644
1996	132,873	68,277	50,949	252,099
1997	129,925	69,096	49,386	248,407
1998	126,922	69,926	47,787	244,635
1999	123,864	47,196	46,151	217,210
2000**	60,374	23,873	22,239	106,486
TOTAL	922,484	452,196	347,205	1,721,885

* Assumes deliveries begin July 1, 1993

** Assumes deliveries end June 30, 2000



ZANKER

Road Landfill

Zanker Road Resource Management, Ltd.

Owens-Corning Disposal Site
 Zanker Road Resource Management, Ltd.
 San Jose, California

Figure 1: Vicinity Map

Fact Sheet #9
Zanker Road Class III Landfill
San Jose, California

TYPE OF FACILITY:

The Zanker Road Class III Landfill (Facility) began operations in 1985 on a site formerly known as the Nine-Par Disposal Site (from 1934-1977). The 70-acre Facility (46 acres permitted for landfilling) is owned and operated by Zanker Road Resource Management, Ltd. The Facility is permitted to accept non-hazardous and non-putrescible solid wastes for processing. These wastes consist mainly of construction and demolition debris, (such as soil, asphalt, concrete, rebar and wood waste) yardwaste, metals, glass, plastic, and paper. The primary activities conducted at the Facility involve extensive resource recovery and recycling. Currently, there are five recycling operations that take place at the Facility: (1) sorting, splitting, chipping, screening, composting, stockpiling, and resale of wood waste; (2) separating, crushing, stockpiling, and resale of concrete waste; (3) hand separating recyclable materials from the incoming waste stream; (4) grinding and resale of wallboard waste (gypsum); (5) processing, screening, composting, and resale of yard waste compost products. The residual solid waste after processing is landfilled on site.

FACILITY CAPACITY:

The facility is permitted to landfill a maximum of 350 tons of waste per day. In 2002, an average of approximately 40 tons of waste was landfilled each day.

ESTIMATED DIVERSION RATE:

In 2002, the Facility received an average of approximately 800 tons per day for processing, and approximately 94% of the material was diverted from disposal.

JURISDICTIONS SERVED:

The Facility serves all of Santa Clara County and all neighboring counties.

FACILITY LOCATION:

The Facility is located at 705 Los Esteros Road in north San Jose off of Highway 237, near the southeastern end of the San Francisco Bay (see the attached map).

Fact Sheet #10
Dunne Ranch Composting Facility

Deleted with the Fourth Amendment
December 1999

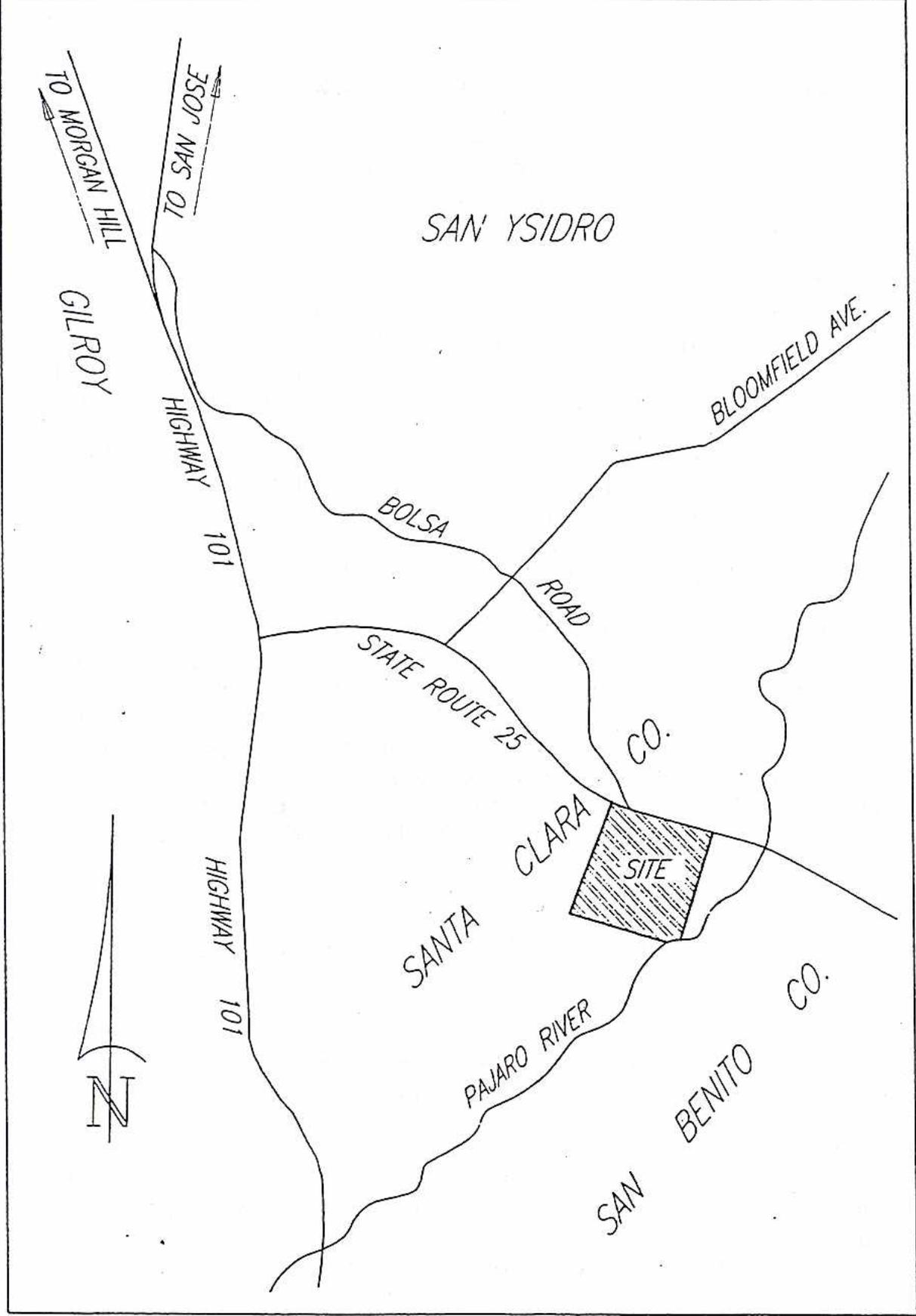


EXHIBIT PREPARATION BY: BELLECCI & ASSOCIATES, INC.

Z-BEST COMPOSTING FACILITY

VICINITY MAP

SANTA CLARA COUNTY

CALIFORNIA

**Fact Sheet #11
Z-Best Composting Facility
Gilroy, California**

TYPE OF FACILITY:

The proposed Z-Best Composting Facility (Facility) is a proposed green waste composting facility that will be owned and operated by Zanker Road Resource Management, Ltd. The operators are currently seeking permits from the County of Santa Clara Department of Planning and Development, the County of Santa Clara Department of Environmental Health, the California Integrated Waste Management Board, the Central Coast Regional Water Quality Control Board, and the Bay Area Air Quality Management District. The operators expect to begin operations in the Fall of 1997. The 70-acre Facility is situated on a 157-acre parcel. The Facility will accept source-separated green waste, agricultural by-products, and other permitted organic materials from municipal collection programs, licensed contractors, and local agricultural operations. The Facility will not be open to the general public. Materials received at the Facility will be processed (screened or ground) and composted using an aerated windrow method. Finished compost will be cured, screened, temporarily stored on site, and transported to market as needed.

FACILITY CAPACITY:

The facility will have an estimated maximum processing capacity of 500 tons per day and is anticipated to accept an average of 200 tons per day.

ESTIMATED DIVERSION RATE:

The Facility will receive only materials that can be composted and therefore will have nearly a 100 percent diversion rate. Anticipated annual diversion would be an estimated 52,800 tons per year (based on 200 tons per day).

JURISDICTIONS SERVED:

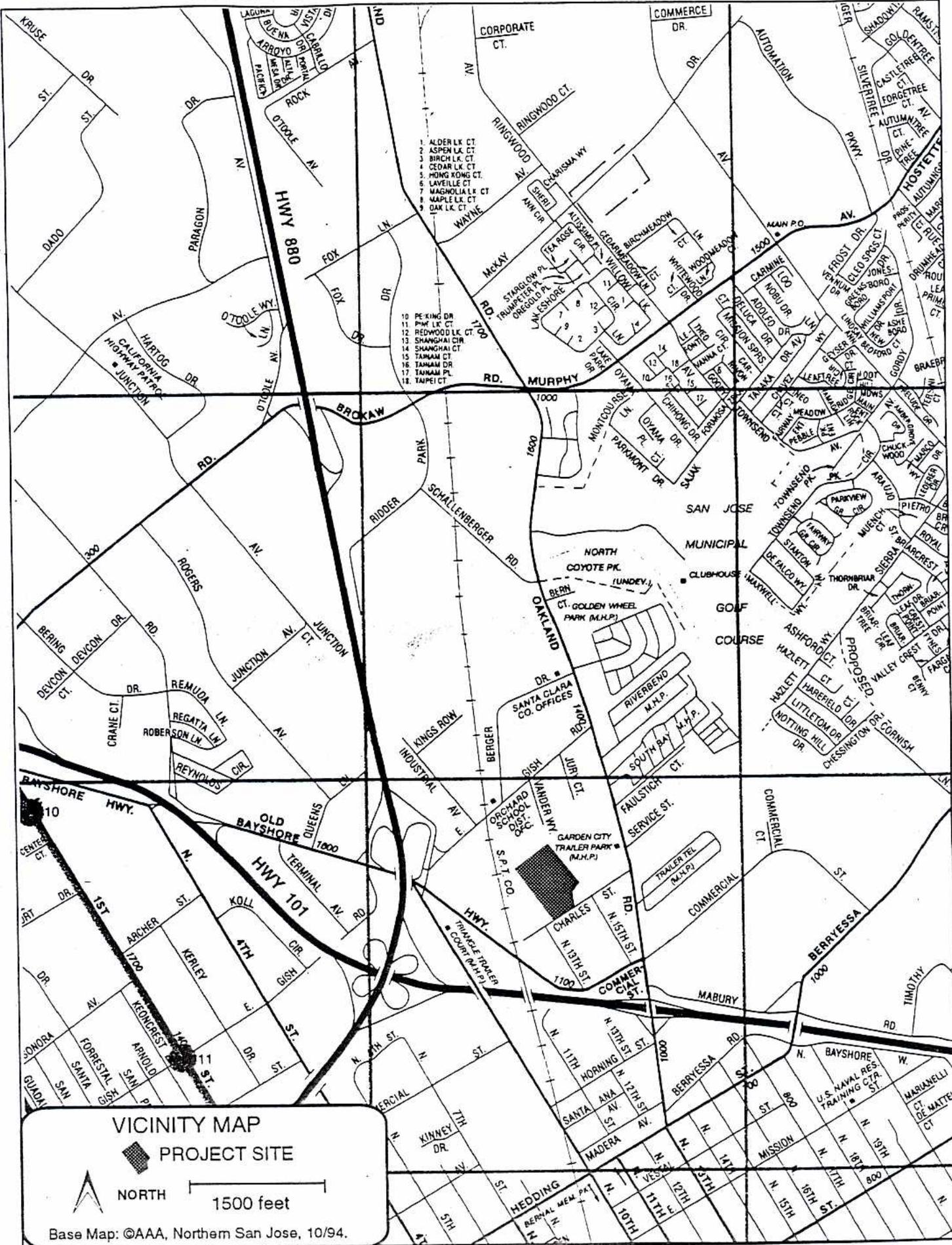
The Facility would serve all of Santa Clara County as well as the surrounding south San Francisco Bay Area.

FACILITY LOCATION:

The Facility is located on the south side of Highway 25 at its intersection with Bolsa Road, which is between the cities of Gilroy and Hollister (see the attached map).

VICINITY MAP

EZTR-AAA.FH5, 03/20/97.



Fact Sheet #12
GreenWaste Recovery Facility
San Jose, California

TYPE OF FACILITY:

The proposed GreenWaste Recovery Facility (Facility) is owned by GreenWaste Recover, Incorporated. The Facility, which is approximately 6 acres in size, began operation in 1995 under a Conditional Use Permit from the City of San Jose. The Facility's primary function will be to recover recyclable materials from the waste stream for further processing and marketing. The Facility will operate a curbside recyclables processing operation, a yard waste transfer operation, and a debris box sorting and recycling operation. All sorting operations will be conducted inside a 40,250 square foot building. Materials which are sorted for recycling will be shipped to other recycling operations for further processing and marketing. The remaining waste will be shipped to permitted landfills for disposal. The Facility will also include the offices, collection vehicle parking, and maintenance facilities of GreenWaste Recovery and its associated businesses.

FACILITY CAPACITY:

The facility will be permitted to accept a maximum processing of 934 tons of compostable waste per day, with a weekly maximum of 4,200 tons. The Facility will be permitted to allow any combination of the following waste categories: curbside recyclables, debris box recycling, yard waste, commercial recyclables, and pre- and post-consumer food wastes from commercial, industrial, and residential sources.

ESTIMATED DIVERSION RATE:

The anticipated diversion rate for the Facility is approximately 84%.

JURISDICTIONS SERVED:

The Facility will serve all of Santa Clara County, northern San Benito County, and southern San Mateo County.

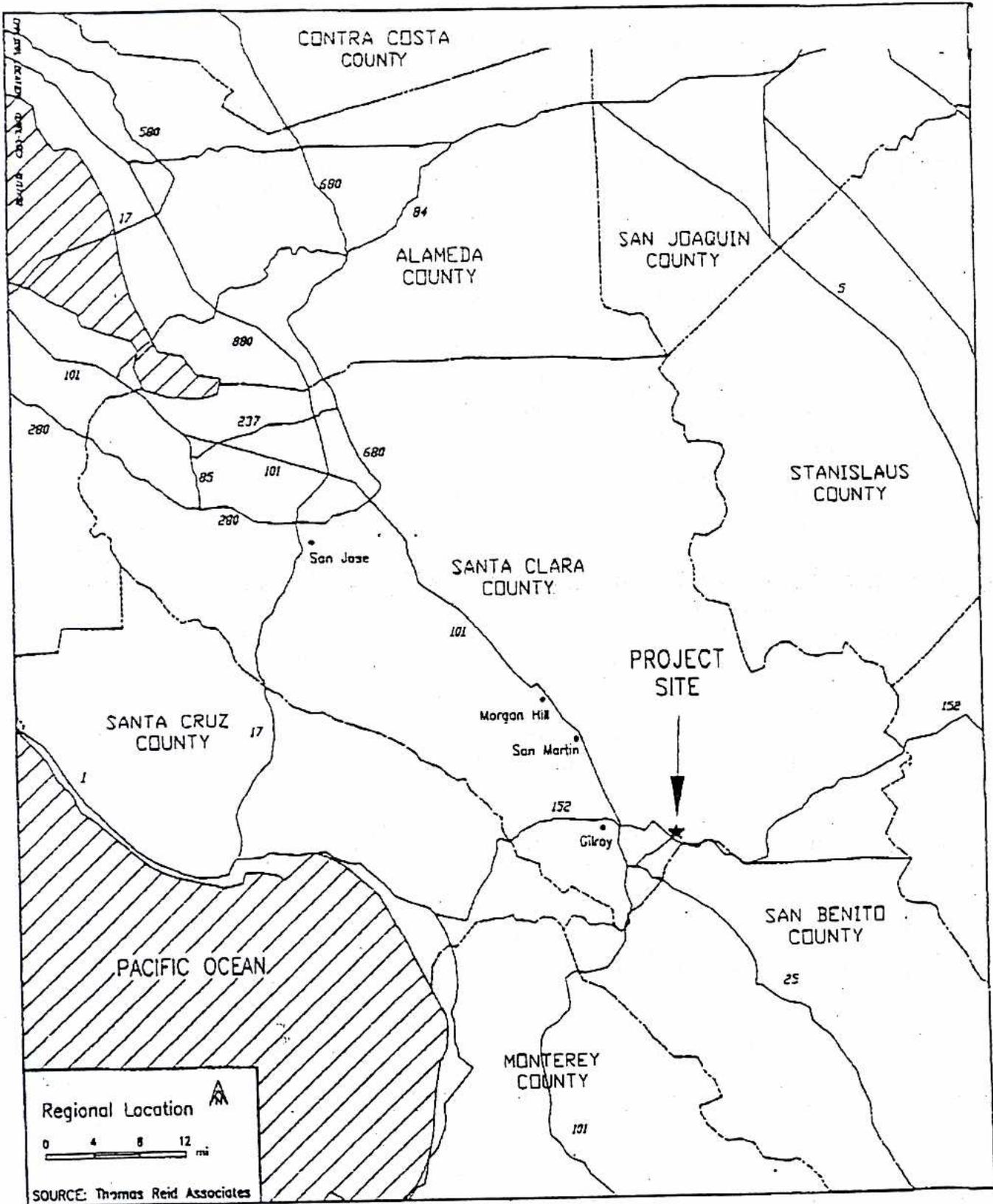
FACILITY LOCATION:

The Facility is located at 625 Charles Street, in San Jose. Charles Street can be reached by Old Oakland Road, east of Highway 101, or by Commercial Street, just south of Highway 880 interchange (see the attached map).

**Fact Sheet #13
ComCare Farms Composting Facility**

Deleted with the Eighth Amendment
February 2010

Project Location Map



**Fact Sheet #14
South Valley Organics Composting Facility
at Recology Pacheco Pass,
Santa Clara County, California**

TYPE OF FACILITY:

The South Valley Organics Composting Facility is owned and operated by Recology Pacheco Pass. The Facility has received an Conditional Use Permit and Architectural Site Approval from the County of Santa Clara Department of Planning, a Full Compost Facility Permit (SWFP) from the County of Santa Clara Department of Environmental Health, a Waiver of Waste Discharge Requirements from the Central Coast Regional Water Quality Control Board, and a Permit to Operate from the Bay Area Air Quality Management District. The Facility accepts green waste, food waste, agricultural waste, and manure from Recology South Valley, and from other commercial haulers in the region. At the Facility, the material is actively composted using either windrow or in-vessel technology, prepared for market, and stored until delivered to markets. Finished product can be used on the site as a topsoil amendment for site revegetation and landfill closure.

FACILITY CAPACITY:

The Facility is designed to accommodate 450 tons average and 750 tons peak daily feedstock, or 117,000 tons annually.

ESTIMATED DIVERSION:

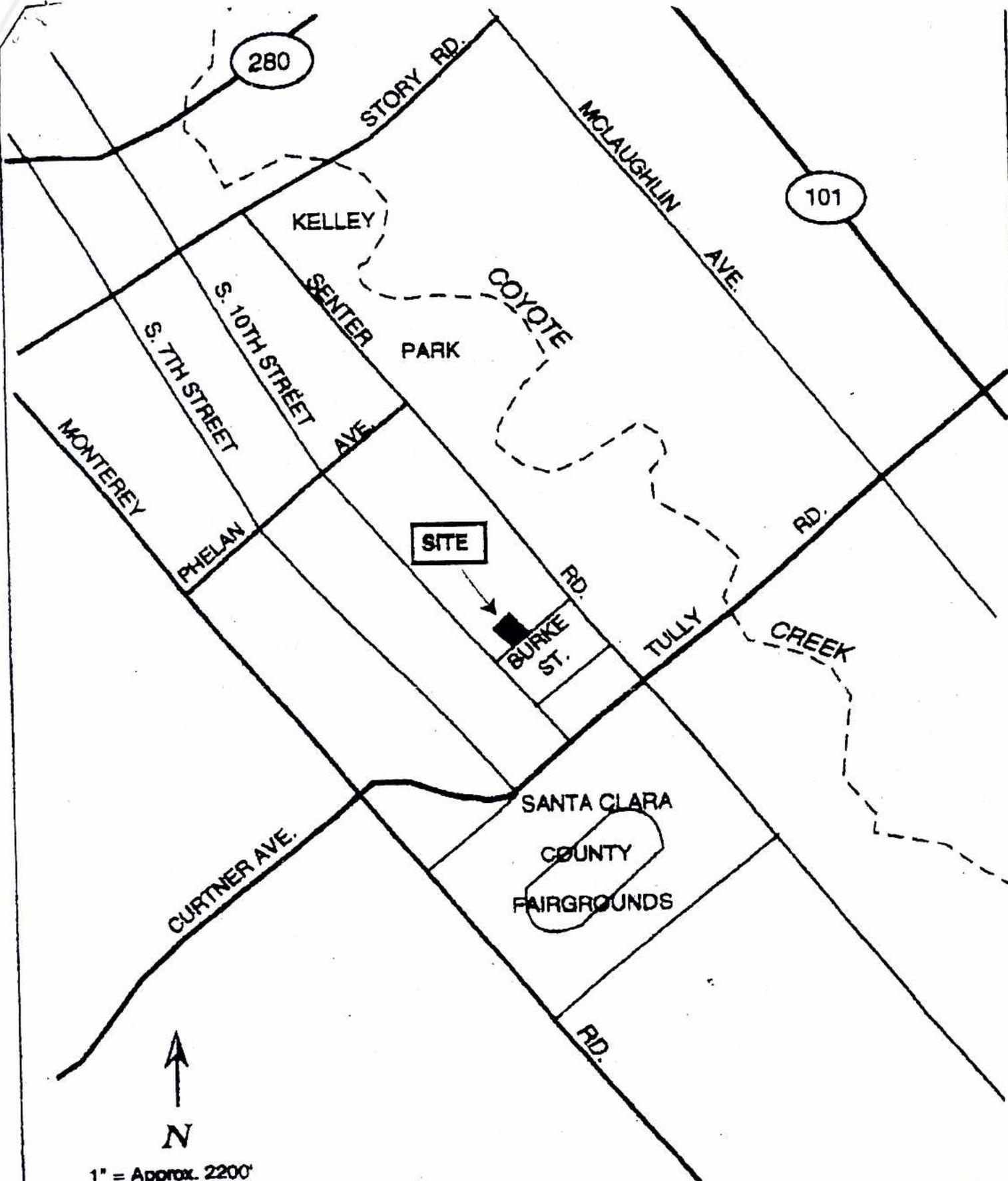
The anticipated diversion rate for the material received at the facility is 100%.

JURISDICTIONS SERVED:

The Facility serves jurisdictions within Santa Clara, San Benito, and other Bay Area Counties.

LOCATION:

The Facility is located at 3675 Pacheco Pass Road, in the southern portion of unincorporated Santa Clara County, and is within the boundaries of the Recology Pacheco Pass facility (see the attached map).



VICINITY MAP

Butterick Enterprises Recyclery
San Jose, California

**Fact Sheet #15
Butterick Enterprises Recyclery
San Jose, California**

TYPE OF FACILITY:

The proposed Butterick Enterprises Recyclery (Facility) is owned by Butterick Enterprises. The Facility, which is 1.87 acres in size, began operation in 1989 as a materials recovery and transfer facility. A Conditional Use Permit for the Facility was issued in January 2000 by the City of San Jose. The Facility's primary function will be to recover recyclable materials from the waste stream for further processing and marketing. All sorting operations will take place outside. Materials sorted for recycling will be shipped to other recycling operations for further processing and marketing. The remaining waste will be shipped to permitted landfills for disposal. The Facility will also include the offices, collection vehicle parking, bin storage, and maintenance facilities for the operation.

FACILITY CAPACITY:

The Facility will be permitted to accept a maximum of 25,000 tons per year, with a monthly maximum of 3,100 tons. The Facility will be permitted to allow any combination of the following waste categories: debris box recycling, commercial, industrial, and residential recyclables. The site is not permitted to accept hazardous material, green waste, brush, garbage, or food waste.

ESTIMATED DIVERSION:

The anticipated diversion rate for the Facility is approximately 70%.

JURISDICTIONS SERVED:

The Facility will serve all of Santa Clara County.

LOCATION:

The Facility is located at 505 Burke Street, San Jose. Burke Street can be reached off Tully Road from Highway 101 (see the attached map).

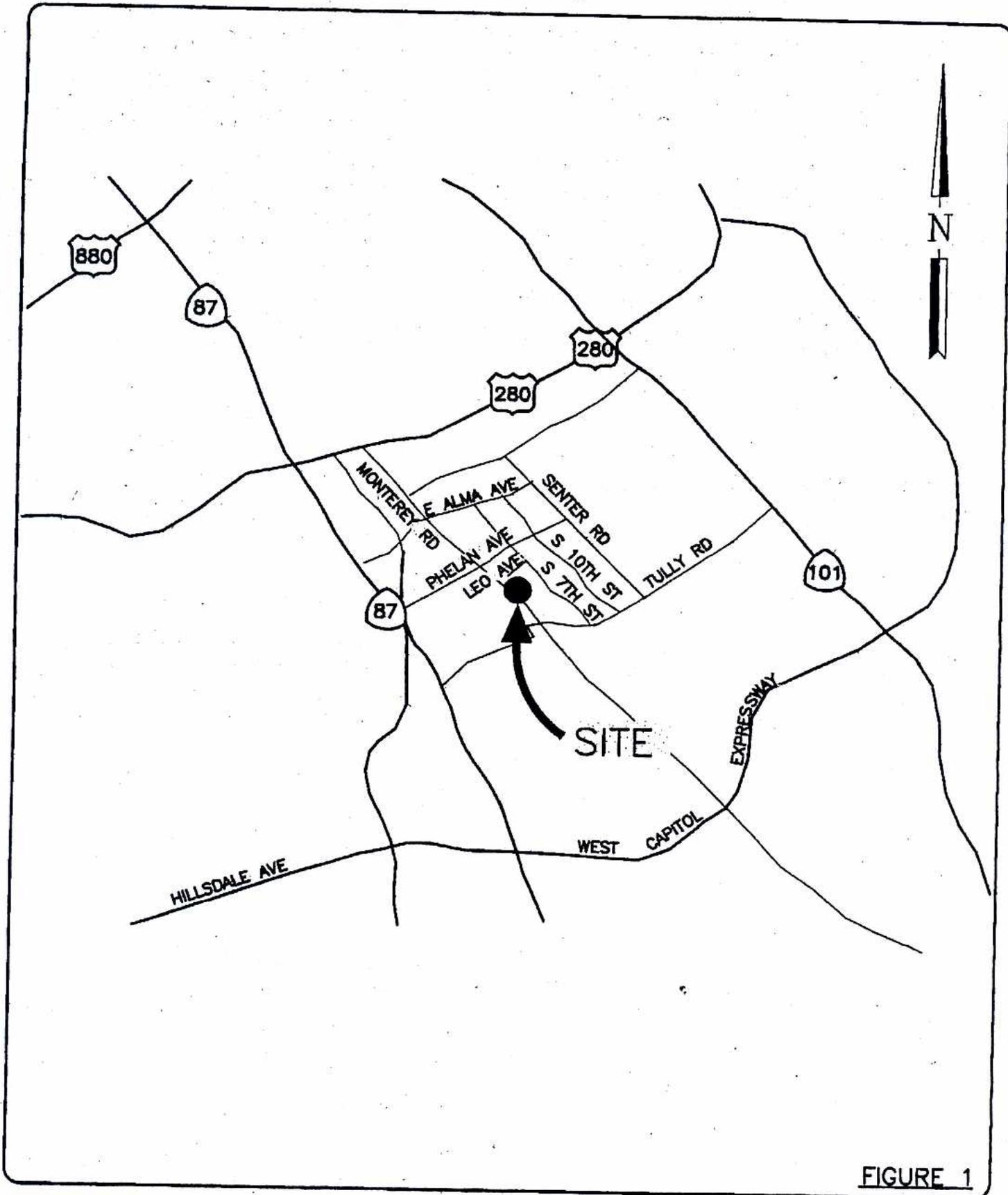


FIGURE 1

 <p>(909) 860-7777</p> <p>BRYAN A. STIRRAT & ASSOCIATES CIVIL AND ENVIRONMENTAL ENGINEERS 1380 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765</p>	<p>PREMIER RECYCLING FACILITY</p>	<p>JOB NO. 2000.019-200</p>
	<p>VICINITY MAP</p>	<p>DATE 2-2000</p> <p>DRAWN BY J.J.G</p> <p>FILE NAME 02082DB.</p>

Fact Sheet #16
Premier Recycling Facility
San Jose, California

TYPE OF FACILITY:

The proposed Premier Recycling Facility (Facility) is owned by Premier Recycling and is a proposed large volume transfer/processing facility. The Facility, which is 1.44 acres in size, began operation in 1997 as a construction/demolition materials recycler. The Facility's primary function will be to recover recyclable materials from construction/demolition activities for further processing and marketing. All sorting operations will take place outside. Sorted recyclable materials will be shipped to other recycling operations for further processing and marketing. The residual waste will be transported to a permitted landfill for disposal. The Facility will also include an office, transfer vehicle parking, and maintenance facilities for the operation.

FACILITY CAPACITY:

The Facility will accept approximately 300 tons per day / 93,000 tons per year, or as specified in the most recently issued Solid Waste Facilities Permit (SWFP). The Facility will accept various recyclables including cardboard, scrap metal, wood, sheetrock, concrete, and other non-putrescible commercial/ demolition waste. The maximum inflow rate and the type and quantities of materials and the facility operations will be governed by the SWFP issued by the City of San Jose Code Enforcement, Local Enforcement Agency Program.

ESTIMATED DIVERSION:

The anticipated diversion rate for the Facility is approximately 80%.

JURISDICTIONS SERVED:

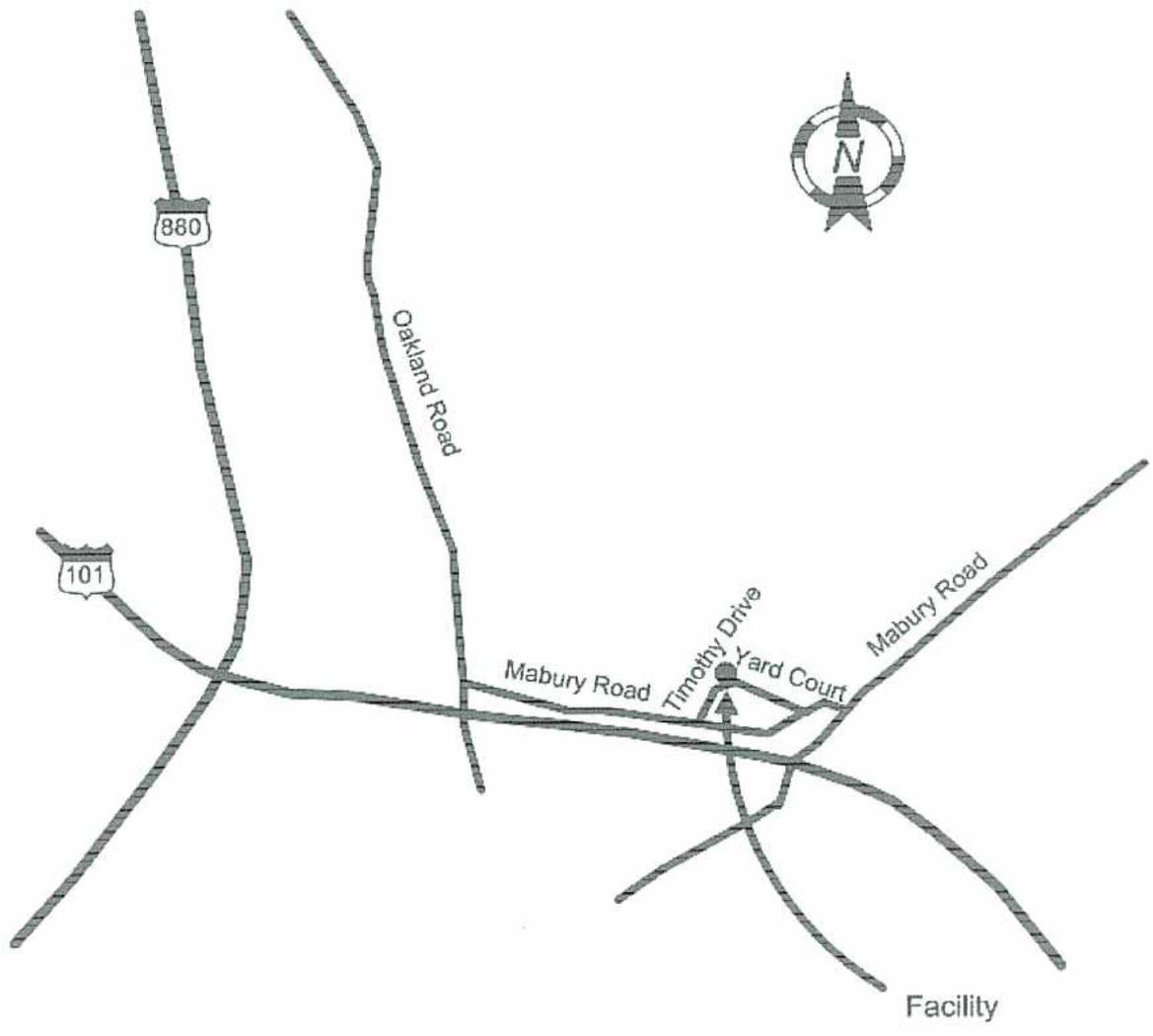
The Facility will serve the greater San Jose Metropolitan Area, all of Santa Clara County, and adjoining counties.

LOCATION:

The Facility is located at 260 Leo Avenue, San Jose. Access to the facility is from Leo Avenue (see the attached map).

Fact Sheet #17
Environmental Management Systems Facility

Deleted with the Seventh Amendment
August 2009



Vicinity Map

California Waste Solutions
San Jose, California

**Fact Sheet #18
California Waste Solutions Recycling & Transfer Station
San Jose, California**

TYPE OF FACILITY: Large Volume Transfer/Processing Facility

The California Waste Solutions Recycling & Transfer Station is operated by California Waste Solutions and owned by Duong Family Investments. The facility, which is 3.57 acres, began operations in August 2002 as a recycling center. A Conditional Use Permit was issued in March 2002 by the City of San Jose to operate a “curbside recycling processing and transfer facility.” All sorting operations occur within the building. Sorted materials are sent for processing and marketing at other locations. Residual solid waste from the operation will be sent to an authorized facility. Non-hazardous residual wastes are sent for disposal at permitted landfills. Hazardous and other prohibited wastes will be sent to approved recycling, treatment, or disposal facilities. Other activities at this site include administrative offices and employee parking.

FACILITY CAPACITY:

The Facility’s design capacity for the intended material stream of commingled recyclables is 530 tons per day. Under terms of its Conditional Use Permit, it is permitted to accept a maximum of 110,000 tons per year.

ESTIMATED DIVERSION:

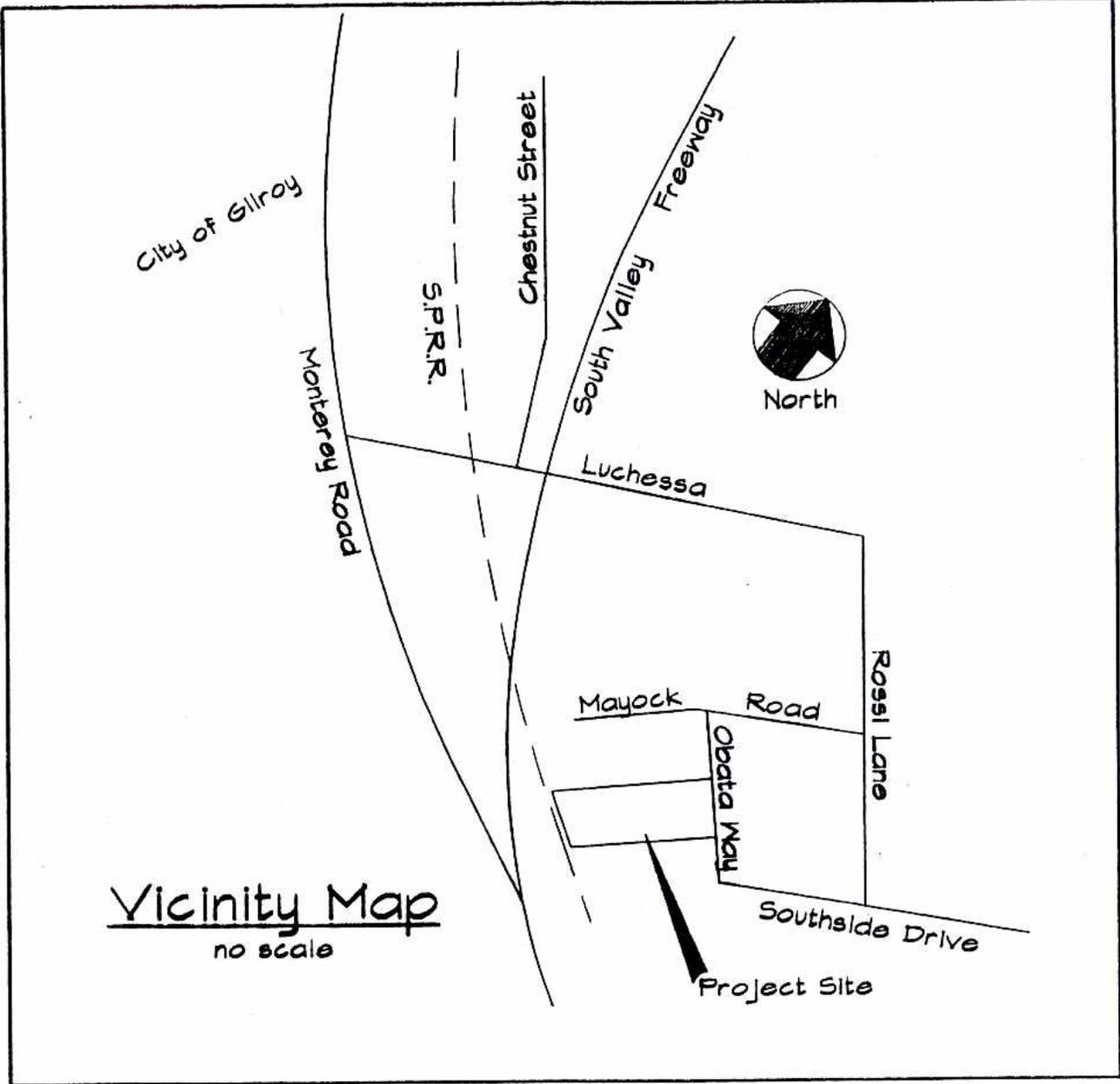
The estimated diversion rate for the Facility is approximately seventy (70%) to ninety (90%) percent.

JURISDICTIONS SERVED:

The City of San José. Subject to the tonnage limits above, as they may be amended, the facility may serve all of the jurisdictions in Santa Clara County.

LOCATION:

The Facility is located at 1005 Timothy Drive, San Jose, California 95133. Access to the facility is from Yard Court.



**Fact Sheet #19
Pacific Coast Recycling
Gilroy, California**

TYPE OF FACILITY:

The Pacific Coast Recycling Facility (Facility) is a recycling processing and transfer facility receiving commingled recyclables. The Facility is located on 6.1 acres at 5895 Obata Way, Gilroy. The business will operate from 7:00 a.m. – 5:00 p.m. six days per week. The Facility recycles construction waste; i.e. roofing, wall, flooring, plumbing, electrical, asphalt, concrete and masonry materials are all typical. This operation will also receive organic garden and landscape wastes. The Facility does not receive food, food packaging or food service waste nor will it handle hazardous materials (except Freon).

FACILITY CAPACITY:

The Facility is permitted to accept no more than 100 tons per day.

ESTIMATED DIVERSION:

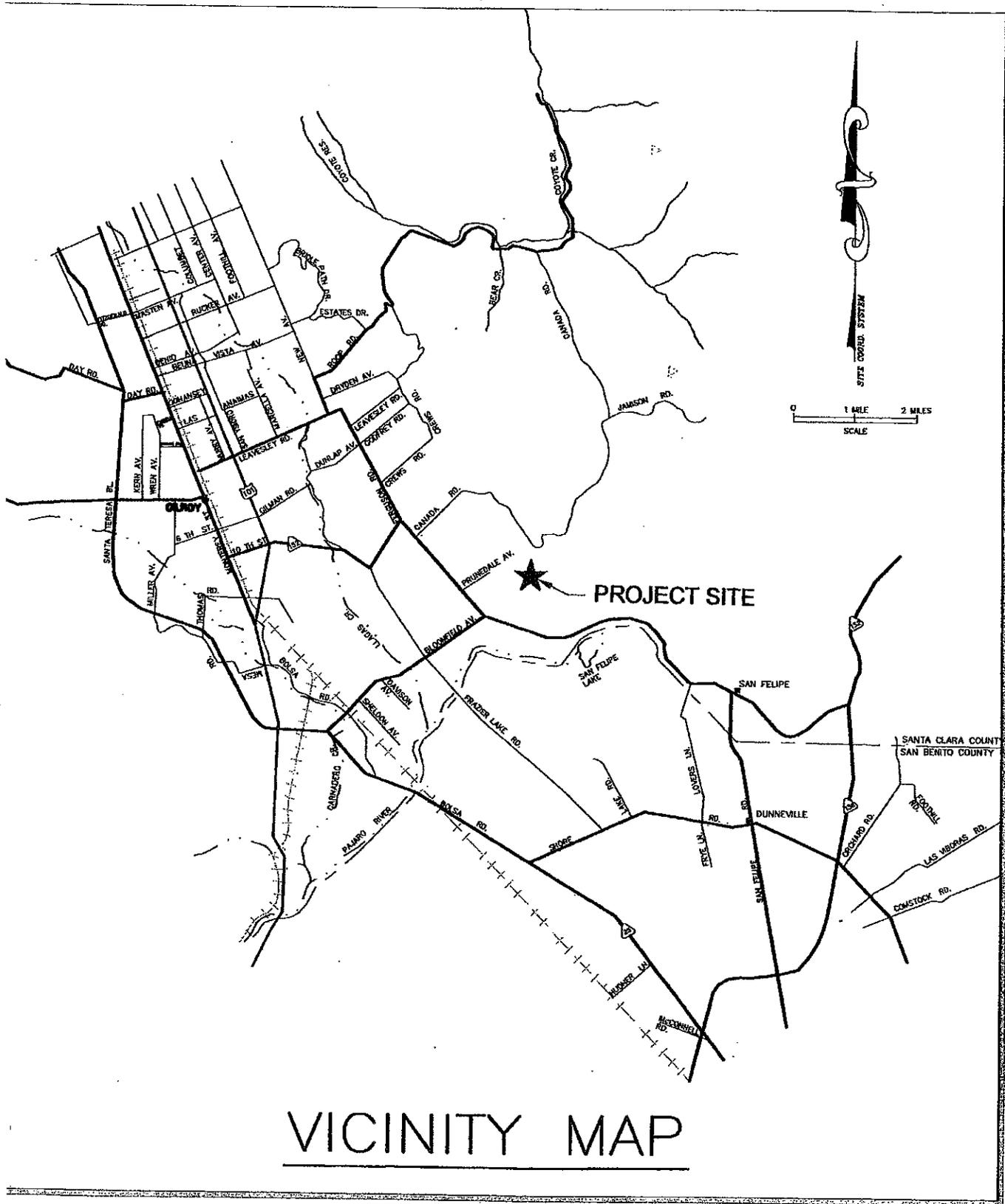
Approximately 90% of all incoming materials is recycled.

JURISDICTIONS SERVED:

This Facility will serve the Santa Clara County and small percentage from San Benito County.

LOCATION:

The Facility is located at 5895 Obata Way, Gilroy, CA 95020. Access to the facility is off Obata Way with ingress/egress provided by two driveway entrances (see the attached map).



VICINITY MAP

**Fact Sheet #20
Pacheco Pass Transfer Station
Santa Clara County, California**

TYPE OF FACILITY:

The proposed Pacheco Pass Transfer Station is owned and operated by Recology Pacheco Pass (RPP). RPP is currently in the process to obtain a Use Permit from the County of Santa Clara, which is anticipated to be issued in 2011. The facility will accept municipal solid waste and mixed recyclables from Recology South Valley collection vehicles and other commercial haulers. Municipal solid waste and mixed recyclables is loaded into transfer trailers and transported to nearby vendors for processing or to permitted landfill for disposal. This facility will replace the San Martin Transfer Station, which will close in 2013.

FACILITY CAPACITY:

The facility is designed to accommodate 500 tons per day average, and 1,000 tons per day peak of municipal solid waste and mixed recyclables.

ESTIMATED DIVERSION:

Only transfer operations will occur at the facility. No sorting or processing is performed. The anticipated diversion rate at this facility is 0%.

JURISDICTIONS SERVED:

This facility primarily serves the Cities of Gilroy and Morgan Hill and the community of San Martin, other unincorporated areas of southern Santa Clara County.

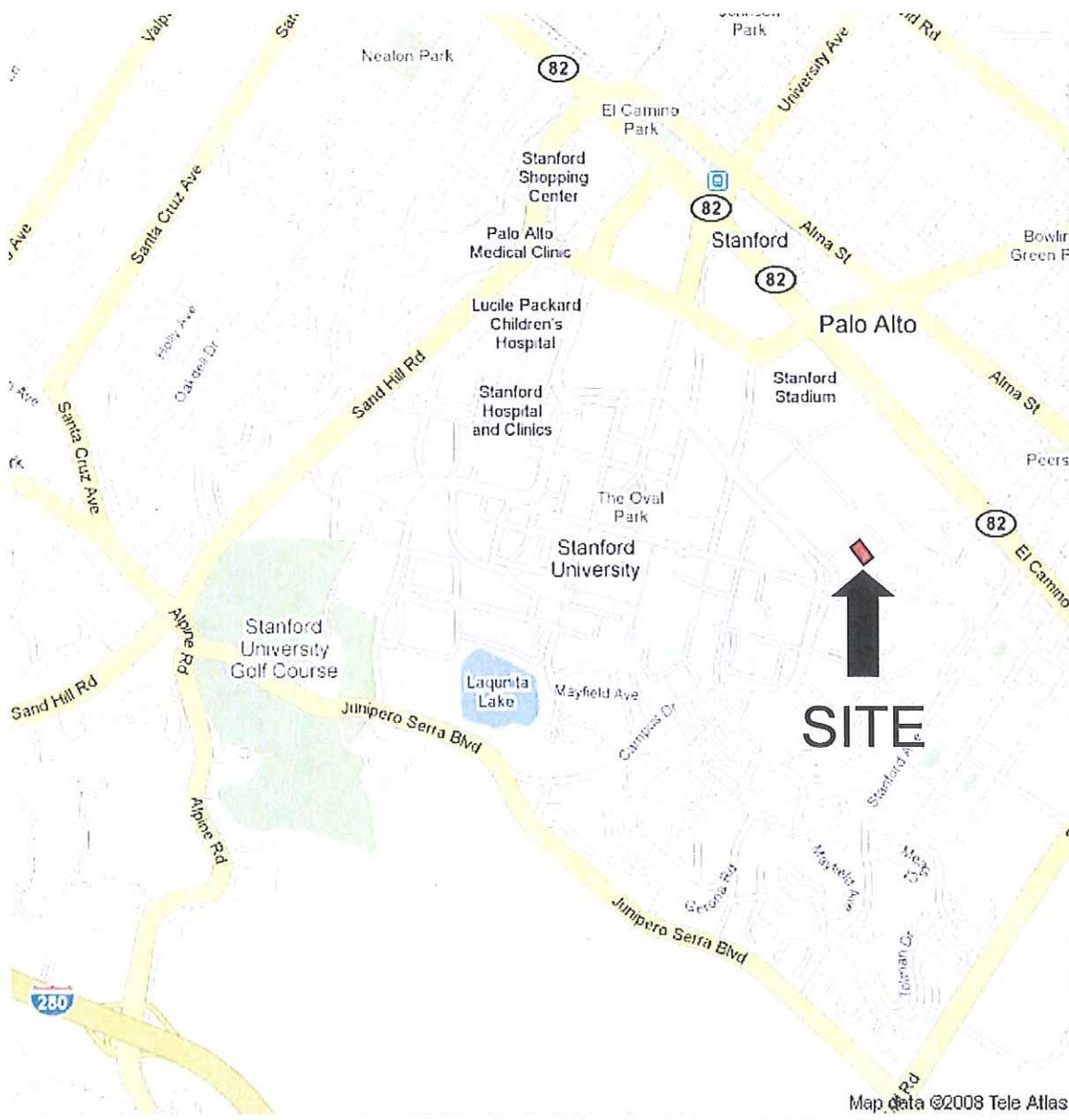
LOCATION:

The Facility is located at 3675 Pacheco Pass Highway, in the southern portion of unincorporated Santa Clara County, and within the permitted boundaries of Recology Pacheco Pass (see the attached map).

Stanford Recycling Center and Direct Transfer Facility

339 Bonair Siding, Stanford, California 94305

Vicinity Map



Fact Sheet #21
Stanford Recycling Center and Direct Transfer Facility
Stanford, California

TYPE OF FACILITY:

The Stanford Recycling Center and Direct Transfer Facility (Facility) is owned and operated by Peninsula Sanitary Service, Inc. (PSSI). The Stanford Recycling Center was established in 1976 with the goal of diverting recyclable materials from landfill. Peninsula Sanitary Service has been the university's solid waste hauler since 1943. The company provides a full array of refuse, yard waste and food waste, recyclables, and construction and demolition services to the campus community including academic and operations buildings, student housing and faculty and staff housing. The Facility currently receives source-separated and mixed recyclables through drop-off and on-campus collection routes. The mixed recyclables are separated through mechanical and manual means utilizing a mechanized processing line at the Facility. Materials accepted include glass jars and bottles, aluminum and tin cans, scrap aluminum, corrugated cardboard, newspapers, magazines, high-grade and mixed paper, telephone books, and waste products of assorted plastic resins.

The Facility proposes to operate a Direct Transfer Facilities (DTF), which can be permitted for up to 150 tons per day (TPD) with a Registration Solid Waste Facility Permit (SWFP). The DTF would handle commingled recyclables, green waste, commingled green waste and food waste, mixed construction and demolition (C&D) debris and/or municipal solid waste (MSW) which will be transferred directly from collection vehicles into direct transfer trailers to maximize the efficiency of transporting materials to off-site processing facilities for the commingled recyclables and mixed C&D, to off-site composting facility for the comingled green waste and food waste, and to a landfill for the MSW. This will garner additional diversion of materials by processing recyclables, mixed C&D, and commingled green waste and food waste at facilities utilizing higher-technology equipment, and reduce the overall diesel use for the operations, minimizing emissions and ultimately the size of the Facility's carbon footprint.

FACILITY CAPACITY:

Approximately 60 tons per day of recyclables were accepted for processing at the Facility during 2007. In addition to the recyclables collection and processing, the Facility proposes to transfer recyclables, commingled green waste and food waste, mixed C&D and MSW at the DTF, the processing and transfer operations have an estimated annual operation capacity of approximately 22,000 tons, with a peak loading capacity of 150 tons per day for the DTF operations.

ESTIMATED DIVERSION RATE:

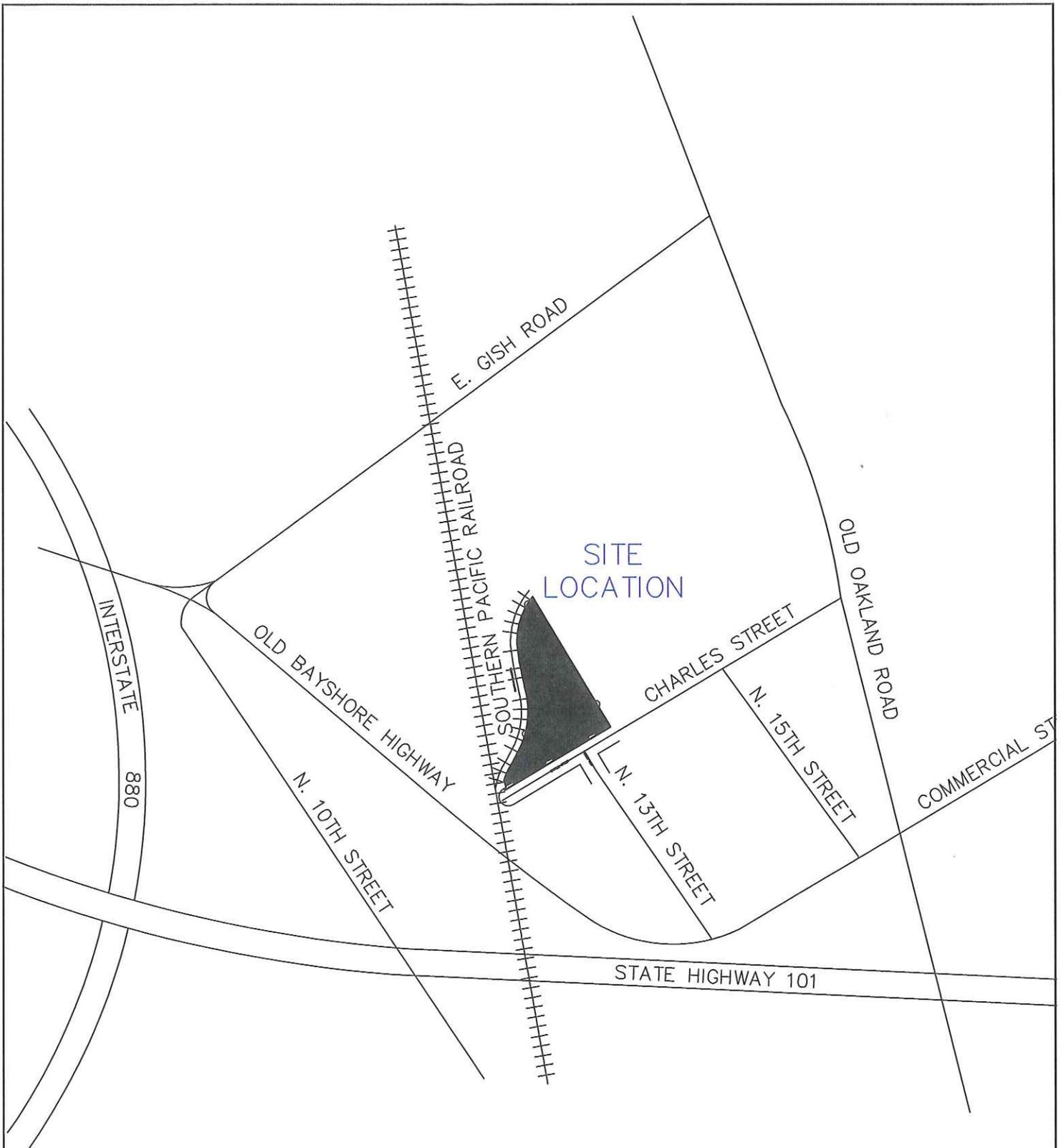
In 2007, total waste generated at the university was 22,013 tons. Based on these figures, the 2007 diversion rate for the facility was approximately 60% of the total waste stream.

JURISDICTIONS SERVED:

The Facility serves the Incorporated and Unincorporated Stanford University Lands in the County of Santa Clara and San Mateo. The Facility is primarily used by students, faculty, and staff at the Stanford University campus.

FACILITY LOCATION:

The Facility is located in Santa Clara County within the Stanford University Community Plan Area at 339 Bonair Siding, Stanford. (see the attached map).



	EDGAR & ASSOCIATES, INC. 1822 21ST STREET SACRAMENTO, CA 95814 PHONE: (916) 750-1200 FAX: (916) 750-1216		LOCATON MAP FOR GREENTeAM MRF	SHEET 1
	1" = 500' JUNE 11, 2009	JOB NUMBER: 170.14.20.01 FILENAME: 170.14.20.01.DWG		

**Fact Sheet #22
GreenTeam of San Jose Material Recovery Facility and Transfer Station
San Jose, California**

TYPE OF FACILITY:

The GreenTeam of San Jose Material Recovery Facility and Transfer Station (GTSJ-MRF) is a wholly-owned subsidiary of Waste Connections of California, Inc. The GTSJ-MRF primarily provides recyclables processing and storage, and solid waste transfer at this site. With the Solid Waste Facility Permit, the GTSJ-MRF plans to harmonize the hours of operations, clarify the outside storage of recyclables – including the bales, bulky materials, and single stream material, and provide appropriate odor and dust mitigation plans for the site and add screening.

FACILITY CAPACITY:

The facility is designed to accommodate 500 tons per day average of commingled recyclables, and 210 vehicles trips per day.

ESTIMATED DIVERSION:

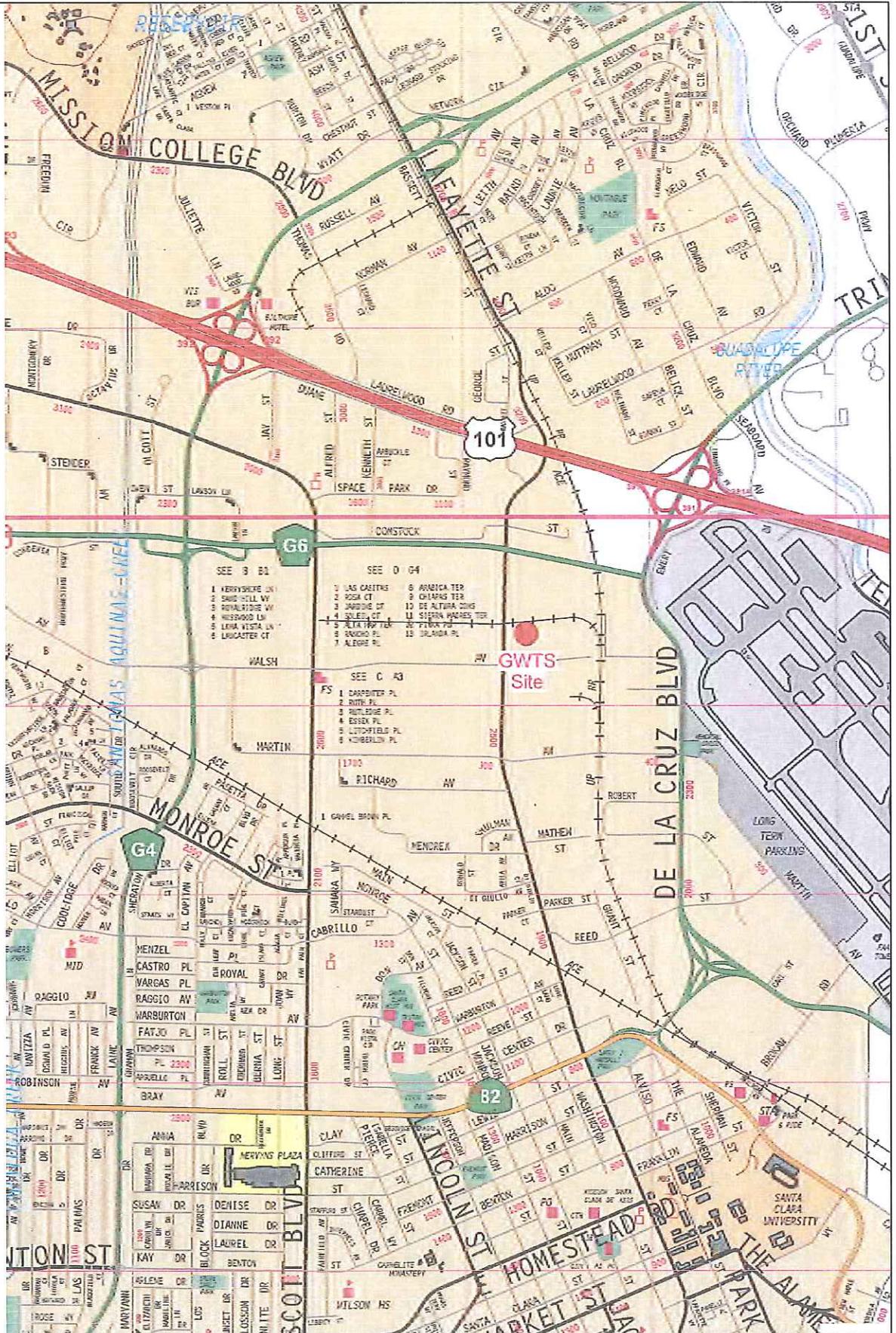
Processing and transfer will occur on site at the facility. The anticipated diversion rate at this facility will be 90%.

JURISDICTIONS SERVED:

This facility primarily serves the Cities of San Jose.

LOCATION:

The Facility is located at 575 Charles Street, San Jose, CA 95112, in the northern portion of the city, and within the permitted boundaries of the Waste Connections GreenTeam of San Jose Material Recovery Facility and Transfer Station (GTSJ-MRF).



APPROX SCALE

NOT TO SCALE



SOURCE
2008 Rand McNally

DATE
04/01/09

ADDRESS
2765 Lafayette St., Santa Clara, CA 95050

SITE LOCATION MAP

GreenWaste Material Processing and
Transfer Station

FIGURE

1

Fact Sheet #23
GreenWaste Material Processing and Transfer Station
Santa Clara, California

TYPE OF FACILITY:

GreenWaste Recovery, Inc. (GreenWaste) is proposing to operate a material processing and transfer facility on 1.87 acres of a 6.44 acre parcel in the City of Santa Clara. Currently GreenWaste uses the site for parking and servicing collection vehicles. The proposed GreenWaste Material Processing and Transfer Station (GWTS) will be operated by GreenWaste on leased property owned by a private party. The GWTS will process and transfer green and compostable materials. The facility's primary function will be to process green and compostable materials prior to being transferred to a compost facility. Green materials such as yard trimmings and wood waste will be processed through size reduction equipment prior to transfer. Compostable materials such as source separated food material will be transferred directly with minimal sorting to remove contaminants and other recyclables. GreenWaste has been processing green and compostable materials for over 10 years and currently owns and operates a similar facility in the City of San Jose.

FACILITY CAPACITY:

A maximum of 1,500 tons per day of green materials (approximately 75-80% by weight) and compostable materials (approximately 20-25% by weight) is proposed.

ESTIMATED DIVERSION:

GreenWaste is estimating 99% diversion of green materials and compostable materials.

JURISDICTIONS SERVED:

The GreenWaste Material Processing and Transfer Station will service the Santa Clara County and surrounding counties. The facility will not be open to the general public.

LOCATION:

The Facility is located in the City of Santa Clara at 2765 Lafayette Street. Refer to attached Site Location Map.

**Fact Sheet #24
Recology Silicon Valley Processing and Transfer Facility
San Jose, California**

TYPE OF FACILITY:

The Recology Silicon Valley Processing and Transfer Facility is an existing medium-volume transfer station that is permitted to receive up to 99 tons per day of mixed waste materials including organic material, residential and commercial refuse and inert material. It is proposed to expand the facility to receive and process recyclable, organic and waste materials from the City of San Jose commercial recycling program and other sources.

FACILITY CAPACITY:

The facility is currently permitted to receive up to 99 tons per day. The facility expansion will be designed to handle up to 600 tons per day of residential and commercial recyclable, organic and waste materials.

ESTIMATED DIVERSION:

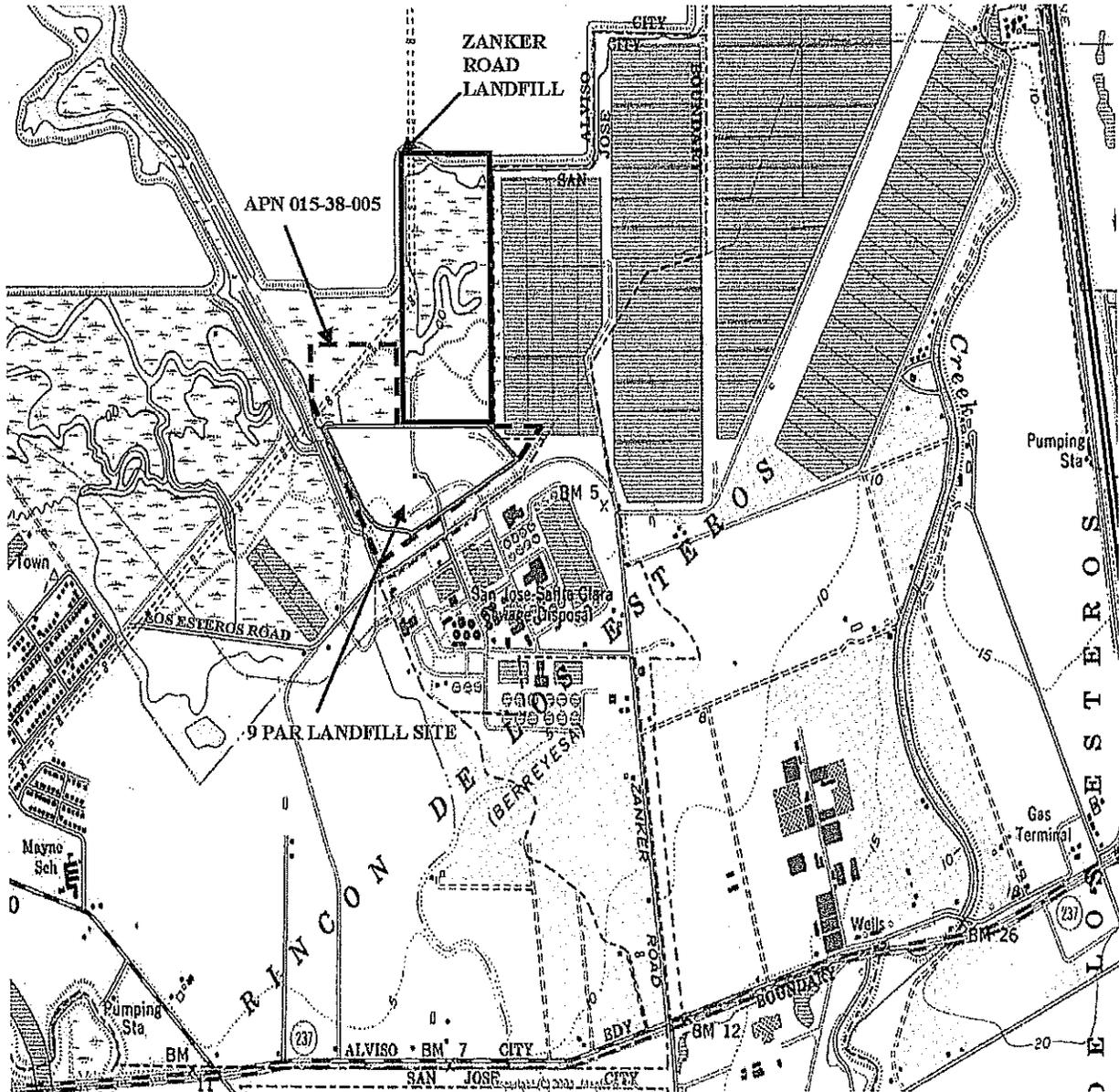
Processing and transfer will occur at the facility. The estimated overall diversion rate is above 60 percent. Recovered materials will be transported from the facility for further processing or to markets. Residual materials will be transported to a permitted disposal site.

JURISDICTIONS SERVED:

The facility will serve San Jose and other South Bay cities.

LOCATION:

The facility is located at 1675 Rogers Avenue, San Jose. Refer to attached Site Location Map.



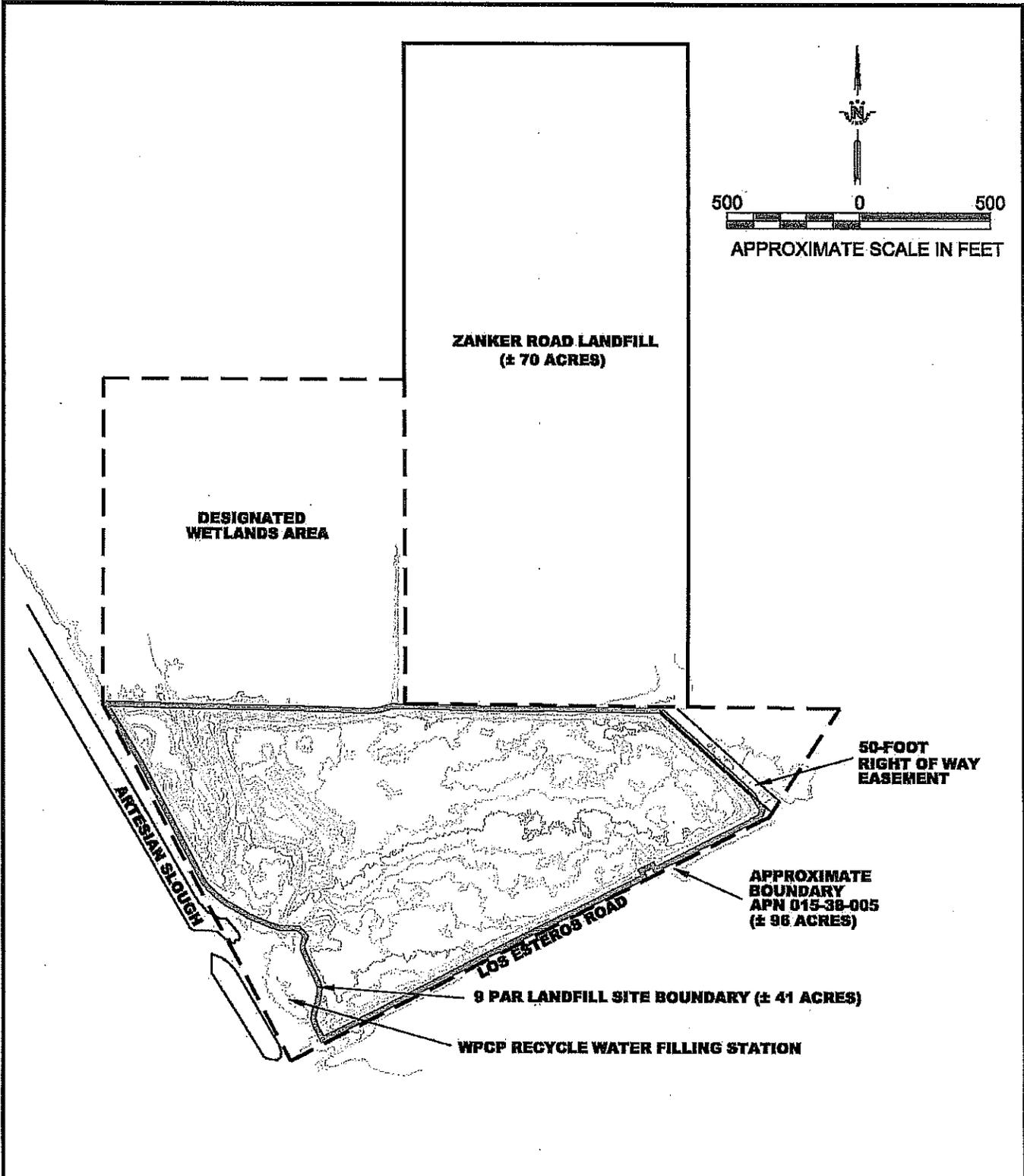
Adapted from USGS Map, California 7.5 Minute Series, Milpitas, CA (Photo revised 1980) Quadrangle.

SCS ENGINEERS

6601 Koll Center Parkway,
Suite 140
Pleasanton, CA 94566
Ph: (925) 426-0080
Fax: (925) 426-0707

FIGURE 1
SITE LOCATION
9 PAR LANDFILL SITE
SAN JOSE, CALIFORNIA

PROJECT NO: 01206142.00		CHECKED BY: JJM
DESIGNED BY: HLG	SCALE: NTS	APPROVED BY: JJM
DRAWN BY: HLG	DATE: 3/07	FILE:



BASE TOPOGRAPHY - 2004 (CITY OF SAN JOSE)

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS

8601 KOLL CENTER PARKWAY, SUITE 140
PLEASANTON, CALIFORNIA 94688
PHONE: (925) 428-0080 FAX: (925) 428-0707

SITE VICINITY MAP

9 PAR LANDFILL SITE
SAN JOSE, CALIFORNIA

SCALE: AS SHOWN

PROJECT NO. 01208142.00

DATE: 4-6-07

FIGURE NO.

2

Fact Sheet #25
Zero Waste Energy Development Company Anaerobic Digestion Facility
San Jose, California

TYPE OF FACILITY:

Zero Waste Energy Development Company (Zero Waste), a joint venture between GreenWaste Recovery, Inc. and its sister company Zanker Road Resource Management (Zanker), is developing the first of its kind in the nation dry fermentation anaerobic digestion facility. Although anaerobic digestion is common in the United States, all the existing processes employ wet feedstock. While the dry-fermentation technology that will be deployed has been commercially demonstrated in Europe for agricultural feedstocks and some MSW feedstocks, there are currently no dry-fermentation anaerobic digestion projects operating in the United States.

FACILITY CAPACITY:

This 150,000 tons per year facility will be developed in three phases; each of the three phases will be capable of processing 50,000 tons per year of organic materials.

FEEDSTOCK:

The facility will process and recover energy from source separated food waste and the organic fraction remaining after materials including municipal solid waste (MSW) are processed at GreenWaste's MRF and create two products: a biogas containing methane and compost. We anticipate phase I of the project will produce 13 million kilowatt hours of electricity per year – enough to power approximately 1,300 homes.

ESTIMATED DIVERSION:

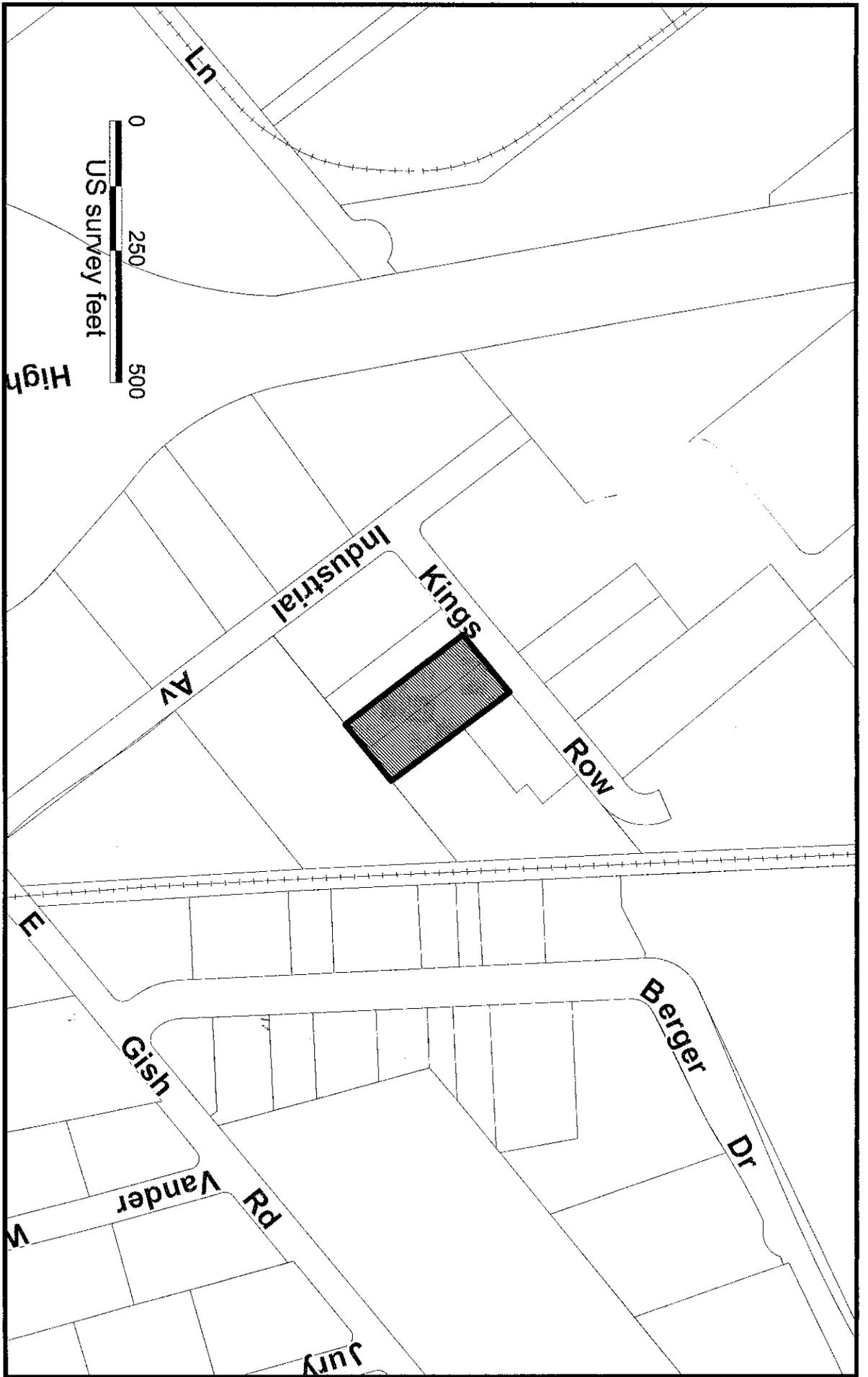
GreenWaste is estimating 80% diversion of green materials and compostable materials.

JURISDICTIONS SERVED:

This facility has been designed to accommodate the current and growing stream of organic waste generated by San Jose and nearby municipalities.

LOCATION:

The proposed site for this facility is located at the former Nine Par landfill at 2100 Los Esteros Road, in the City of San Jose, adjacent to the existing Zanker processing facilities. Refer to attached Site Location Map.

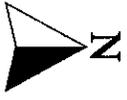


650 Kings Row

File No: SP09-026

District: 4

Quad No: 51



0
250
500
US survey feet

High

Av

Industrial

Kings

Row

High

Gish

Berger

Dr

Vander

Rd

W

July

05/08/2009

Noticing Radius: 500 feet

**Fact Sheet #26
Green Earth Management LLC Kings Row Recycling Facility
San Jose, California**

TYPE OF FACILITY:

The Green Earth Management LLC Kings Row Recycling Facility is an existing Chipping and Grinding Operation on 0.91 acres of leased property permitted to handle up to 199 tons per day of green materials. Green Earth Management LLC. is planning to expand their material processing and transfer facility in the future. The Kings Row Recycling Facility currently chips and grinds green material for transfer to biomass energy facilities. The planned expanded facility's primary function will be to process green and compostable materials prior to being transferred to compost or energy facilities.

FACILITY CAPACITY:

The facility is currently permitted to handle up to 199 tons per day. A maximum of 600 tons per day of green materials (approximately 75-80% by weight) and compostable materials (approximately 20-25% by weight) is planned in the future.

ESTIMATED DIVERSION:

Kings Row Recycling Facility is estimating 99% diversion of green materials and compostable materials.

JURISDICTIONS SERVED:

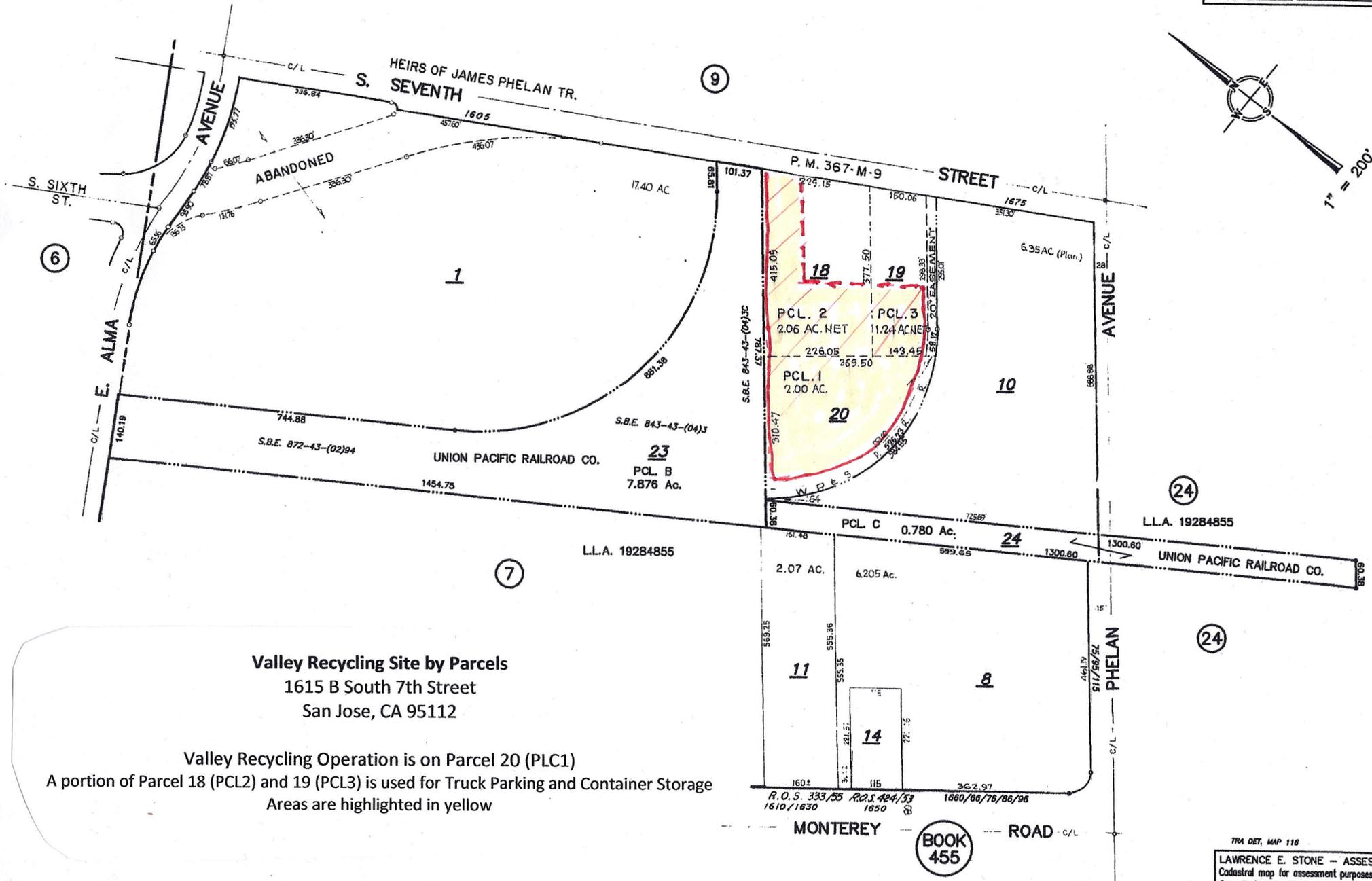
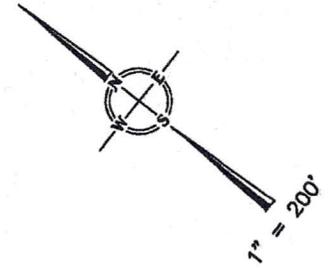
The Kings Row Recycling Facility will service Santa Clara County and surrounding counties. The facility will be open to the public.

LOCATION:

The facility is located in the Enterprise Zone of the City of San Jose at 650 Kings Row. Refer to attached site location map.

APN#:

23730005 and 23730006



Valley Recycling Site by Parcels
 1615 B South 7th Street
 San Jose, CA 95112

Valley Recycling Operation is on Parcel 20 (PCL1)
 A portion of Parcel 18 (PCL2) and 19 (PCL3) is used for Truck Parking and Container Storage
 Areas are highlighted in yellow

**BOOK
455**

TRM DET, MAP 116
 LAWRENCE E. STONE — ASSESSOR
 Cadastral map for assessment purposes only.
 Compiled under R. & T. Code, Sec. 327.
 Effective Roll Year 2008-2009

Fact Sheet #27
Environmental Resources Recovery Inc. (Valley Recycling)
San Jose, California

TYPE OF FACILITY:

Environmental Resource Recovery Inc. (Valley Recycling) is currently permitted as a Medium Volume Construction Demolition Debris Facility. Valley Recycling has been in business since 1986 on property leased from a private party. This facility is currently operating under state and local limits of 175 tons per day. This facility is currently seeking to move a higher state permit “Tier” to implement future plans to process and increase tonnage as a fully permitted solid waste facility, within allowable limits of state and local permit entitlements. The existing medium volume C&D facility has storage bunkers, assorted sizes of dumpster and parking for the roll-off vehicles, and related trucks with compactor-loads.

FACILITY CAPACITY:

A maximum of 175 tons per day of Construction, Demolition and assorted Debris.

ESTIMATED DIVERSION:

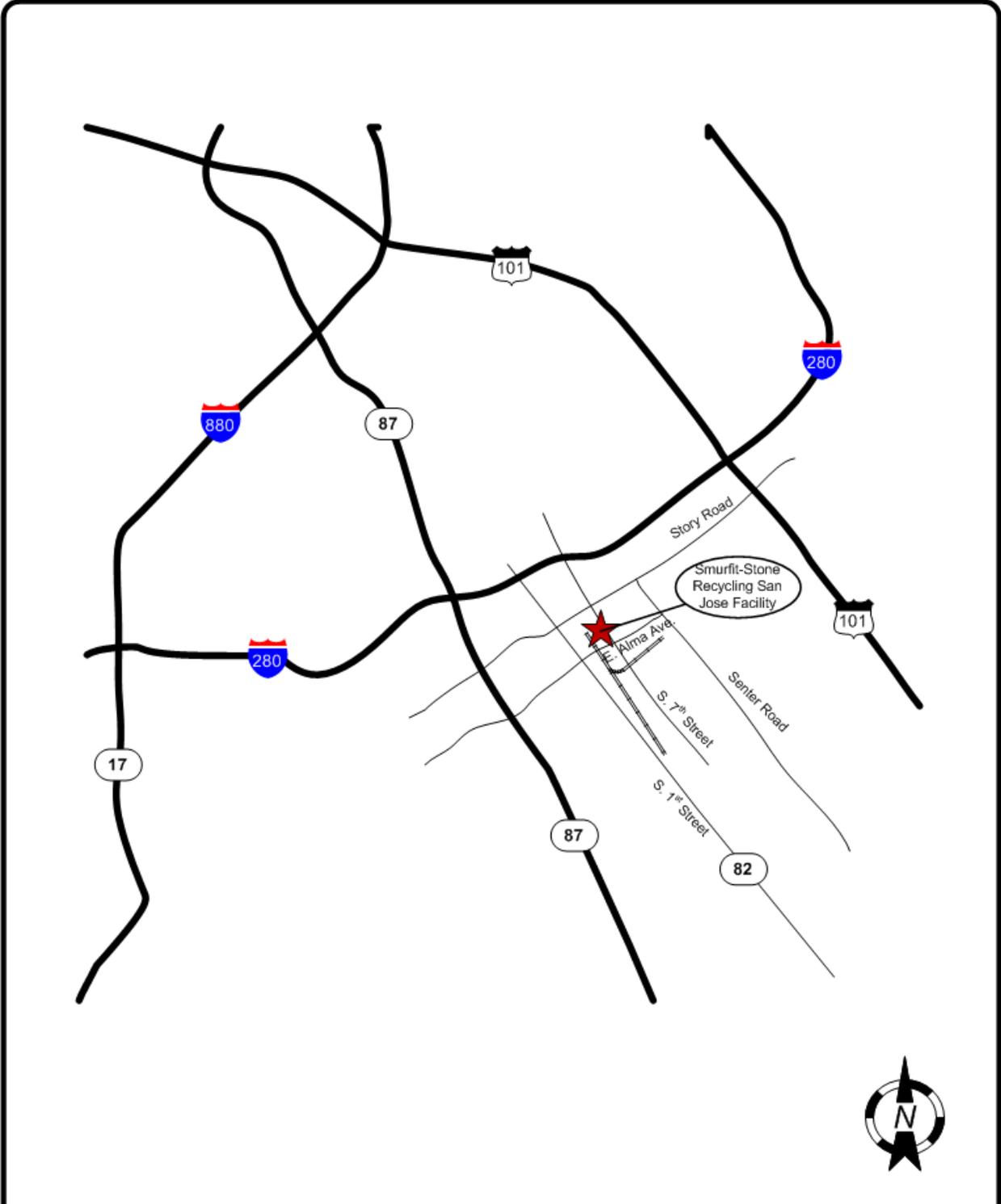
The existing facility recycles less than 5% of the volume received at this time. As new state and local permit entitlements are approved, future operations may increase processing and recycling levels. Their stated goal in the future is to maximize the diversion that may allow up to or in excess of 75% diversion. They are in the early stages with LEA to go to the next “Tier” up and at this time it is uncertain what will be required.

JURISDICTIONS SERVED:

Valley Recycling services the Bay Area and will be looking to expand in the future.

LOCATION:

The facility is located at 1615 B South 7th Street in San Jose. Site Map Attached.



Smurfit-Stone Recycling San Jose Facility Location Map
205 East Alma Avenue, San Jose, CA 95112-5902

**Fact Sheet #28
Smurfit-Stone Recycling San Jose Facility
San Jose, California**

TYPE OF FACILITY:

The Smurfit-Stone Recycling San Jose Facility is a recycling processing and transfer facility receiving commingled and source separated recyclables operated by Smurfit-Stone Recycling and Waste Services. The facility, which is 5.17 acres, began operations in 1982 as a recycling center. This facility is seeking a permit as a solid waste processing and transfer facility in anticipation of incoming recyclables that could be in excess of the state mandated ten percent residual limit. All sorting operations occur within the building. Sorted materials are sent for processing and marketing at other locations. Residual wastes are sent for disposal at permitted landfills. Other activities at this site include: administrative offices and employee parking.

FACILITY CAPACITY:

The Facility's design capacity is 960 tons per day of recyclable commodities including but not limited to cardboard, paper, and beverage containers. Residual solid waste from the operation will be sent on to an authorized facility. Hazardous and other prohibited wastes will be sent to approved recycling, treatment, or disposal facilities.

ESTIMATED DIVERSION:

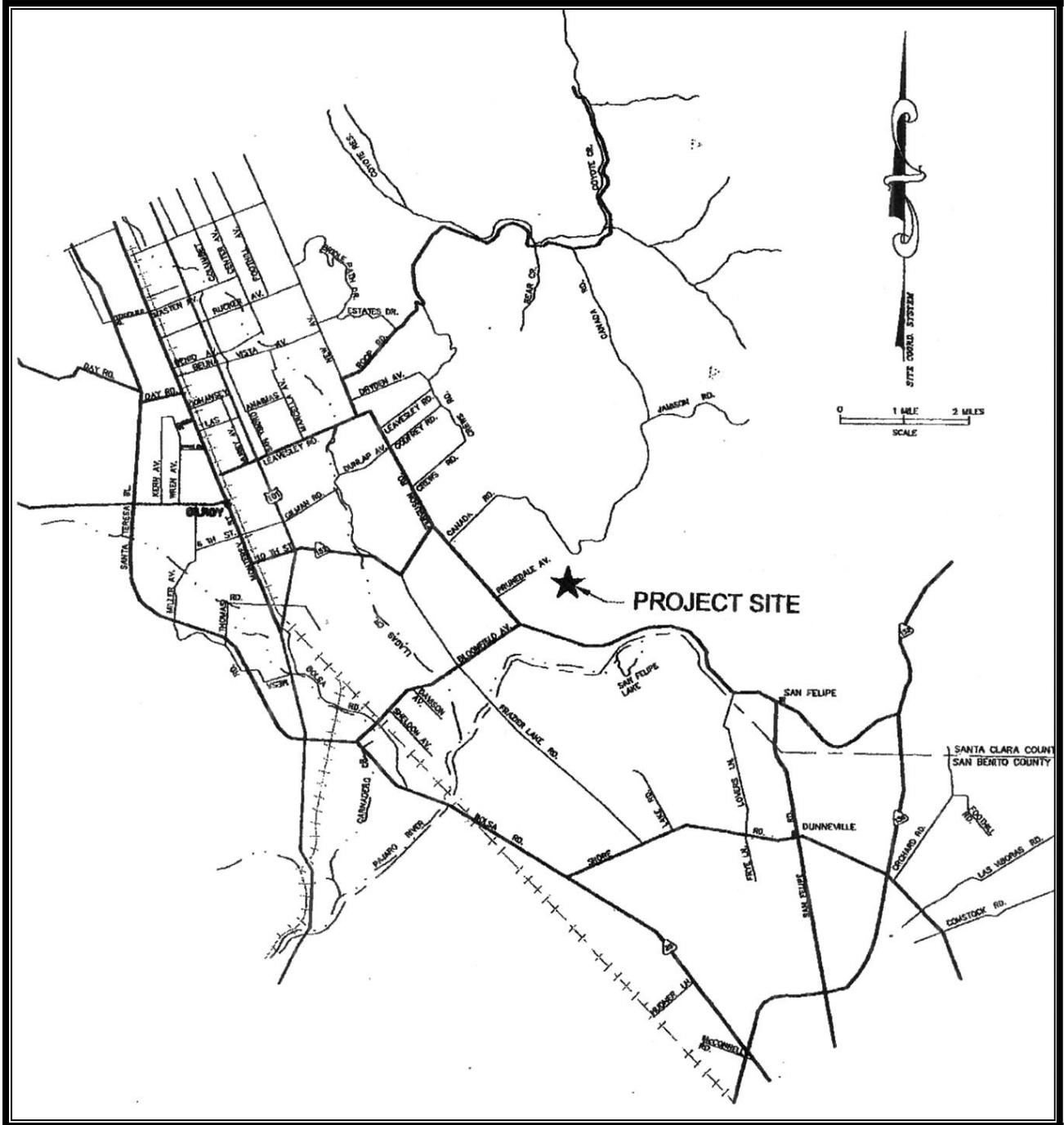
The anticipated diversion rate for the facility will be over 90 percent.

JURISDICTIONS SERVED:

The Facility will serve the City of San Jose and other jurisdictions in Santa Clara County.

LOCATION:

The facility is located at 205 East Alma Avenue in San Jose. Access to the facility is from East Alma Avenue. Site Map Attached.



	<p>Recology Pacheco Pass</p> <p>Construction and Demolition Debris Processing Facility</p> <p>3675 Pacheco Pass Hwy, Gilroy, California</p>
	<p>Site Location Map</p>

Fact Sheet #29
Recology Pacheco Pass Wood Processing Facility
Santa Clara County, California

TYPE OF FACILITY:

The proposed Facility is owned and operated by Recology Pacheco Pass (RPP). The Wood Processing Facility is planned for continued operation at the existing RPP Landfill after final closure of the landfill. After final closure of the landfill, the Facility will operate under a separate Solid Waste Facility Permit, as a Medium Volume Construction Demolition/Inert Debris Processing Facility. The facility was described in the Modification of the Conditional Use Permit by the County of Santa Clara in January of 2011. The facility, which is approximately 2.5 acres, processes a combination of wood and wood-related construction and demolition (C&D) debris accepted from Recology collection vehicles and other commercial haulers. The facility will use the scale, access roads, and supporting infrastructure of the two other facilities that will share other areas of the property, South Valley Organics (composting) and the Pacheco Pass Transfer Station (pending construction). All sorting operations will be completed using loaders and personnel by hand.

FACILITY CAPACITY:

The facility will be permitted to accept a maximum for processing of 175 tons per operating day. The inbound material may be of any combination of green material (stumps and logs), wood and wood-related C&D debris. The storage capacity on the 2.5 acre processing area is approximately 5,000 cubic yards.

ESTIMATED DIVERSION:

The Facility will divert a minimum of 60% of each load of incoming material.. Non-recyclable materials are transferred to a permitted disposal site.

JURISDICTIONS SERVED:

The facility primarily serves the Cities of Gilroy and Morgan Hill, the community of San Martin, and other unincorporated areas of southern Santa Clara County.

LOCATION:

The facility is located at 3675 Pacheco Pass Highway, in the southern portion of unincorporated Santa Clara County. It is within the current permitted boundaries of RPP Landfill but will not be directly over waste. (see attached map).

VALLEY RECYCLING

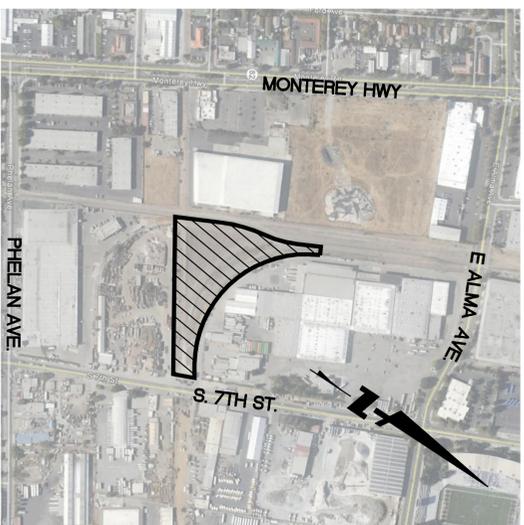
EAST 7TH STREET SPECIAL USE PERMIT DECEMBER 2013

PROJECT TEAM

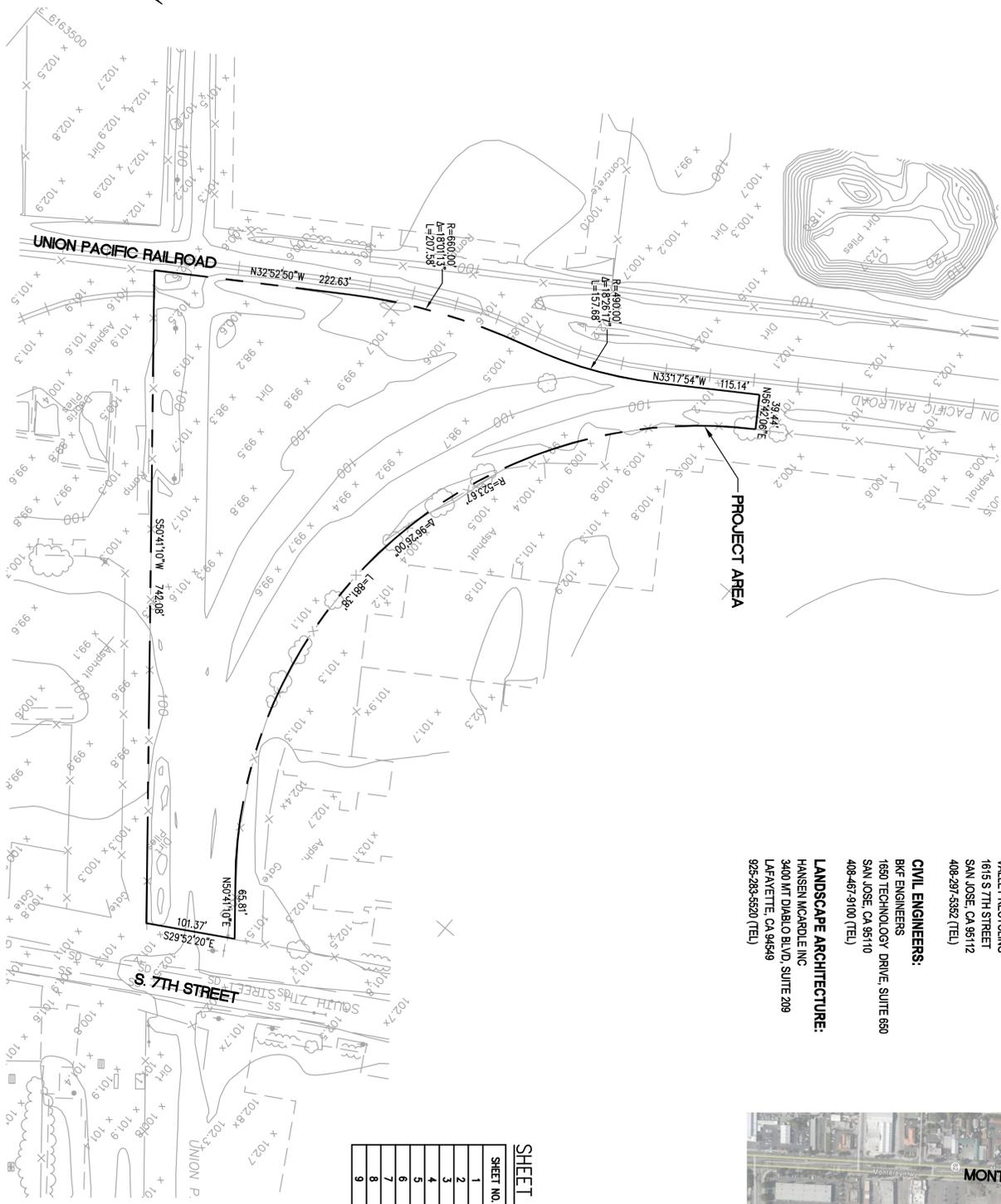
OWNER:
 VALLEY RECYCLING
 1615 S 7TH STREET
 SAN JOSE, CA 95112
 408-297-5382 (TEL)

CIVIL ENGINEERS:
 BKF ENGINEERS
 1650 TECHNOLOGY DRIVE, SUITE 650
 SAN JOSE, CA 95110
 408-487-9100 (TEL)

LANDSCAPE ARCHITECTURE:
 HANSEN MCARDLE INC
 3400 MT DIABLO BLVD, SUITE 209
 LAFAYETTE, CA 94549
 925-283-5520 (TEL)



VICINITY MAP
 NOT TO SCALE



SHEET INDEX

SHEET NO.	SHEET REFERENCE	DESCRIPTION
1	T-1	TITLE SHEET
2	A-1	MODULAR OFFICE ELEVATIONS
3	A-2	FENCE ELEVATIONS AND SECTIONS
4	A-3	LANDSCAPE PLAN
5	L-1	GRADING AND DRAINAGE PLAN
6	C-1	UTILITY PLAN
7	C-2	STORMWATER CONTROL PLAN
8	C-3	STORMWATER CONTROL PLAN
9	C-4	STORMWATER CONTROL PLAN DETAILS

DATE: 12/18/13 SHEET NO.: 01 OF 09 DRAWING NO.: T-1	VALLEY RECYCLING SPECIAL USE PERMIT TITLE SHEET SAN JOSE SANTA CLARA COUNTY CALIFORNIA	BKF ENGINEERS / SURVEYORS / PLANNERS 1850 TECHNOLOGY DRIVE SUITE 250 SAN JOSE, CA 95110 408-482-9100 (TEL) 408-482-9199 (FAX)	DRAWN: FW CHECKED: JW DESIGNED: JW/FW APPROVED:		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="5">REVISIONS</th> </tr> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> <th>APP'VD</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REVISIONS					NO.	DESCRIPTION	BY	DATE	APP'VD															
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NO.	DESCRIPTION	BY	DATE	APP'VD																										

**Fact Sheet #30
Valley Recycling San Jose CDI Processing/Transfer Facility
Santa Clara County, California**

TYPE OF FACILITY:

Medium Volume Direct Construction, Demolition Debris, and Inerts (CDI) Processing/Transfer Facility. Valley Recycling San Jose proposes to develop CDI operations on this property.

FACILITY CAPACITY:

174.9 Tons per day maximum volume of CDI material received, and open 362 days per year (closed Thanksgiving, Christmas, and New Year's)

ESTIMATED DIVERSION:

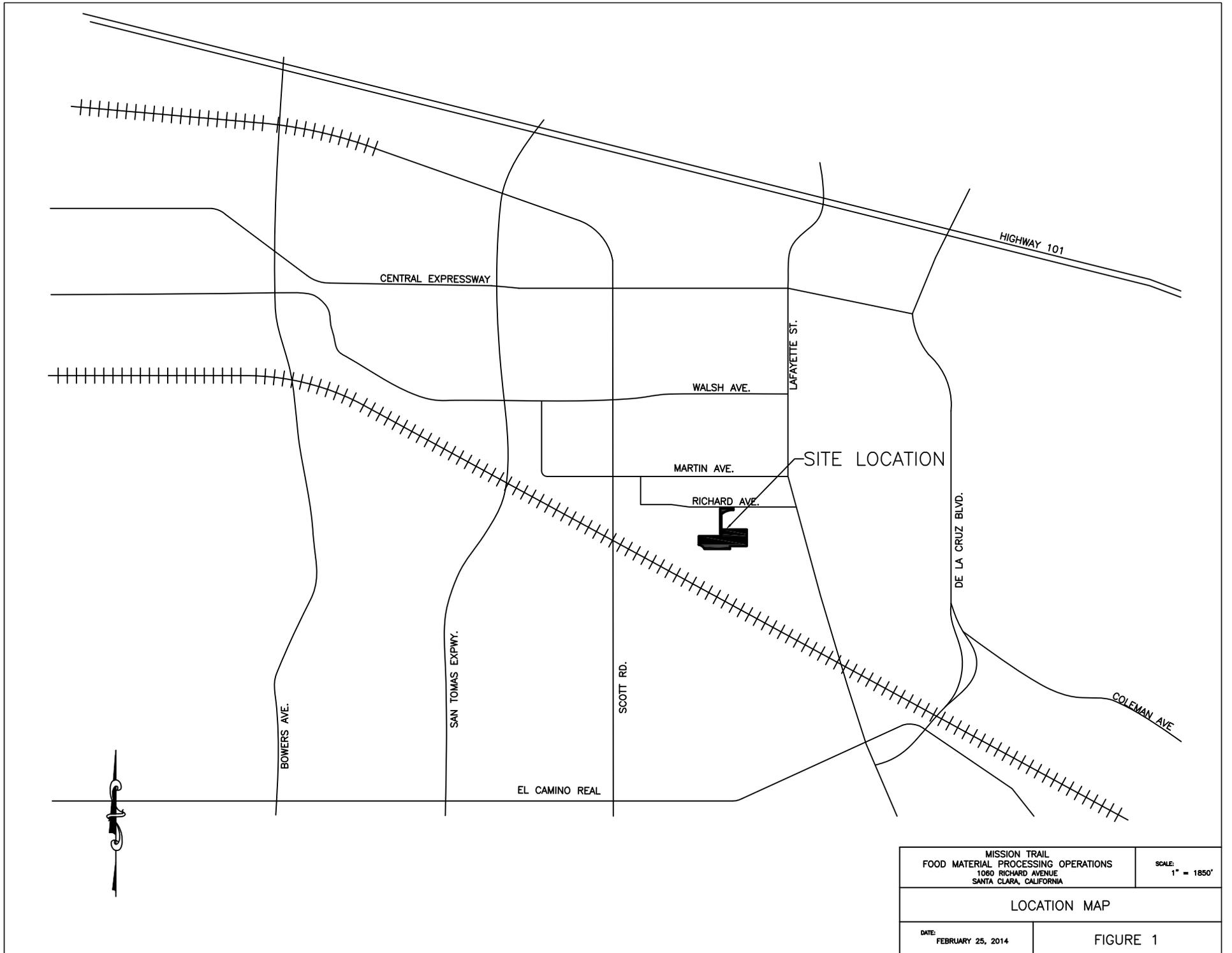
All clean source separated material type received will be segregated and delivered for reuse or recycling. All comingled CDI materials received will be sorted, processed, separated, and delivered to other CDI processing certified facilities, and permitted landfills. Material transferred from facility is anticipated to be delivered to facilities both within and outside of Santa Clara County (majority anticipated to be outside Santa Clara County) for recycling, reuse, processing of materials, and residue disposal. Diversion from landfilling of materials received is estimated to be in excess of 60%.

JURISDICTIONS SERVED:

This facility will be available to serve the City of San Jose, surrounding municipalities, and the unincorporated areas of Santa Clara County.

LOCATION:

The proposed site for this facility will be located on a vacated piece of railroad property adjacent to 1615-B South 7th Street, San Jose, CA 95112. Refer to attached Site Location drawing. (See attached map).



MISSION TRAIL FOOD MATERIAL PROCESSING OPERATIONS 1060 RICHARD AVENUE SANTA CLARA, CALIFORNIA		SCALE: 1" = 1850'
LOCATION MAP		
DATE: FEBRUARY 25, 2014	FIGURE 1	

Fact Sheet #31
Mission Trail Food Materials Transfer/Processing Operations
Santa Clara, California

TYPE OF FACILITY:

The Mission Trail Food Materials Transfer/Processing Operations (FMTPO) is owned and operated by Mission Trail Waste Systems (MT) and is located on approximately 0.9 acres at the existing Mission Trail Transfer Station.

The FMTPO is a transfer/processing facility handling compostable food materials, collected from restaurants and other regional food production operations, that are to be processed and transferred to a permitted facility for use as a compost feedstock, anaerobic digestion feedstock, or in the production of animal feed. The FMTPO uses sealed containers for the collection of food materials, where they are introduced into proprietary equipment for separation from contaminants. The enclosed processing system retains all liquids and food materials in a sealed tank which will be pumped into sealed trailers for transportation, with residual contaminants expelled into covered containers.

The FMTPO will garner additional diversion of food waste materials – in accordance with the Climate Action Plans approved by the City of Santa Clara other jurisdictions, by processing food waste into a usable feedstock commodity for composting, anaerobic digestion, or animal feed, minimizing landfill and transportation emissions and ultimately the size of the facility and community carbon footprints.

FACILITY CAPACITY:

The FMTPO is designed to handle up to 99 tons per day of food materials and approximately 30 vehicle trips per day.

ESTMATED DIVERSION RATE:

Processing and transfer will occur on site at the facility. The anticipated diversion rate at this facility will be 50%.

JURISDICTIONS SERVED:

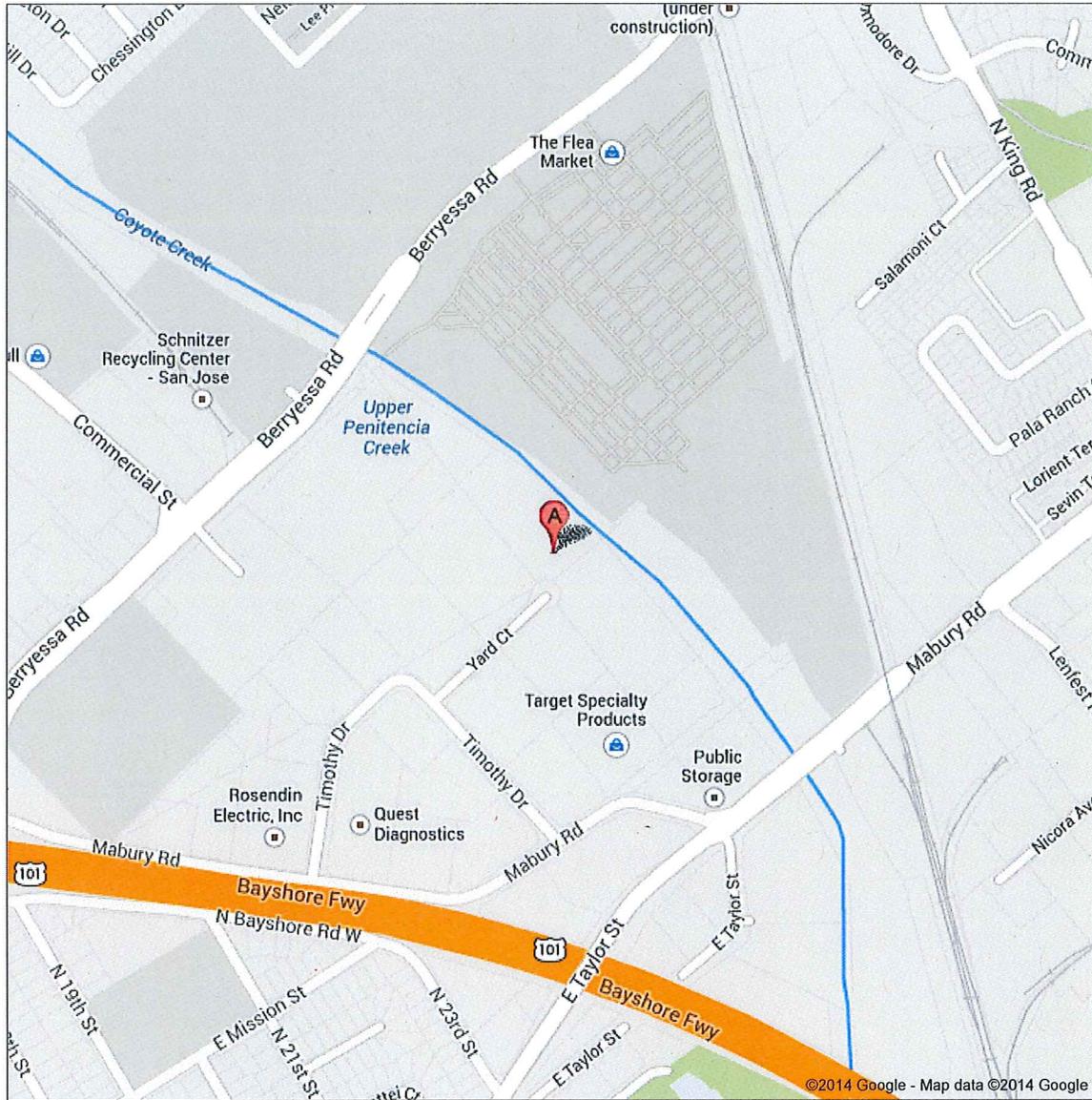
The FMTPO serves primarily the City of Santa Clara and Unincorporated County of Santa Clara, in addition to other regional jurisdictions.

FACILITY LOCATION:

The Facility is located at 1060 Richard Avenue, Santa Clara, CA 95050 (see the attached map).



Address 1255 Yard Ct
San Jose, CA 95133



**Fact Sheet #32
ECO Box Recycling, Inc.
San Jose, California**

TYPE OF FACILITY:

Medium Construction and Demolition/Inert Debris Processing Facilities ($25 \text{ tpd} \leq x < 175 \text{ tpd}$)

ECO Box Recycling San Jose proposes to operate a Registration Tier Permitted CDI Facility on this property.

FACILITY CAPACITY:

75 tons per day maximum volume of CDI material received

ESTIMATED DIVERSION:

All clean source separated material type received will be segregated and delivered for reuse or recycling. All comingled CDI materials received will be sorted, processed, separated, and delivered to other CDI processing certified facilities, and permitted landfills. Material transferred from facility is anticipated to be delivered to facilities both within and outside of Santa Clara County for recycling, reuse, processing of materials, and residue disposal. Diversion from landfilling of materials received is estimated to be in excess of 60%.

JURISDICTIONS SERVED:

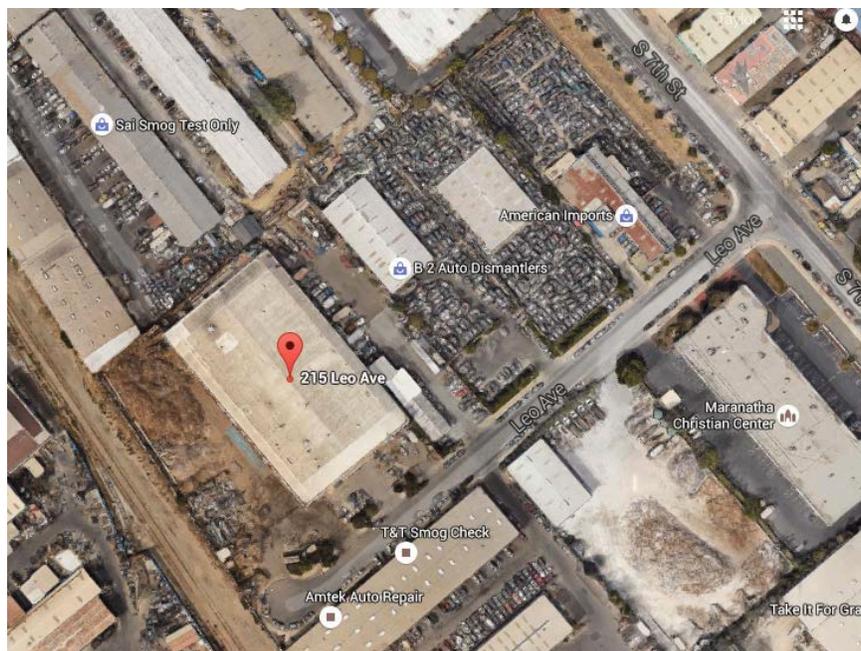
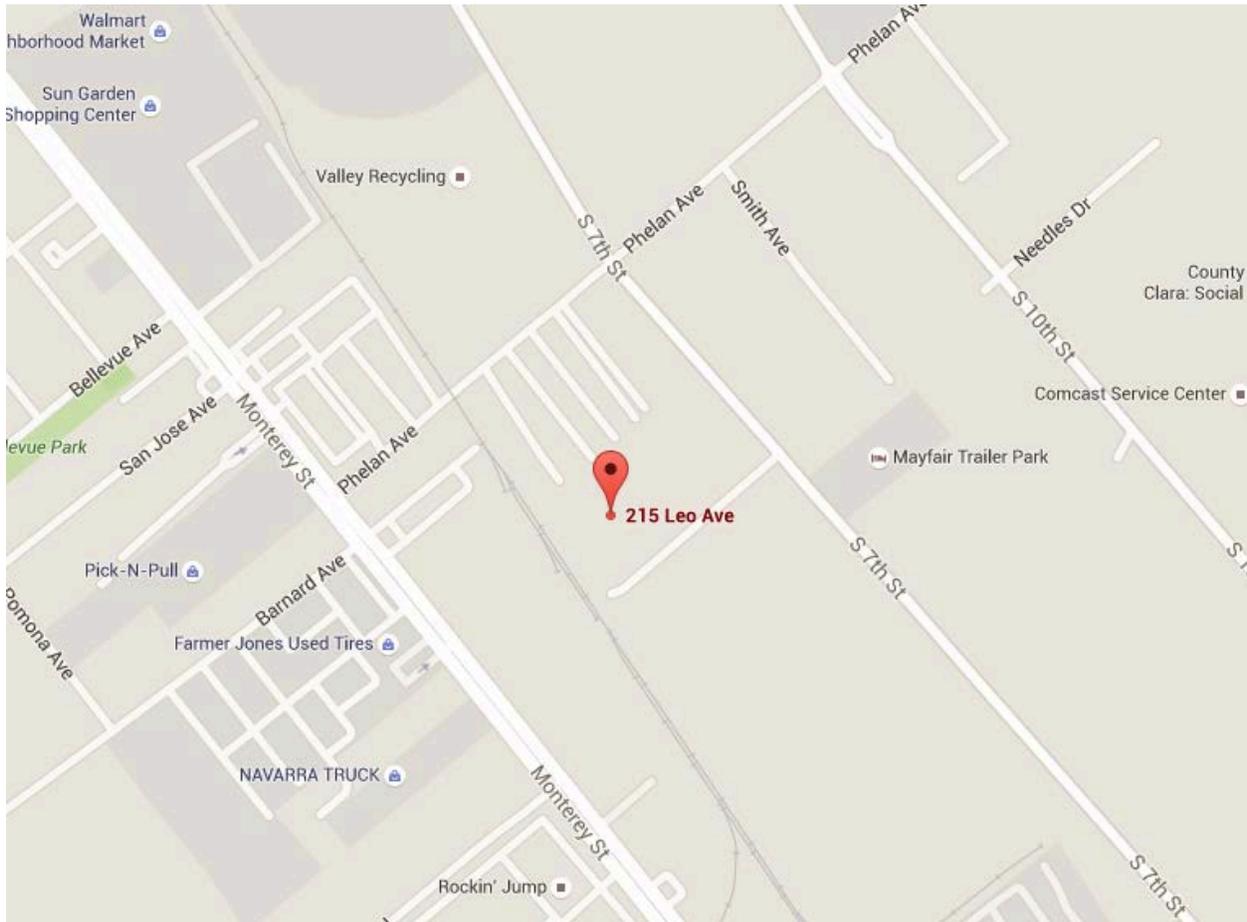
This facility will be available to serve the City of San Jose, surrounding municipalities, and the unincorporated areas of Santa Clara County.

LOCATION:

The proposed site for this facility will be located 1255 Yard Court, San Jose, CA 95133. Refer to attached Site Location (see attached map).

MAP OF LEO RECYCLE

215 Leo Ave
San José, CA



Google
Map data ©2016 Google

Fact Sheet # 33
Leo Recycle
San José, California

TYPE OF FACILITY:

Medium Construction and Demolition/Inert Debris Processing Facilities ($25 \text{ tpd} \leq x < 175 \text{ tpd}$)

Lam Hauling, Inc. (DBA: Leo Recycle) proposes to operate a Registration Tier Permitted CDI Facility on this property. The facility consists of one half (25,000 square feet, designated Suite 10) of the building located at 215 Leo Ave (50,000 square foot building). The second half of the building (Suite 20) is operating independently as a Recycling Center, as defined by CalRecycle. Both Suites have access and utilize the same entrances, exits, parking, roads, and scale.

Leo Recycle accepts Construction & Demolition debris, Inert debris, Green waste. Materials are inspected and weighed prior to receipt. Once accepted, materials are deposited into designated piles and/or sorted, before being transported to their appropriate processing facilities. Residual materials are transported to permitted landfills.

FACILITY CAPACITY:

175 tons per day maximum volume of CDI material received.

ESTIMATED DIVERSION:

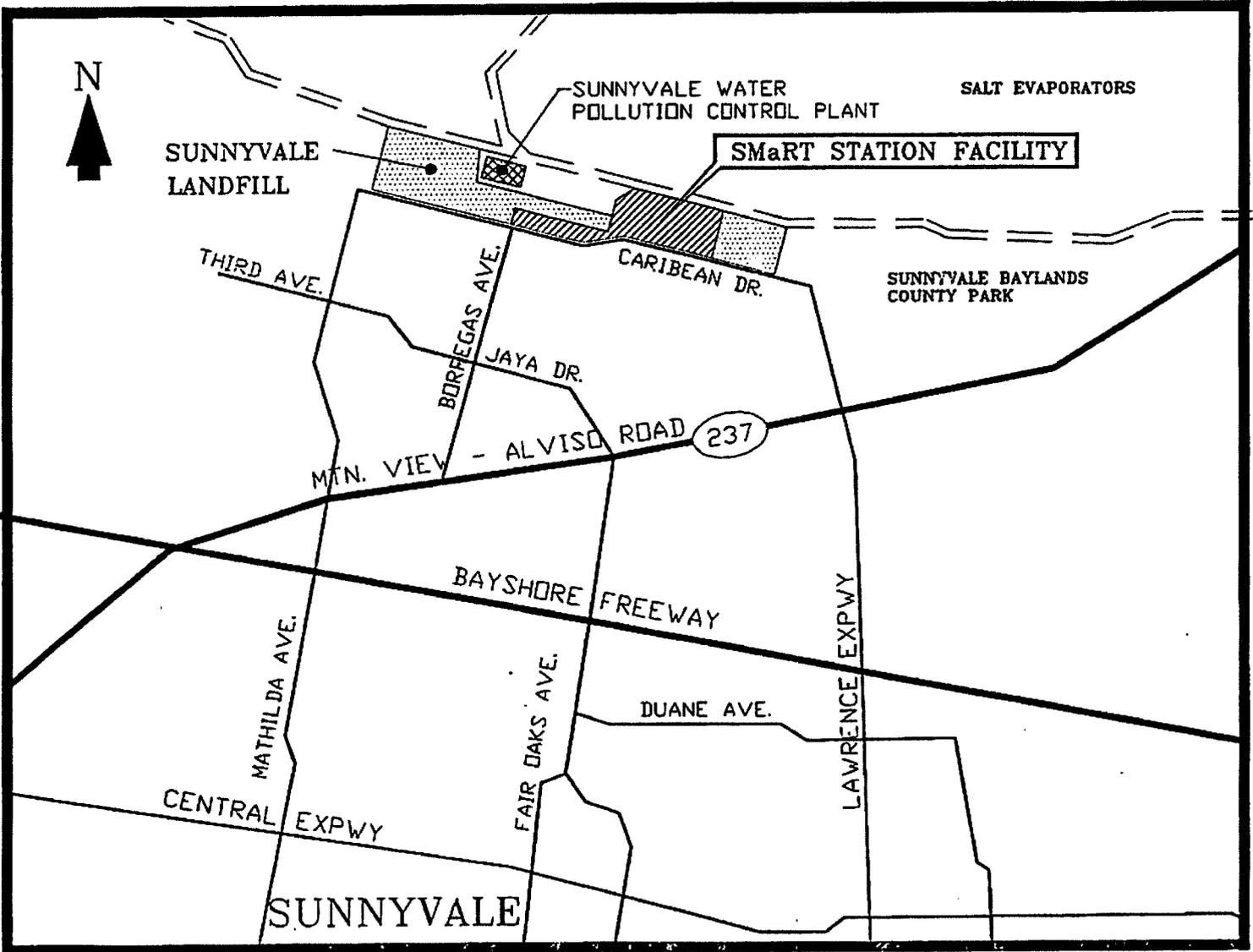
All clean source separated material type received will be segregated and delivered for reuse or recycling. All co-mingled CDI materials received will be sorted, processed, separated, and delivered to other CDI processing certified facilities, and permitted landfills. Material transferred from facility is anticipated to be delivered to facilities both within and outside of Santa Clara County for recycling, reuse, processing of materials, and residue disposal -- including Merced County and Solano County. Diversion from landfilling of materials received is estimated to be in excess of 60%.

JURISDICTIONS SERVED:

This facility will be available to serve the City of San Jose, surrounding municipalities, and the unincorporated areas of Santa Clara County.

LOCATION:

The facility is located 215 Leo Ave, San Jose, CA 95112. It is zoned as Heavy Industrial and conforms to its surrounding urban pattern. See attached map.



LOCATION MAP

DRAWN BY: JA DATE: CHECK'D BY: DATE:	SMaRT STATION FACILITY LOCATION MAP	APPROVED BY: PE NO. _____ DATE: _____
SCALE: NONE	City of Palo Alto	DRAWING NO.

Fact Sheet #34
Sunnyvale Food Materials Transfer/Processing Operations
Santa Clara, California

TYPE OF FACILITY:

The Sunnyvale Food Materials Transfer/Processing Operation (FMTPO) is currently owned and operated by Bay Counties Waste Services and is located on approximately 0.9 acres at the existing Sunnyvale Materials Recovery and Transfer Station (SMaRT Station®).

The Sunnyvale FMTPO is a transfer/processing facility handling food materials source-separated by restaurants, cafeterias, grocery stores and other food facilities, as well as source-separated food materials from the Sunnyvale residential food scraps collection program. Once processed these materials are transferred to other facilities for use as a compost feedstock, anaerobic digestion feedstock, or in the production of animal feed. The FMTPO uses sealed containers for the collection of food materials, where they are introduced into proprietary equipment for separation from contaminants. The enclosed processing system retains all liquids and food materials in a sealed tank which will be pumped into sealed trailers for transportation, with residual contaminants returned to the transfer station tip floor for appropriate disposition.

The Sunnyvale FMTPO will process food materials into a usable feedstock commodity for composting, anaerobic digestion, or animal feed, minimizing landfill and transportation emissions and ultimately the size of the facility and community carbon footprints.

FACILITY CAPACITY:

The FMTPO is designed to handle up to 99 tons per day of food materials and approximately 40 vehicle trips per day.

ESTMATED DIVERSION RATE:

Processing and transfer will occur on site at the facility. The estimated diversion rate at this facility is 70%.

JURISDICTIONS SERVED:

The Sunnyvale FMTPO will initially serve the City of Sunnyvale and may add materials from other regional jurisdictions.

FACILITY LOCATION:

The Facility is located on City of Sunnyvale owned property, northeast of the intersection of Caribbean Drive and Borregas Avenue, at 301 Carl Road, Sunnyvale (see attached map).

County of Santa Clara

Recycling and Waste Reduction Commission of Santa Clara County
 Recycling and Waste Reduction Division

1555 Berger Drive, Building 2, Suite 300
 San Jose, CA 95112-2716
 (408) 282-3180 FAX (408) 280-6479
 www.ReduceWaste.org



RECYCLING AND WASTE REDUCTION COMMISSION MINUTES

June 28, 2017

Board of Supervisors Chambers

70 W. Hedding Street

San Jose CA 95110

Business Meeting at 5:30 p.m.

Voting Members in Attendance

Lan Diep, City of San Jose
 Jim Griffith, City of Sunnyvale
 Susan M. Landry
 Linda J. LeZotte, SCVWD
 Pat Showalter, City of Mountain View
 Cat Tucker, City of Gilroy
 Mike Wasserman, County of Santa Clara

Representing

City of San Jose
 SMaRT Station® Cities
 Member-at-Large
 Santa Clara Valley Water District
 Member-at-Large
 South County Cities
 County of Santa Clara

Voting Members Not in Attendance

Mary-Lynne Bernald, City of Saratoga
 Teresa O'Neill, City of Santa Clara
 Rod Sinks, City of Cupertino

Representing

West Valley Cities
 Central County Cities
 North County Cities

County Staff to the Commission

Bill Grimes, Manager, TAC Administrator
 Lisa Rose, Commission Staff

Others in Attendance

Cheri Donnelly, City of Cupertino
 Tony Eulo, City of Morgan Hill
 Marci Gordon, Silicon Valley Talent Partnership/Joint Venture Silicon Valley
 Karin Hickey, City of Santa Clara
 Matthew Krupp, City of Palo Alto
 Mary Lindemuth, City of Sunnyvale
 Doug Muirhead, Morgan Hill resident
 Alana Rivadeneyra, City of San Jose
 Lori Topley, City of Mountain View
 Jenny Weiss, Silicon Valley Talent Partnership/Joint Venture Silicon Valley

Commissioners: James R. Griffith – Chair, Linda J. LeZotte – Vice-Chair, Mary-Lynne Bernald, Lan Diep, Susan M. Landry, Teresa O'Neill, Pat Showalter, Rod Sinks, Cat Tucker, Mike Wasserman

1. Call to Order and Roll Call

Vice-Chair LeZotte called the meeting to order at 5:38, six commissioners were present and quorum was met. Chair Griffith arrived shortly after the start of the meeting and assumed duties.

2. Special Orders of the Day

Vice-Chair LeZotte welcomed new Commissioner Lan Diep from the City of San Jose.

Chair Griffith presented Commissioner Tucker with a certificate and thanked her for her nine years of service to the Recycling and Waste Reduction Commission.

3. Public Presentations

There were no public presentations.

4. Consent Calendar

Commissioner Wasserman motioned approval of the Consent Calendar; Commissioner Showalter seconded and all voted to approve.

5. Food Rescue Update

Marci Gordon gave a PowerPoint presentation regarding the Food Waste initiative (PowerPoint available at <https://www.sccgov.org/sites/rwr/rwrc/Documents/RWRC%20Meeting%20-%206-28-17.pdf>). Marci noted that Silicon Valley Talent Partnership (SVTP) is in their second year of the contract with the County as the Food Rescue Coordinator. She noted that food rescue is a complex and complicated issue and they have culled together a myriad of research from the Food Shift report, the 2016 ReFed report and many other publications. SVTP has synthesized the data received and is developing a comprehensive action plan. SVTP has engaged Cheryl Kollin from Community Food Rescue in Montgomery County and using their model as it addresses a lot of the recommendations from the Food Shift report and interviews conducted in the community. This is in no way identical because not all elements align. SVTP will adapt the Montgomery County model to fit with Santa Clara County's needs. This plan also honors existing relationships with existing food service organizations such as Second Harvest, Hunger at Home and Martha's Kitchen.

Marci described the key action steps.

- Understanding the Landscape – who are the players, what works, what doesn't and why? SVTP has compiled a comprehensive list of food assistance agencies and organizations and there are over 200 in Santa Clara County.
- Branding and Educational Resources – this may seem premature, but it helps build momentum and capacity so that when initiative launches it will be ready to go.
- Food Safety – this is a critical element in any food donation program. All players (donors, drivers, food organizations) need to understand how to safely donate food.
- Matching Tool – SVTP is already evaluating various tools and working with Second Harvest to ensure it is a real time, seamless tool. They recognize that technology is not the only solution – there are many elements that go into a holistic approach. The human element is one of the most critical components.
- Capacity Building – this involves leveraging underutilized assets, identifying and securing grants, and potentially becoming a grantor for things like refrigerated trucks. SVTP is applying for a CalRecycle grant that is due at end of July. The grant proposal will be for implementation of a transportation system and for providing grants to those who need fixed

assets such as trucks. SVTP would like the support of cities and the County as they move forward on the application.

- Recognition Program – this will be similar to a Yelp seal that can be used in social marketing and on donor’s windows.
- New Donors – SVTP will help existing donors subscribe to the technology platform while adding more donors at the same time.
- Government Policies and Support – SVTP will need support in legislative policies. Some areas of support include prioritizing food donation over composting, removing barriers for food rescue that exist within franchise agreements and supporting legislation that requires large companies to donate surplus food.
- New Models for those left out of current solutions.

Looking at the 2016 ReFed report’s maturity curve, SVTP is on track. They believe changing the culture so that donating excess food becomes as easy as recycling.

In mid-July, SVTP will become fully integrated under the umbrella of Joint Venture Silicon Valley, so future reports will be presented by Joint Venture Silicon Valley.

Commissioner Wasserman asked about pursuing grants and wanted to know the dollar amount that SVTP will be seeking. Marci replied that CalRecycle is a state grant. He also asked about looking for new food donors. He asked if there are more food donors than recipients at this time. Marci said the food need is much greater than the number of food donors. One in four people in Santa Clara County is food insecure and not sure where their next meal is coming from. There is approximately 40% of edible food going to landfill. There is a gap between receiving food from donors and getting it to the people in need. Commissioner Wasserman asked if there is currently enough excess food available to feed those food insecure people. Marci said this is unknown at this time. Commissioner Wasserman would like to know what is needed to fill this gap to better understand the path to solving the problem. He asked that SVTP/JVSV provide that information at a future presentation. Marci noted that some barriers include not having the matching tool in place, the fear of donation, and lack of healthy, nutritional food.

Commissioner Tucker asked what the long term vision is for the project. She also asked if a corporate cafeteria had a food to donate (i.e. meatloaf), who would they call to collect food. Marci said this is where the matching tool comes in. Commissioner Tucker also asked about excess farm food and if that is being considered. Marci said that will also be identified and included in the matching tool. They will start with Farmer’s Markets and grocery stores and build on that. The Food Rescue Coordinator (SVTP/JVSV) will manage the matching tool.

Commissioner Landry thanked Marci for their efforts to date. With regard to grants, she asked if some of that money would go towards helping to put people to work. Marci said that is outside of the scope of what SVTP was charged with doing, but that many of the organizations have expanded services beyond just feeding people. With regard to branding Commissioner Landry noted that recycled water was not a desirable term at the outset and that this initiative should be coined to a term other than food rescue to something more positive that allows recipients more dignity.

Commissioner Showalter asked what tax credits/incentives are available and if they were state or federal credits. Marci replied that there are current tax incentives available and SVTP/JVSV will further explore exactly what those credits are and whether they are state or federal credits or even both. Commissioner Showalter said that the RWRC has been influential in state legislation in the past and this may be an area they can support.

Commissioner Griffith asked about whether those organizations receiving the food are also getting write-offs and tax incentives and if this conflicts with donors also receiving tax incentives.

Commissioner Wasserman asked if SVTP/JVSV is reaching out to cold weather shelters. He also asked, with regard to liability, if it is just the fear of being sued. Marci responded that even though the Bill Emerson Act (Good Samaritan law) has been around for 30 years donors are still reluctant of not only being sued but also the public perception if someone were to get sick from their donated food.

Chair Griffith said that capital costs are a given and asked who will pay for operating costs such as paid staff, gas, etc. for ongoing program. He posited if the costs could be born from donors saving money from not having to pay to landfill that food. SVTP is exploring that along with other avenues. Chair Griffith asked if demonstrated reduced landfill costs can be used to spend solid waste funds on diversion programs in a cost-neutral way to ratepayers.

Commissioner Landry asked if Google were to hold a large event, could they order 1% surplus food and have their vendor donate that food directly to organizations and agencies serving the food insecure.

Commissioner Diep asked if there are competing agencies. Marci said they are all collaborating to make a larger food distribution effort.

Commissioner Showalter said that parking issues for homeless was an issue in Mountain View and they were able to obtain a small liability insurance policy to address that issue.

6. Strategic Planning for the Future (swapped Items 6 and 7)

Chair Griffith noted that when he joined the RWRC the Commission was much more proactive in advocating their priorities and direction. He would like to see the RWRC be more proactive than reactive and sharing best practices among jurisdictions. He asked what we are not doing that we should be doing. He would like a better understanding of what is still going into landfill that should be addressed. It could be construction waste, mattresses, etc.

Commissioner Landry brought up at the last meeting the lack of places to drop off cans and bottles to claim the CRV money. This is a state issue and CalRecycle is working on it. Chair Griffith asked what bills should the RWRC advocate for to move this forward. Bill said the proposed Bottle Bill Reform in the last session did not pass but everyone recognizes the problem and proposals should come up again.

Chair Griffith asked that all the Commissioners be informed of legislation that he is advocating on so that they too can send letters of support/opposition for various bills.

Commissioner Tucker asked about eWaste in South County. She remembered that in the past there was a workplan on which Commissioners provided input.

Commissioner Showalter said there is a lot of building going on and she would like to see what materials are being used and which are being reused for new construction, including what is being mixed with concrete (fly ash). Mandating certain on-site recyclables to be used on site. Also consider Green Building standards that are the same for all cities.

Bill said that C&D makes up about 35% of what goes to landfill and we focus much more on the other 65%. Bill shared that Michael Gross had asked that the RWRC consider supporting third party C&D

certification. This could include a TAC work group that could focus a model ordinance that would require 3rd party C&D certification for disposal sites. Likely to result in more meaningful diversion reporting and ideally, increased diversion.

Commissioner Landry noted that San Jose has a deposit when demolishing a building and the builder must use specific processors and provide proof before they can get their deposit back.

Chair Griffith asked what the current best practices are related to these issues. He asked what else should they the Commission be looking at related to food since we are already addressing food rescue, composting and in many cases, curbside food collection. He asked if the next area of focus be on upstream like source reduction.

Commissioner Wasserman understands limited staff resources in all the cities and County. He wants to be sure that as suggestions are being made, that there are staff available to execute the Commission's vision. He asked for candid feedback from the TAC Chair.

Bill said while he doesn't speak for all of the TAC members, his perception is that TAC welcomes ideas from the Commission and will be realistic about which things TAC can and cannot do. Commissioner Wasserman said perhaps TAC can review and ask RWRC to prioritize based on what resources are available for each project. Chair Griffith reiterated that the workplans from the past were reviewed by TAC and they were good about doing those things they could and letting the Commission know when they were unable to do something.

Tony Eulo pointed out that there have been two additions that came through that RWRC approved via budget recommendations – Food Rescue and Sustainable Materials Management which deals with the circular economy and how to recycle what we can and use more recycled content in new materials. The RWRC approved funding for a study that will help better identify these areas of focus.

Commissioner LeZotte said she supports reviewing the workplan from past and see what's been done and what can be added. She agrees that the Commission has been reactive and wants to get back to being more proactive.

With regard to Tony's comments, Commissioner Landry asked what type of businesses are being considered for Sustainable Materials Management. She noted that in Australia they have a company that makes recycled paper from rice hulls from beer manufacturing, blue jeans and kangaroo waste.

7. Compost Capacity/Organics Diversion Study Update

Bill Grimes said that SCS Consultants are in the process of conducting a Compost Capacity and Organics Diversion Study on behalf of all jurisdictions in the County. Bill said the RWRC recommended to the Board of Supervisors (BOS) money for the study in response to AB 341 to reset recycling goals and to also meet AB 1826 (commercial organics recycling) goals. The report will be packaged into a detailed study related to current compost capacity and future capacity. An RFP was issued, four proposals were received and SCS was awarded the contract. They are far into the study and the preliminary report will come out next month so that staff can complete CalRecycle's annual report and then the final report will come out in middle of August.

8. Announcements and Future Agenda Items

- Amy Brown, Director of Consumer and Environmental Protection Agency has retired. Commissioner Wasserman said he is really going to miss her and that she was really

instrumental in environmental policy and in assuring that the County will have a new animal shelter. He noted that Amy was able to take on anything and was always professional and dedicated to the work she did. Bill noted that one doesn't easily change one's career after 22 years and knowing of Amy's leadership helped encourage him to make that move.

- Chair Griffith reported that Sunnyvale just started food waste collection using a split cart. While the pilot collection was very positive the Citywide reaction has been less so but staff is working to help residents assimilate.
- Commissioner LeZotte Jim Fiedler leaving Water District after 33 years. He's been a great leader in the recycled water movement.
- Lisa Rose noted that Commissioner Bernald worked with Cole Smith to bring a composting workshop to the City of Saratoga this August. All are welcome to attend this West Valley workshop.

9. Adjournment

The meeting was adjourned at 7:01 p.m.

<p>Consent Calendar – Items will be considered under Item No. 4. Items removed from the consent calendar will be considered at the end of the regular agenda.</p>
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10. Approval of Minutes from February 22, 2017 RWRC Meeting*

11. Review approved TAC Minutes from February and March 2017 meetings

County of Santa Clara

Recycling and Waste Reduction Commission of Santa Clara County
Recycling and Waste Reduction Division

1555 Berger Drive, Suite 300
San Jose, California 95112
(408) 282-3180 FAX (408) 280-6479 www.ReduceWaste.org



TECHNICAL ADVISORY COMMITTEE MEETING MINUTES
May 11, 2017

VOTING MEMBERS IN ATTENDANCE

ACTERRA	Maija McDonald
CALIFORNIA PRODUCT STEWARDSHIP COUNCIL	Rob D'Arcy
CITY OF CUPERTINO	Alex Wykoff
CITY OF GILROY	Tony Eulo
CITY OF LOS ALTOS	Chris Lamm
CITY OF MORGAN HILL	Tony Eulo
CITY OF MOUNTAIN VIEW	Lori Topley
CITY OF PALO ALTO	Wendy Hediger
CITY OF SAN JOSE	Alana Rivadeneyra
CITY OF SANTA CLARA	Karin Hickey
CITY OF SUNNYVALE	Mark Bowers
CLARA MATEO	Julie Muir
CLEAN WATER FUND	Samantha Sommer
COUNTY ENVIRONMENTAL HEALTH	Stan Chau
COUNTY RECYCLING AND WASTE REDUCTION	Bill Grimes
COUNTY UNINCORPORATED AREA	Wendy Fong
SAN JOSE STATE UNIVERSITY	Bruce Olszewski
SANTA CLARA VALLEY WATER DISTRICT	Karen Koppett
SIERRA CLUB	Heidi Melander
SILICON VALLEY LEADERSHIP GROUP	Lou Ramondetta
WEST VALLEY CITIES	Marva Sheehan

Commissioners: James R. Griffith – Chair, Linda J. LeZotte – Vice-Chair, Mary-Lynne Bernald, Lan Diep, Susan M. Landry, Teresa O'Neill, Pat Showalter, Rod Sinks, Cat Tucker, Mike Wasserman

VOTING MEMBERS NOT IN ATTENDANCE

CITY OF MILPITAS

TOWN OF LOS ALTOS HILLS

OTHERS IN ATTENDANCE

Brad Angell	SCC Office of Sustainability
Vishakha Atre	Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP)
Andrew Becerra	City of San Jose
Amory Brandt	City of San Jose
Larry Carr	Joint Venture Silicon Valley (JVSV)
Clifton Chew	SCC RWRD
Karen Gissibl	City of Sunnyvale
Marci Gordon	Silicon Valley Talent Partnership (SVTP)
Shikha Gupta	City of San Jose
Alan Ha	California Resource Recovery Association (CRRA)
Brock Hill	Premier Recycle Company
Elizabeth Huerta	GreenWaste
Lina Prada-Baez	City of Santa Clara
Alyssa Rice-Wilson	San Jose Conservation Corps
Lisa Rose	SCC RWRD
Amisha Shah	City of San Jose
Amandeep Saini	SJSU Student
Dave Staub	City of Santa Clara
Ursula Syrova	City of Cupertino
Jenny Weiss	SVTP
Jaime Wiltz	City of Santa Clara

1. Call to Order

Lori Topley, Chair, called the meeting to order at 1:33 p.m. A quorum of 24 was present. Those present introduced themselves.

2. Approval of Minutes

Bruce Olszewski made a motion to approve the minutes for March 9, 2017 minutes. The motion was seconded by Tony Eulo and all present voted to approve the minutes. Those not present at the March 9, 2017 TAC meeting abstained.

3. Public Presentations

There were no public presentations.

4. Eco Garden

Karen Koppett gave a preview of the Squarespace website showing the pros and cons of the website versus the current Garden Soft website.

The pros include: cost of Squarespace is \$144/year (slightly more on a month-to-month basis) compared to Garden Soft \$5K/year; significant content changes would add additional and potentially unknown costs with Garden Soft website while Squarespace changes would be handled by Karen directly; Squarespace is optimized for mobile devices and Garden Soft is not and would cost about \$10K to optimize for mobile devices; links to California Native Plant Society; Events calendar is easier to use and navigate on Squarespace; videos can be easily added.

The cons include: using Squarespace would link to the plant list hosted by the San Jose Water Company rather than it being provided within the software as is currently the case with Garden Soft.

Karen has volunteered to upload/update Squarespace to mirror current Eco-Gardens site. All materials that were created by City of San Jose and other cities can be retained. BayAreaEco-Gardens.org is not available to retain but BayAreaEco-Gardens.com is available or consider other names.

A question was raised as to how long the current website is contracted with Garden Soft. The next license fee is due in September.

Lori Topley reiterated that there is still discussion as to whether Eco-Garden will continue as a subcommittee or become a separate program.

Vishakha Atre said SCVURPPP asked TAC to take a step back and evaluate what the overall goal is for the website. They would like to see the various types of gardens remain on the website and not just available through a provided link.

Tony Eulo acknowledged SCVURPPP's concerns but noted that one of the major TAC goals for the website was adding training videos on how to compost. The current Garden Soft website does not have videos and would cost additional funds to add them. He recommended that a discussion occur between SCVURPPP and TAC members to determine next best steps.

Tony Eulo made a motion to endorse the transition to a website that more fully envelops composting message while addressing SCVURPPP's needs. The motion was seconded by Wendy Hediger and all present voted to approve the motion.

5. Food Rescue Quarterly Update

Marci Gordon gave a PowerPoint presentation on Food Rescue.

Samantha Sommer asked about packaging of food delivery and if donors would receive decals. She wondered about details, i.e. would they get a decal for one donation or for being in the system? She also noted that with ReThink Disposable coming online in the County that they work together and include food packaging as well.

A question was asked about incorporating into franchise agreements but this has yet to be developed.

Another question was asked about paid food delivery drivers and that is currently being explored.

6. Biomass Update

Michael Gross was unable to attend and had asked Mark Bowers to provide the update. Mark said he will include the information in the Legislative Update.

7. RWRC Update

Lisa Rose said there was no meeting in April. The next meeting is June 28. Topics will include Food Rescue and Legislative Update. TAC members also suggested the following topics – update on Compost Capacity/Organics Diversion Study.

8. Division Manager's Report and Updates on Countywide Programs

A. Disposal Reporting System – report in packet.

B. Other - Bill Grimes thanked all the partners for all the hard work they have done over the past six weeks during Earth month. Rob will give update on pharmaceuticals.

9. Program Updates

A. Green Business – Report in packet.

B. Composting Education – report in packet. Cole announced that he has a part time employee to sell bins at workshops and that they are averaging 21 people at workshops. He has scheduled a workshop in the West Valley Cities at the request of Commissioner Bernald.

C. Recycling Hotline – report in packet. Enabled website to upload data and now also has image search.

10. Subcommittee Reports and Updates on Countywide Programs

A. Eco-Gardens – heard earlier but hats off to Lina Prada-Baez for the social media work and posters are going out to nurseries, libraries, etc.

B. Enforcement – Did not meet. Bill Grimes noted that Stan Chau would be retiring tomorrow (May 12).

C. Household Hazardous Waste – Alex Wykoff said they did not meet this week. Previously they reviewed the outreach campaign and will be moving forward with it. In-stadium and out-of-stadium campaign brand for Earthquakes is being developed now for the fall. Development for the Sharks will be later in the fall for the spring season. Treated wood was discussed and where it can be taken – CDR students are routinely updating locations that will accept this material. The mid-year report was a brief overview with preliminary data but trending normal.

Rob D'Arcy said the County has a conditionally approved plan for MED-Project (Stewardship Plan operator). The plan includes regulation and an amended ordinance. The drug take back day on April 28 netted 74K pounds collected in California. Seven cities' police departments participated in Santa Clara County.

There are 15 independent pharmacy drop off locations throughout the County that supplement many more at health care and law enforcement locations – for just those 15 pharmacies, 28 pick-ups in the first three months at a cost of \$13k. In April, collection included 12 pick-ups and that cost was \$5400; so about \$60k annually. City managers may have received a letter regarding the transition from the County to MED-Project as the operator. Cities will need to coordinate and facilitate the transition of pharmacies in your jurisdiction. The first MED-Project plan was rejected and the second was conditionally approved. Conditions include that they understand the convenience standard – one for every 20,000 residents and transition all locations to MED-Project administration. Some collections are currently taking place that will need to be evaluated to be fully compliant with all applicable laws and regulations. Rob is currently working with MED-Project to determine where they can and cannot collect. To become a collector there need to be changes on the host location DEA registry application. The vendor, Stericycle, has strict rules and guidelines including utilizing a common carrier model. Briefly, the common carrier model is that consumers first drop meds into bins. On a regular cycle or when the bin has reached capacity, two pharmacists open the bin, Stericycle closes and seals the bag and then seals the box affixing a pre-paid, pre-addressed shipping label with tracking. The pharmacy then stores box in safe, secure holding place until it can be collected by UPS. MED-Project continues to identify and recruit appropriate locations. Most larger chain stores have refused to participate thus far – we need this to change. Cities may be able to mandate this through ordinances. All pharmacies should be collection points. Independent pharmacies have been great partners.

First take back event by August 20. Mail-back services can also be provided to residents by the MED-Project. The conditionally approved plan requires two mail-back services in place of a dedicated collection kiosk. The plan had no public education component so we are now requiring detailed marketing plans and reach/impression metrics. If you go to any nationwide sites, consumers are still told to put meds in coffee grounds or kitty litter. In the conditions for the approved plan, this information must come down and sites can only direct that meds be taken to a drop off location.

There is a pending referral to develop a sharps ordinance that would include the requirement that health care facilities participate.

HHW cannot accept medications – law enforcement must take back. MED-Project pays for law enforcement, bins, technicians who tie bags and collect, etc.

Rob is going to provide names of TAC City Reps to MED-Project as the contact. Let him know by end of the week if it should be someone else.

D. Legislation

Mark Bowers noted the very first RAFT was in Sunnyvale where the City provided \$9k in funding.

Mark Bowers went over the following legislation:

- AB 920 – biomass bill – amended and changed language significantly. Energy law is complicated. 20% set aside for biomass is facing a lot of opposition. Would be required for all public utilities. Wood waste needs to go somewhere and goes to these biomass plants. If they can't get take material to a biomass facility then the Central Valley farmers will have few options but to burn it, raising significant air quality concerns.
- SB 168 - Bottle bill – redemption. Senator Bob Wicowski wants to redo bill completely. The danger in that is that many cities are used to getting revenue from curbside programs and that helps subsidize collection rates. Millions of dollars are at stake since haulers are getting this money. If this revenue goes away, rates could go way up. League of Cities may be unaware of this and should be informed.

- SB 705 – strategic situation – banning EPS food containers unless designated as recyclable by a local government. Mark Murray explained the bad boy is eps. Now bill changed to just ban eps altogether. This leaves other plastic take out containers still on the table. In senate appropriations.

William DuBois, farmer in El Centro passed away at 100 – he was a big supporter of recycling having observed that cattle will eat anything and would routinely eat litter. Became a lifelong passion to him and an article was passed around that highlighted his life accomplishments in this field and others.

- E. Public Education – Karin Hickey noted the Save The Food social media campaign is up and running – staff will send out the calendar of posts to all the cities; images are in the cloud and can be accessed easily. Karin then asked if there were any questions about the draft RFP and Scope of Services for the Public Outreach campaign. Alana had some comments – suggested the title should be changed to recycling and source reduction and remove the word waste reduction. Second question was around target audience – market research – do not have consultant spend time/money; third – attachment B – related to the most common items recycled.

It was noted this is just a call to get a design firm – we can still tweak once we have someone in place and direct them to spend various amounts of the contract amount on different activities. The goal is to figure out how to come up with messages that will resonate with the greatest number of people.

- F. Source Reduction and Recycling – Lina Prada-Baez said Food Rescue presented at the meeting (similar to today's presentation) and the SRR began discussion about providing direction to Cole on the Composting Education Program.

11. IC Update

Lori Topley said there was no IC meeting this month.

12. Items for Future Agenda/ Guest Speakers

Hold to next meeting; June meeting is joint meeting with Alameda County on June 1. There will be no regular TAC meeting. Their topics overlap with most of ours – need further refinement. Illegal dumping, homeless encampments, 3rd party certification for C&D, organics will likely be three topics.

13. Informational Updates and Announcements

Tony Eulo said Stan Chau messaged him to say goodbye to everyone.

Mark Bowers said CAW annual event is September 6 in Sacramento.

Lou Ramondetta said his company just became a certified B Corp.

Brock Hill said that with the new Trump budget, they are classifying biomass as carbon neutral.

Alan Ha said May 31 is the last day for early registration for CRRA Conference.

Wendy Fong emailed out agreements today to most cities.

14. Adjournment

The meeting adjourned at 3:41 p.m.

THE NEXT SCHEDULED TAC MEETING: June 1, 2017

*Joint TAC Meeting with Alameda County

County of Santa Clara

Recycling and Waste Reduction Commission of Santa Clara County
Recycling and Waste Reduction Division

1555 Berger Drive, Suite 300
San Jose, California 95112
(408) 282-3180 FAX (408) 280-6479 www.ReduceWaste.org



TECHNICAL ADVISORY COMMITTEE MEETING MINUTES July 13, 2017

VOTING MEMBERS IN ATTENDANCE

ACTERRA	Maija McDonald
CITY OF CUPERTINO	Cheri Donnelly
CITY OF GILROY	Tony Eulo
CITY OF MORGAN HILL	Tony Eulo
CITY OF MOUNTAIN VIEW	Lori Topley
CITY OF PALO ALTO	Wendy Hediger
CITY OF SAN JOSE	Alana Rivadeneyra
CITY OF SANTA CLARA	Karin Hickey
CITY OF SUNNYVALE	Mark Bowers
CLARA MATEO	Michael Gross
CLEAN WATER FUND	Samantha Sommer
COUNTY RECYCLING AND WASTE REDUCTION	Bill Grimes
COUNTY UNINCORPORATED AREA	Wendy Fong
SANTA CLARA VALLEY WATER DISTRICT	Karen Koppett
SIERRA CLUB	Heidi Melander
WEST VALLEY CITIES	Scott Holt

Commissioners: James R. Griffith – Chair, Linda J. LeZotte – Vice-Chair, Mary-Lynne Bernald, Lan Diep, Susan M. Landry, Teresa O'Neill, Pat Showalter, Rod Sinks, Cat Tucker, Mike Wasserman

VOTING MEMBERS NOT IN ATTENDANCE

CALIFORNIA PRODUCT STEWARDSHIP COUNCIL
 CITY OF LOS ALTOS
 CITY OF MILPITAS
 COUNTY ENVIRONMENTAL HEALTH
 SAN JOSE STATE UNIVERSITY
 SILICON VALLEY LEADERSHIP GROUP
 TOWN OF LOS ALTOS HILLS

OTHERS IN ATTENDANCE

Ekpa Akpan	City of San Jose
Clifton Chew	SCC RWRD
Tammy Green	SCC RWRD
Richard Gertman	ForSustainabilityToo
Elizabeth Huerta	GreenWaste
Lisa Rose	SCC RWRD
Dave Staub	City of Santa Clara
Alex Wykoff	City of Cupertino

1. Call to Order

Lori Topley, Chair, called the meeting to order at 1:33 p.m. A quorum of 17 was present. Those present introduced themselves.

2. Approval of Minutes

Tony Eulo made a motion to approve the minutes for May 11, 2017 minutes. The motion was seconded by Karin Hickey and all present voted to approve the minutes. Those not present at the May 11, 2017 TAC meeting abstained.

3. Public Presentations

There were no public presentations.

4. ReThink Disposable

Lori Topley reminded TAC members that ReThink Disposable was a Countywide program that was funded for two years. Samantha Sommer gave a PowerPoint presentation.

Samantha said the goal is to get 30-45 food service establishments and 3-5 institutions (school, senior center, government facilities, etc.) to participate in the ReThink Disposable project. She would like to have recommendations for good candidates from city staff. It is anticipated that city staff time would be approximately 2-3 hours per month depending on a jurisdiction's level of interest/engagement. The preference would be for someone who is already interfacing with businesses that could promote ReThink Disposable in the course of regular duties. Samantha also noted that the ideal candidate is the smaller, independent, locally-owned business as it can take longer to work with chain restaurants as you need to go through corporate offices.

There will be 30 businesses that will receive \$300 mini-grants to help defray costs of switching to durables or installing a dishwasher.

The ReThink website shows locations of participating businesses and visitors can view details of each one when selected/clicked.

A question was raised about the difference between years one and two. Samantha said it should look the same each year as the number of participating businesses requires a lot of front end work. It may take 10 business touches to get three interested but only have one participate.

Lori Topley indicated that TAC does not have time to go into detail about the program at each meeting and that this project be referred to a subcommittee. Logically it would go to the Source Reduction and Recycling (SRR) subcommittee but it already has a few items to report back and could possibly be an ad hoc subcommittee. This will need to be determined at a future meeting. If anyone has any ideas, please contact Lori Topley, Clif Chew or Lisa Rose.

5. RWRC Strategic Planning

Lori Topley said at the last RWRC meeting Commissioner Griffith wanted to get back to some strategic planning. He would like to have a brainstorming session with the other commissioners about developing a plan and how they would do it.

Lori noted that beginning in 2009 the Commission developed a list of items they wanted TAC to develop. This process changed in 2015 with the adoption of MOA and the RWRC was provided a workplan from the Implementation Committee that outlined projects and their related costs. Lori suggested the IC agendaize this item and bring some sort of strategic planning document/memo to the RWRC for their October or December meeting. It should be developed when working on the budget.

Mark Bowers noted that Commissioner Griffith is from Sunnyvale and is likely used to getting a two paragraph summary of the issue along with a rough cost estimate.

It was suggested that Commissioner Griffith recalled the past where the RWRC was most active in recent history. They were very engaged in Countywide issues such as single-use carryout bags and foam container bans. It might be good to look for topics that are beyond the normal interest of TAC members and reach out to a wider audience.

6. Sustainable Materials Management

Lori Topley said this was an IC item in which \$50K/year was allocated for the next two years. The project has no clear definition of where to go with it. This was discussed at TAC in March and she projected the topics that were discussed at that time. She was inclined to have a discussion at TAC to develop the focus and then refer it to SRR or an ad hoc subcommittee.

It was suggested that we dedicate this topic to an entire TAC meeting and invite people who don't normally attend TAC meetings and ask them to bring forward ideas and areas of focus. She felt that August might be too soon for the meeting so targeting September would be better. Staff will need to put together a packet of information to be sent out in advance to get people interested.

7. Recycling and Waste Reduction Commission (RWRC) Update

Lisa Rose said the RWRC met on June 28 and talked about the strategic plan that Lori had already discussed earlier. She said the Food Rescue group made a presentation and the Commissioners were very engaged. They asked if there were any policy decisions that could be promoted through the Cities. The Food Rescue group announced they are going after a CalRecycle grant and requesting cities provide letters of support. A template will be distributed to TAC members. The grant application is due Tuesday, July 18.

The Commission said goodbye to outgoing Commissioner Tucker and presented her with a certificate. The Cities Association will be appointing another South County representative in August.

8. Division Manager's Report and Updates on Countywide Programs

- A. Disposal Reporting System – available online but TAC members requested that if there are problems related to specific haulers/facilities/jurisdictions, they should be brought to TAC. Bill Grimes noted that only one facility was not reporting/paying and he is working with County Counsel to remedy the situation.
- B. Other – Bill Grimes noted that the Compost Capacity Study is still under way but that we should get a preliminary report for jurisdictions this month. Thus jurisdictions can complete their report to CalRecycle. The full report should be completed in August. The contract currently only allows for a single presentation but he is looking to see if there is funding to get a second presentation (one for TAC and one for RWRC). Bill also announced Amy Brown's retirement (Agency Director) and well as Rob D'Arcy's re-retirement.

9. Program Updates

- A. Green Business – Report in packet. Lisa Rose announced Green Business Recognition Event is September 28 and will be celebrating 83 businesses in the courtyard at 1555 Berger Drive.
- B. Composting Education – no report.
- C. Recycling Hotline – no report.

10. Subcommittee Reports and Updates on Countywide Programs

- A. Eco-Gardens – Karen Koppett said at the last TAC meeting she discussed possibly transitioning from the old website to a new website that is less expensive, easier to update and is also optimized for mobile devices. TAC supported the move and she then went to SCVURPPP for their input. SCVURPPP was also in support of transitioning the website so the group is now moving forward with the transition. The one issue is the current company that manages the website is reluctant to give up the URL. One jurisdiction is checking with counsel to see who has the legal right to the URL. If anyone has any input for the new website please let a subcommittee member know.

- B. Enforcement – Bill Grimes said DEH is working on a letter for designating TAC representation.
- C. Household Hazardous Waste – Alex Wykoff said there was a special meeting at the end of May: they reviewed the outreach campaign; selected some text language for the 15 second Comcast video that will be available online; the item is moving to editing and filming with a rollout next week; the group selected three static ads that will be produced and released in late September. He wanted to thank all the cities for their support.

Alex also noted that Bill Grimes said the HHW management contract was approved by the Board of Supervisors. The contract was awarded to the current provider, Stericycle, for one year with up to four one-one extensions.

Alex said Bill Grimes reported that the pharmaceutical collection costs are tracking where they should be at about \$6,000/month. There will be more cost savings once MedProject takes over.

D. Legislation

Mark Bowers said he just got off the Local Task Force (LTF) call.

Mark Bowers went over the following legislation:

- AB 1158 – carpet bill – will finally be approved and go to the governor this year to fix the problems with carpet recycling. Southern California jurisdictions were upset that they are unable to get credit for burning material that is too dirty to recycle.
 - AB 1132 – LTF position switch – air districts were going to be given power to issue abatement orders in case of imminent hazards to health and safety from odors and so forth. There was concern that they might use those power when it is not an actual health and safety issue. It is now support if amended from oppose if amended.
 - AB 332 – gives local jurisdictions the ability to close streets and highways from illegal dumping – has been signed by Governor.
 - AB 444 and SB 212– pharmaceutical bills - both are spot bills and have not been fleshed out and expect to re-emerge in January.
 - Discussion with Nick Lapis, Californians Against Waste (CAW), on topics like more funding for CalRecycle by increasing tipping fees and generator fees on residents and businesses. It is challenging asking private industry to take on role typically played by government. Will need 2/3 vote.
 - AB 398 and AB 617 – Cap and Trade bill currently in Senate Environmental Quality and was just passed with 2/3 vote and will now go to Senate Floor.
 - Bottle bill had no short term fixes; SB 458 plays with convenience zone concept.
 - AB 920 in Senate Appropriations and includes biomass.
 - AB 458 on Senate Floor and needs 2/3 vote and will likely pass.
- E. Public Education – Karin Hickey noted there was a pre-proposal conference this morning with 15 people attending. The deadline to submit written questions through BidSync is July 20 with responses posted by July 25. Proposals are due August 9.

Karin got an email from the Save the Food Campaign and they want to include the RWRC logo on their partner's page. This should be up in a couple weeks.

Karin asked who is posting Save the Food messages on their social media calendar – several are and GreenWaste has signs on their trucks.

- F. Source Reduction and Recycling – Cheri Donnelley said Marci Gordon, JVSV, is submitting a Food Rescue grant application for up to \$500K. A draft was sent to steering committee and Marci is asking for letters of support [template being circulated has City of Santa Clara letterhead]. There was also a discussion about clinical waste, specifically blue saline plastic wrap, which is being rejected by China. Looking to see who is recycling the material.

11. IC Update

Lori Topley said there was no IC meeting this month.

12. Items for Future Agenda/ Guest Speakers

May have some guest speakers in September.

13. Informational Updates and Announcements

Lori Topley had two items: 1) Mountain View will have a temporary HHW event on August 12; and 2) residential food scraps program starts on Monday – they will be delivering kitchen pails, informational brochures and complementary bags to 14,000 households. They have added a 24-gallon compost cart so that town homes, row housing and people who don't traditionally have yard waste carts can participate.

Lisa Rose said California Green Business Network received \$1M in Cap and Trade funding so that each local program will receive \$20K with the remaining to update the website and advertising.

Tammy Green said she is back part time and looking for table events.

Karin Hickey announced Santa Clara will be starting residential food scrap pilot on October 16. The pilot will include 5,000 homes for four years.

Richard Gertman said the City of New York is starting to deal with commercial solid waste system.

Alana Rivadeneyra said City Council directed them to negotiate with residential haulers and to return to Council in September with a recommendation to either move forward or go out to bid.

Wendy Fong said the final HHW participation numbers for FY17 are at 28,600+ which is approximately 2,000 greater than last year.

Bill Grimes announced the Mountain View event already has 48 people signed up compared to 0 at Las Plumas and typically the Las Plumas location will have about 250 people (who don't normally sign up this early). He said HHW is committed to getting an outreach event to Gilroy this year.

Mark Bowers had three items: 1) September 5 is CAW birthday event (5:30PM in Sacramento); 2) getting horrible results from bidding process (no bids or overestimated budget); and 3) Food waste in Sunnyvale had 100+ resident meeting at the library last night.

14. Adjournment

The meeting adjourned at 3:22 p.m.

THE NEXT SCHEDULED TAC MEETING: August 10, 2017

County of Santa Clara

Recycling and Waste Reduction Commission of Santa Clara County
Recycling and Waste Reduction Division

1555 Berger Drive, Suite 300
San Jose, California 95112
(408) 282-3180 FAX (408) 280-6479 www.ReduceWaste.org



TECHNICAL ADVISORY COMMITTEE MEETING MINUTES September 14, 2017

VOTING MEMBERS IN ATTENDANCE

CITY OF CUPERTINO	Cheri Donnelly
CITY OF GILROY	Tony Eulo
CITY OF MORGAN HILL	Tony Eulo
CITY OF LOS ALTOS	Chris Lamm
CITY OF MILPITAS	Elizabeth Koo
CITY OF MOUNTAIN VIEW	Lori Topley
CITY OF PALO ALTO	Paula Borges
CITY OF SAN JOSE	Anna Szabo
CITY OF SANTA CLARA	Karin Hickey
CITY OF SUNNYVALE	Mark Bowers
CLARA MATEO	Michael Gross
CLARA MATEO	Julie Muir
CLEAN WATER FUND	Samantha Sommer
COUNTY ENVIRONMENTAL HEALTH	Roel Meregillano
COUNTY RECYCLING AND WASTE REDUCTION	Bill Grimes
COUNTY UNINCORPORATED AREA	Wendy Fong
SAN JOSE STATE UNIVERSITY	Bruce Olszewski
SANTA CLARA VALLEY WATER DISTRICT	Kirsten Struve
SIERRA CLUB	Heidi Melander
WEST VALLEY CITIES	Scott Holt

Commissioners: James R. Griffith – Chair, Linda J. LeZotte – Vice-Chair, Mary-Lynne Bernald, Lan Diep, Susan M. Landry, Teresa O'Neill, Pat Showalter, Rod Sinks, Mike Wasserman

VOTING MEMBERS NOT IN ATTENDANCE

ACTERRA
 CALIFORNIA PRODUCT STEWARDSHIP COUNCIL
 SILICON VALLEY LEADERSHIP GROUP
 TOWN OF LOS ALTOS HILLS

OTHERS IN ATTENDANCE

Tracie Bills	SCS Engineers
Clifton Chew	SCC RWRD
Richard Gertman	ForSustainabilityToo
Karen Gissibl	City of Sunnyvale
Anne Hansen	City of San Jose
Elizabeth Huerta	GreenWaste
Alyssa Rice-Wilson	City of Sunnyvale
Cole Smith	UCCE
Dave Staub	City of Santa Clara
Paul Tavares	SCC DEH LEA
Alex Wykoff	City of Cupertino

1. Call to Order

Lori Topley, Chair, called the meeting to order at 1:34 p.m. A quorum of 18 was present. Those present introduced themselves.

2. Approval of Minutes

Tony Eulo made a motion to approve the minutes for July 13, 2017 minutes. The motion was seconded by Bruce Olszewski and all present voted to approve the minutes. Those not present at the July 13, 2017 TAC meeting abstained.

3. Public Presentations

Mark Bowers gave a brief background that he had recently met with the mill buyer for the SMaRT Station. Since all the mills have closed on the west coast, all the material is being sent to China but the bales have included high levels of contamination. He is asking all jurisdictions, haulers and processors to clean up their paper collection because China has new specification of contamination of 0.3% which

is politically driven. Thus there is a high risk that most current material sent will be rejected for not meeting the specifications.

4. Sustainable Materials Management

Lori Topley showed David Allaway's EPA presentation:

https://www.youtube.com/watch?v=4GJz7Gvz7_w.

David Allaway was able to teleconference and provided a brief biography before responded to questions.

Lori told David that TAC has set aside some funds toward SMM but was looking for some guidance on suitable projects.

A question was raised about how Department of Environmental Quality (DEQ) is funded. David responded by saying DEQ is like of many CA agencies rolled into one (CARB, CalRecycle, Water Board). And so, the department is funded through various mechanisms but the SMM portion is funded through a per ton disposal fee. The fees were created in 1991 and had never been adjusted until 2015. David said they explored alternatives but did not have political will to support those avenues. Now they have statutory authority to administratively adjust those fees within certain boundaries like CPI.

Another question asked about reliability of life cycle analysis (LCA). David explained that the comparative assertions made by LCAs always have 'it depends' because of all the variables and they have a bad reputation as a marketing tool of industry mainly because those are the ones seen by the public. He noted that LCAs are poor at dealing with human toxicity and marine debris but as long as we are aware of the limitations - more knowledge is better. He noted that they are not using LCAs in a regulatory manner. He also wanted to make a distinction between LCA and life cycle thinking (LCT), where LCT is considering the impact cost of LCAs.

There was a follow up question on toxicity and marine debris about how to balance recommending items that could impacted by those factors. David said for toxicity there are two parts: first when toxicity occurs from packaging leaching and the second is toxicity from industrial processing such as manufacturing, transportation and resource extraction. Plastics in the marine environment is bad but need to consider the larger picture with ocean acidification and neutrification. He cited a study that said there will be more plastic in the ocean than fish by 2050 and that it had another interesting fact. The US contributes less than 1% of all the plastics in the world's oceans.

David commented that twenty years of promoting recyclability as the ultimate solution to the worlds sustainability problem is deceptive. Try to get out of the solid waste box that everyone uses and look at the big picture.

It was suggested that there is potential for other money in our County to be contributing to our program such as through Silicon Valley Clean Energy.

Lori reiterated to David, some of TAC past projects: model bag ban ordinance; model EPS; CEP; and working on Food Rescue. David responded that he had four ideas for potential projects with the background that is focus on prevention and reduction to lay framework for broader SMM.

- Develop waste generation goal (target higher in the hierarchy). Where generation is defined as the sum of recovery in total. From experience, what gets measured is what gets managed. Thus having a goal around generation, authorizes and enables action in prevention and reuse.

- Hire a contractor to start with a study of leading and innovative programs (probably outside of CA-Oregon, Minnesota, Europe especially UK). [feasibility study of prevention and reuse programs that could be implemented locally]
- Look at food waste prevention (study shows 20x higher ghg reduction than composting). Could hire someone to develop strategic plan or outreach in partnership with trade associations. Could take critical examination of waste recovery messaging on prevention behavior.
- Commission a feasibility analysis and hire a contractor to explore what SMM would look like at the municipal or county level, specifically with what kind of new programing might be introduced. Also look at changes to existing programs.
- Recommends not to spend money on educating consumers about purchasing decisions (premature at this time).

Everyone appreciated David's time and comments.

Lori Topley asked Richard Gertman to kickoff the discussion. Richard said he views SMM as the next step. When we started, it was looking at what was going to landfills and how to manage that material. Then it was recycling and that brought the wider focus of composting. So each step is working towards a holistic approach. Where solid waste and recycling are a subset of SMM and the next step after that would be the GHG impact issue and resource consumption and extraction. Richard reminded everyone that recycling aluminum was the benefit of not having to extract bauxite for additional aluminum. A lot of benefits are upstream so not looking at end of life but mid-life as items are being used. Convince the makers of goods to make goods that are less environmentally impactful. He used an example of shipping light items in Tyvek in place of cardboard due to weight via transport where it would use more energy in collection and recycling of cardboard than shipping in a Tyvek envelope.

A comment was made that the alternatives tend to be light and would end up in the water.

Another comment was the difficulty in accepting working with an industry (plastics) that doesn't want to work with us. The industry is not wanting to be responsible for the things it produces. That there are additional costs that are not included such as oil spills, conflict over extraction and management of oil.

David wanted to clarify some comments about LCAs in that oils spills are not included but the total use of oil is included. So his comment was if you wanted to use less oil, then use light weight packaging. There is oil used in making the packaging but there is more oil used in making and transporting of cardboard. He said another LCA concluded single use water bottles were terrible no matter if they were recycled.

Lori Topley directed the SRR Subcommittee review the suggestions made by David Allaway and bring forward options to TAC.

5. Organics Capacity Study

Tracie Bills provided a presentation on the Organics Capacity Study.

Mark Bowers have a few comments in regards to the report: 1) expressed skepticism towards anaerobic digester because difficult to get approval from sewage treatment facility; 2) dehydrator turned wet garbage into dry garbage; and 3) he considers backhauling a franchise violation.

A question was raised about including organics that were processed and the residuals used as ADC. Tracie said she would check on that question.

Lori Topley said one of the reasons for this study was to respond to AB876 and the report did not provide a clear link to that expressed intention. Clifton Chew noted that he has had some conversations

with Tracie about responses to CalRecycle over this question. Lori asked to include the answers directly in the report.

A question was asked if bread products used in animal feed was included in the study which it was not.

Please send all comments to Lisa or Clif by the end of the month.

6. Recycling and Waste Reduction Commission (RWRC) Update

Bill Grimes said the RWRC did not meet.

7. Division Manager's Report and Updates on Countywide Programs

A. Disposal Reporting System – available online.

B. Other – Bill Grimes ask TAC members to send on official letterhead, their jurisdiction's TAC voting representatives. Additionally, the NGO advertisement went out and if TAC members know of interested parties, ask them to send nominations by December 1 to Clif or Lisa. The Green Business presentation was moved to next month and there will be a budget IC meeting next month.

8. Program Updates

A. Green Business – Report in packet.

B. Composting Education – Report in packet.

C. Recycling Hotline – Report in packet.

9. Subcommittee Reports and Updates on Countywide Programs

A. Eco-Gardens – Karen Hickey said the Bay Area Eco-Gardens website will remain active until October 10. The South Bay Green Gardens is up. She noted that Lisa Rose sent out a message of the poster with the new website and encourage TAC members to get the word out.

B. Enforcement – not active.

C. Household Hazardous Waste – Alex Wykoff said he will send, through Clif, a link to google docs for TAC members to be able to use the developed collateral.

D. Legislation

Mark Bowers said the legislative policies and priorities were in the TAC packet for review so that TAC members could discuss at the next meeting.

Mark Bowers went over the following legislation indicating this was the last week of the first year of legislative session so things need to get done by midnight Friday:

- AB 954 – going to the governor for signature.
- Bottle bill still looking for a sponsor.
- AB 1158 – Carpet recycling- on the assembly floor and looking for support.
- AB 1219 – limiting liability for food donations.
- AB 1250 – regarding contracting to Counties regarding labor rules.

- SB 258 – added to legislative update at the request of Commissioner Pat Showalter, cleaning product right to know act to disclose the contents of cleaning products. Passed Assembly and Senate on to the governor for signature.
- SB 458 – produce pilot project for beverage container redemption. Passed Assembly and in Senate for concurrence.

- E. Public Education – Karin Hickey noted the RFP went out and received eleven proposals. The evaluation committee narrowed it down to three for interviews and then selected one. The selection will go to the Board of Supervisors on September 26 for approval.
- F. Source Reduction and Recycling – Cheri Donnelly said there were several items covered:
- CEP – recap and provide more direction and focus. Discussed demonstration sites and partnerships. There will be a policy level discussion about what Master Composter Volunteers will be doing. Future SRR will discuss animal feed and the message about composting (for that model). Class held in West Valley Cities on a weeknight which was successful.
 - ReThink Disposable – they put out a RFP to get a consultant for the two-year contract to provide hands-on assistance to guide city staff and businesses through the process. The preference for the consultant is to have someone who lives in the County (cut commute time), is fully trained by Samantha, and not a team of people.

10. IC Update

Lori Topley said there was no IC meeting this month but will be one in October.

11. Items for Future Agenda/ Guest Speakers

The conservation corps tour will be postponed to 2018.

12. Informational Updates and Announcements

Cheri Donnelly said Cupertino is getting ready to extend its franchise agreement with Recology.

Karen Gissibl said today was day two of the delivery of food recycling carts and there was a community meeting last night with an attendance of 32 down from 100 initially.

Julie Muir had two items: 1) students return to campus (16K extra people) with a whole week of orientation- zero waste lunch, tours of the recycling center and sustainable move-in volunteers; and 2) composting expanded to second level and the tailgating areas (will be demonstrating sustainable tailgating).

Dave Staub said Santa Clara kicking off residential/commercial food scrap pilot program on October 9. There will be a public meeting on September 28.

Cole Smith said the Master Composting Training coming up in March. Fliers will be available soon.

Michael Gross announced Green Waste Recovery won national recycling excellence award.

Bruce Olszewski had a couple of items: 1) he has 25 students working at CDR and 2) he asked jurisdictions to respond to the recycling guide update.

13. Adjournment

The meeting adjourned at 3:51 p.m.