



## AGENDA REGULAR MEETING

### ADVISORY COMMITTEE

THURSDAY, AUGUST 25, 2022, 3:00 P.M.

ZOOM Meeting ID No. 867 6568 8081

Password: 307706

*Working for a future without landfills...*

This meeting will be held virtually via Zoom, information on how to participate and an important notice on page 2.

#### Call to Order

#### Roll Call

Christie Cromeenes, President

Nikki Cossio, Grower-Shipper Association

Keven McIntosh, Central Coast Builders Association

Grant Leonard, North County Chamber of Commerce

Marc Bloom, South County Chamber of Commerce

Ryan Kelly, Farm Bureau

Cesar Lara, Citizen from City of Salinas

Marty Horton Ramirez, Citizen from South County Cities

Paula Getzelman, Citizen from Unincorporated County

#### Vacancies

Cannabis Industry

Salinas Valley Chamber of Commerce

#### Public Comments

Receive public comment on topics which are not on the agenda. The public may comment on scheduled agenda items as the Committee considers them. Speakers are limited to three minutes at the discretion of the President of the Committee.

#### Welcome New Member

Ryan Kelly, Farm Bureau

#### Meeting Topics

1. [Minutes of March 24, 2022 Meeting](#)
  - A. Public Comment
  - B. Committee Discussion
  - C. Recommended Action: Approval
2. [Agency Update](#)
  - A. Receive Report from General Manager/CAO, Patrick Mathews
  - B. Public Comment
  - C. Committee Discussion
  - D. Recommended Action: None; Informational Only
3. [Update on the Sun Street Transfer Station Closure and Relocation of the Recycling Facility & Household Hazardous Facility](#)
  - A. Receive Report from General Manager/CAO, Patrick Mathews and Resource Recovery Manager, Mandy Brooks
  - B. Public Comment
  - C. Committee Discussion
  - D. Recommended Action: None; Informational Only
4. [New Strategic Planning Priority: Explore Alternative and Emerging Technologies to Reduce Landfill Dependence](#)
  - A. Receive Report from General Manager/CAO, Patrick Mathews
  - B. Public Comment

- C. Committee Discussion
- D. Recommended Action: Provide Input

## Future Topics/Committee Comments

### Adjournment

#### Important Notice

Due to State, County and local orders and recommendations on protocols to contain the spread of COVID-19, all of the Committee members will be attending remotely from various locations. Members of the public interested in observing the meeting may do on our YouTube channel

<https://www.youtube.com/user/svswa831>.

To make a general public comment, or to comment on a specific item on the agenda, you may do so by submitting your comment via email by 12 p.m. on Thursday, August 25, 2022 to the Clerk of the Board at [comment@svswa.org](mailto:comment@svswa.org). Comments should be limited to 250 words or less. Every effort will be made to read your comment into the record, but some comments may not be read due to time limitations. Comments received via e-mail after 2 p.m. will be made part of the record if received prior to the end of the meeting. To assist the Clerk in identifying the agenda item relating to your public comment please indicate in the Subject Line, the item number (i.e. Item No. 10).

To make a general comment or to comment on a specific agenda item as it is being heard, you may do so by participating via ZOOM. Join with computer audio at: <https://us02web.zoom.us/j/86765688081?pwd=TOQxNW1aNEsvYTNOVlhWZXZ0NVdkUT09>. When you are ready to make a public comment, please click to Raise your Hand.

To participate by telephone dial any of the numbers listed below and enter the meeting ID number and passcode:

+1 669 900 9128	+1 253 215 8782	+1 346 248 7799
+1 301 715 8592	+ 1 312 626 6799	+ 1 646 558 8656
Enter <b>Meeting ID: 867 6568 8081</b> #		Passcode: <b>307706</b>
To <b>Raise your Hand</b> press <b>*9</b>		To <b>Mute</b> and <b>Unmute</b> yourself press <b>*6</b>

Based on guidance from the California Department of Public Health and the California Governor's Officer, in order to minimize the spread of the COVID 19 virus by maintaining appropriate social distancing with a 6-foot distance between individuals and the limited space available there will be no observation room available for the public.

This meeting agenda was posted at the Salinas Valley Solid Waste Authority office at 128 Sun Street, Suite 101, Salinas, and on the Authority's Website on **Friday, August 19, 2022**. The Advisory Committee will next meet in a regular session on, **Thursday, October 27, 2022**. Any writing or documents provided to a majority of the Committee regarding topics on this agenda will be made available for public inspection at the Salinas Valley Solid Waste Authority office at 128 Sun Street, Suite 101, Salinas, California 93901, Phone 831-775-3000, during normal business hours.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in the meeting, please contact Erika J. Trujillo, Clerk of the Board, at 831-775-3000. Notification 48 hours prior to the meeting will enable the Authority to make reasonable arrangements to ensure accessibility to this meeting (28 CFR 35.102-35.104 ADA Title II)

**MINUTES OF  
THE SALINAS VALLEY SOLID WASTE AUTHORITY  
ADVISORY COMMITTEE SPECIAL MEETING  
MARCH 24, 2022**  
Meeting was conducted remotely via ZOOM.

**CALL TO ORDER**

Meeting was called to order at 3:07.

**MEETING COMMENTS**

None

**ROLL CALL****Members Present**

*Christie Cromeenes, President*  
*Grant Leonard*  
*Marty H. Ramirez*  
*Paula Getzelman*  
*Marc Bloom*  
*Ryan Kelly (logged in at 3:08)*

**Members Absent**

*Keven McIntosh*  
*Nikki Cossio*  
*Cesar Lara, Vice President*

**Staff Present**

*Patrick Mathews, General Manager/CAO*  
*Mandy Brooks, Resource Recovery Manager*  
*Rosie Ramirez, Administrative Assistant*  
*Erika J. Trujillo, Clerk of the Board*

**PUBLIC COMMENT**

None

**WELCOME NEW MEMBER**

The Committee welcomed Ryan Kelly representative of the Farm Bureau.

**MEETING TOPICS****1. Minutes of October 28, 2021 Meeting**

(3:10)

**Public Comment:** None

**Committee Discussion:** The Committee discussed the presentation.

**Motion:** Committee Member Getzelman made a motion to approve the minutes as presented. Committee Member Ramirez seconded the motion.

**Votes:** Cromeenes, Leonard, Ramirez, Getzelman, Bloom, Kelly

**Noes:** None

**Absent:** McIntosh, Cossio, Lara

**Abstain:** None

**2. Agency Update**

(3:12) General Manager/CAO Mathews provided an update on the progress made on the agreements established with the City of Salinas and Republic Services to relocate the AB 939 programs which include the Household Hazardous Waste facility and the Recycling services. He reported that the status of the improvements at the Madison Lane transfer station required by the lease agreement and the preparation the Authority is doing to fulfill the transportation services. He

informed the Committee that a community meeting has been scheduled for March 31<sup>st</sup> to inform the community of the changes. He indicated that the relocation date has been pushed back a couple of months due to some unforeseen permit issues. Mr. Mathews also reported on the selection of the new vendor by the Board for processing and marketing of the Organics at the Johnson Canyon Landfill. He indicated that Atlas Organics will be assuming operations July 1, 2022. He reported that the Board approved the balanced budget for the fiscal year 2022-23.

**Public Comment:** None  
**Committee Discussion:** The Committee discussed the report.  
**Motion:** None; Informational Only.

### 3. Update on SB 1383 Organics Recycling Program

(3:31) Resource Recovery Manager provided an update on the progress made on the Senate Bill 1383 program. She indicated the program includes a Curbside Food Scrap program and new outreach and educational materials focusing on behavior change. She explained the expansion of the program had created an increase in enrollment of commercial food waste customers and collaboration with the haulers, County and City representatives to roll out programs to implement food scrap and food recovery programs at schools and developing School Training videos is underway. Development of the Monterey County Edible Food Recovery Technical Advisory Committee and subcommittees was completed in March 2021 this will assist the member agencies and their haulers with program roll out. A soft launch of the Residential Food Scraps Collection Program rolled out in January 2022 with the full launch expected on Earth Day April 22, 2022. Mrs. Brooks indicated staff has worked diligently with the marketing consultants to develop flyers, brochures, a web page, printed ads, social media post, kitchen pails, and a billboard sign that has been posted along HWY 101, South of Soledad.

**Public Comment:** None  
**Committee Discussion:** The Committee discussed the report.  
**Motion:** None; Informational Only.

### 4. Discussion on Regular Meeting Schedule

(3:51) General Manager/CAO Mathews reported on the possibility of not being able to utilize AB 361 after March. He indicated a doodle poll could be distributed to obtain the Committees availability.

**Public Comment:** None  
**Committee Discussion:** The Committee discussed the report indicating the possibility of the extension of AB 361.

**Motion:** By consensus the Committee directed staff to obtain more information on the possibility of the extension and to distribute a doodle poll once more information is obtained.

### COMMITTEE COMMENTS

(3:58) None

### ADJOURNED

Meeting was adjourned at 3:59 p.m.

APPROVED: \_\_\_\_\_  
Christie Cromeenes, President

ATTEST: \_\_\_\_\_  
Erika J. Trujillo, Clerk of the Board

## ADVISORY COMMITTEE

---

**Date:** August 25, 2022  
**From:** Patrick Mathews, General Manger/CAO  
**Title:** Agency Update

---

**A report will be given at the meeting.**

**Attachments:**

1. SVR Board of Directors Strategic Planning Workshop Report



**Salinas Valley Solid Waste Authority  
Board Strategic Planning Workshop  
Held June 30, 2022**

**July 2022**

**Management  
Partners**







## Table of Contents

---

<b>Workshop Report .....</b>	<b>1</b>
Workshop Overview.....	1
Welcome and Opening Comments.....	4
Icebreaker Exercise.....	5
Governance, Values, and Norms .....	6
Celebrate Accomplishments .....	9
Vision and Mission.....	9
Board Interview Themes .....	10
Establishing Top Priorities for FY 2022-23.....	10
Wrap Up .....	11
<b>Attachment: Workshop Evaluation .....</b>	<b>12</b>



## Workshop Report

The Salinas Valley Solid Waste Authority (also known as Salinas Valley Recycles or SVR) held a Board workshop to update its Strategic Plan on Thursday, June 30, 2022, from 1:00 p.m. to 4:00 p.m, in the Council Chambers in the City of Gonzales. The workshop provided an opportunity for Board members to celebrate accomplishments made since the adoption of the previous Strategic Plan; discuss SVR's vision, mission, and values; brainstorm goals; and strengthen teamwork. This report contains a summary of the results of the workshop.

Senior Manager Christine Butterfield and Special Advisor Magda Gonzalez with Management Partners facilitated the workshop.



### ***Workshop Overview***

#### **Objectives**

- Celebrate accomplishments from the previous Strategic Plan.
- Review and update the values, vision, and mission.
- Discuss and establish Board norms.
- Discuss and establish Board goals and strategies for the next three to five years.

#### **Agenda**

- Welcome and call to order by the President
- Public comments
- Comments from the General Manager

- Icebreaker exercise
- Discuss governance, Board values, and Board norms
- Celebrate accomplishments
- Discuss vision and mission
- Review Board interview themes
- Establish and prioritize goals and strategies
- Wrap up and next steps

## Participants

### Board of Directors

**President**  
**Chris Lopez**



**Vice President**  
**Christie Cromeenes**



**Alt. Vice President**  
**Andrew Tipton**



**Past President**  
**Robert Cullen**



**Board Member**  
**Liz Silva**



**Board Member John**  
**Phillips**



**Board Member  
Kimbley Craig**



**Board Member  
Anthony Rocha**



**Board Member  
Ben Jimenez**



Board members Robert Cullen and Liz Silva were unavailable for the workshop due to unforeseen circumstances.

### **Staff**

- Patrick Mathews, General Manager
- Cesar Zuniga, Assistant General Manager
- Erika Trujillo, Clerk of the Board
- Ray Hendricks, Finance and Administrative Manager
- Mandy Brown, Resource Recovery Manager
- Brian Kennedy, Engineering and Operations Manager
- Rosie Ramirez, Executive Assistant

### **Workshop Ground Rules**

At the start of the workshop, Christine suggested several ground rules to help the group have a successful workshop.

- Review public health protocols,
- Listen to understand,
- Participate,
- Assume good intent,
- Speak up if we need a course correction, and
- Focus on shared interests.

### **Workshop Preparation**

In preparation for the workshop, Christine Butterfield and Magda Gonzalez held individual interviews with each Board member and each department director. They also discussed workshop objectives with the General Manager. They then prepared an agenda and PowerPoint presentation, along with other materials to guide discussions during the session.





## ***Welcome and Opening Comments***

The workshop began with a welcome and call to order from President Chris Lopez. He invited members of the public to speak. The General Manager then offered opening comments about why the workshop was important and explained what he hoped the group would gain from the day's discussions.

The General Manager turned the session over to the facilitators, who reviewed the workshop agenda, objectives, ground rules, and the purpose of the bike rack, which is a time management tool. Christine explained that items that were brought up outside of today's agenda would not receive immediate attention and would be added to the bike rack. There were no items added to it during the workshop.



## ***Icebreaker Exercise***

Christine led the group in an icebreaker exercise. The purpose was to begin the workshop in a fun way and to learn more about each other. The facilitators asked each participant to share the greatest lesson they have learned as a leader. The lesson could have been learned from a success or a miss. The following lessons were shared:

- Appreciate different perspectives,
- Compromise is key,
- Avoid assumption and don't count your chickens before they hatch,
- Earn the respect of others by doing homework,
- Abide by rules; they are in place for good reason,
- Reset after a failure; it's important how you do it,
- Move the needle along little by little and bring people along,
- Keep an open mind; be curious,
- Look at the best interest of the whole,
- Maintain a thick skin,
- Honor all perspectives; one person's failure may be success of another,
- Focus on the greater good; we can't make everyone happy,
- Progress is success; 30% is better than zero,
- Reflect on how to do things differently; be open to learn,
- There is a lack of urgency in public sector (as compared to private sector),
- Find elements of success within failure, and
- Engage in uncomfortable conversations; it is okay,



## **Governance, Values, and Norms**

The next segment of the workshop focused on effective governance. Christine offered a refresher on best practices that make governing bodies work well and reviewed the importance of effective governance.

The group first reviewed the values identified in SVR's current Strategic Plan, beginning with the values. These values are listed below. The value that the Board agreed *to add* is indicated in **bold**.

- Fiscal prudence,
- Resourcefulness,
- Customer service,
- Community partnerships,
- Innovation,
- Integrity,
- Public education,
- Efficiency, and
- **Equity.**

## **Interview Themes**

The facilitators stressed the importance of having a strong working partnership between the Board and General Manager. Everyone has a role to play, and having a good partnership is critical for the success of the Authority.

Magda reviewed themes that emerged from the interviews pertaining to the challenges and opportunities that SVR faces. They are listed below.

- Improve **governance** and Board relations,
- Provide **equitable** administrative support,
- Ensure clear **guidelines** about the Board agenda and supporting documentation, and
- Review the joint powers agreement (JPA) and member jurisdiction contributions and **relationship to the revenues** and forecasts.

## **Best Governance Practices**

Christine explained that effective governance is a team sport, and that personal commitment to working together is required for good governance. The Board reviewed the Institute for Local Government (ILG) article called "*Attributes of Exceptional Councils*." She explained that effective governing bodies share a unity of purpose; understand roles and responsibilities; foster a positive governance culture; and establish norms, protocols, and procedures. The six attributes of exceptional governing bodies are listed below.



### **Exceptional Governing Bodies....**

1. Have a **sense of team** - a partnership with the city manager to govern and manage the city
2. **Clear roles** and responsibilities that are understood and adhered
3. **Honor the relationship with staff and each other**
4. Routinely conduct **effective meetings**
5. Hold themselves and the city **accountable**
6. Have members who practice **continuous improvement**

Christine asked the group what resonated from the ILG article. A summary of the responses are provided below.

- Be a lifelong learner; be curious, analyze, don't assume
- Be accountable
- Be adaptable
- Conduct meetings in person again; Covid has not allowed as many discussions as before the election
- Ask questions and avoid rubberstamping staff recommendations
- Come prepared to meetings; do your homework
- Establish goals, priorities, and plans to accomplish as a group
- Exceptional councils work as a team
- Seek compromise.
  - A split vote is not always best or ideal
  - It is not good to be constantly fractured as it doesn't help with relationships
- Alert staff about Board questions/concerns ahead of time; no gotchas
- Focus and discuss where we have agreement
- Raise a different (or non-popular) perspective; others may agree
- Look at what is best for the jurisdiction and region at large
- Being popular is not the role of elected officials
- Adapt, which is good
- Consider what is best for the group, not just one-member jurisdiction



### **Board Norms**

The facilitators provided examples of governing norms from the cities of Santa Rosa, Santa Clara, and Fremont. Following the review of these samples, Magda led the group in a discussion about norms for the Board. The purpose of this discussion was to create consensus on a set of norms for governing. Magda asked whether the norms resonated with the Board members and whether they thought they would work well now as well as set the tone for future Boards. Board members agreed to adopt the following 11 norms at a future Board meeting:

- Avoid assuming intent or motives.
- Commit to the shared success of the Authority.
- Govern as a body.
- Maintain an Authority perspective and balance it with individual city/county interests.
- Recognize the success of employees.
- Hold regular meetings between the General Manager and one-on-ones with Board members.
- Communicate effectively with the public.
- Respect the form of government.
- Avoid criticizing staff or each other in public; coach privately.
- Refrain from using technology during Board meetings.
- Approach the business of government in a professional manner.

The facilitators asked how the Board will operationalize the norms. Board members agreed that they would adopt the norms by resolution and add the norms to every agenda document.

## ***Celebrate Accomplishments***

Following a brief stretch break, the group reconvened to review and celebrate some of the Authority's recent successes. The purpose of this discussion was to help set the context for priority setting and reflect on SVR's progress. The following was presented.



### **Accomplishments**

- Commitment to the mission,
- Maintenance of reasonable rates,
- Stewardship of the Authority's fiscal resources,
- Dedicated staff,
- Communicating accurate and timeline information, and
- Compliance with SB 1383.

When asked whether there were any additional accomplishments that should be acknowledged, the following comments were offered:

- Purchased a building,
- Kept services operational during Covid,
- Made progress in closing Sun Street,
- Put 1383 infrastructure in place, and
- Continued public education during Covid; it is having a positive impact.

## ***Vision and Mission***

The facilitators lead the Board in a discussion about the strategic vision and mission for the next three years. Following a brief discussion, they agreed to update the Authority's mission and add the word equitable to the statement. The new mission statement is below.

### **Mission**

To manage Salinas Valley Solid Waste as a resource, promoting **equitable**, sustainable, environmentally sound and cost-effective practices through an integrated system of waste reduction, reuse, recycling, innovative technology, customer service, and education.

## Vision

The Board agreed that no changes are needed to the Authority's vision. The current vision is shown below.

To reduce the amount of waste by promoting individual and corporate responsibility.

To recover waste for its highest and best use while balancing rates and services.

To transform our business from burying waste to utilizing waste as a resource.

To eliminate the need for landfills.

## Board Interview Themes

The facilitators reviewed and discussed the priority themes from the individual interviews, which set the context for establishing priorities. The themes from the interviews are shown on the slide below.

**Board Priorities**

*The following priorities were identified during interviews*

- Compliance with **new organics requirement**
- Engagement of **third-party contractor** to process organics
- Relocation of **transfer station**
- Relocation of **administrative offices**
- Comprehensive **communication and branding** strategy
- **Public education** strategy
- Maintain **reasonable rates**
- Need for **succession planning**
- Invest in **training and technology**
- **Excited about the future of the agency and its mission!**

Management Partners 

33



## Establishing Top Priorities for FY 2022-23

Christine and Magda engaged the group in a review of the five proposed goal areas. Staff provided some content for each area, and the Board agreed that the goal areas are appropriate. Then the facilitators reviewed the strategies for each goal.

Next, the Board members voted on their top priorities. Each Board member ranked their highest priority items. Results are provided below. Items that received three or more votes **bolded in green**.

**A. Governance and collaboration**

- Improve governance and board relations
- Provide equitable administrative support – **1 vote**
- **Clarify guidelines related to Board agendas and supporting documentation – 3 votes**
- Develop succession plan
- Invest in training and technology – **2 votes**

**B. Financial sustainability**

- Review the JPA member jurisdictions' contributions, governance alternatives, and orientation to the revenue forecast
- Continue to prefund liabilities and debt – **1 vote**
- **Maintain equitable and reasonable rates – 4 votes**

**C. Facilities master planning**

- **Relocate the transfer station (and lease) – 3 votes**
- **Explore alternative and emerging technologies to reduce landfill dependance – 4 votes**

**D. Comply, adapt, and respond to regulatory changes**

- Ensure compliance with new organics requirement and outreach
- Advocate against unfunded mandates and for emerging technologies – 2 votes

**E. High-quality community engagement**

- Maintain a comprehensive communication and branding strategy
- Continue to deliver the public education strategy – 1 vote

## **Wrap Up**

To conclude the workshop, Christine explained that Management Partners would prepare this report. Board members shared one-word takeaways or reflections about what was useful in spending the day together. A summary of these reflections is provided below.

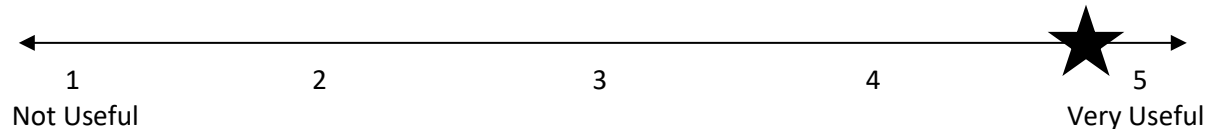
- Common ground,
- Teamwork,
- Manageable,
- Enhanced comradery,
- Fun, and
- Enjoyable.

## Attachment: Workshop Evaluation

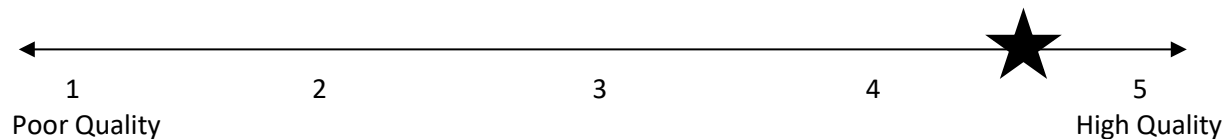
### Salinas Valley Solid Waste Authority Board Workshop June 30, 2022

Facilitator(s): Christine Butterfield, Magda Gonzalez

Overall **usefulness** of the workshop: **4.79**



Overall **quality** of the workshop: **4.57**



The **best thing** about this session was...

- Easy communication
- Being back together in the same room
- Having everyone working towards common goals for a change
- Well organized
- Quick, efficient
- Efficient and fun

Some thing(s) that **could have been better**...

- Have everyone involved – I know it's difficult though
- No changes

What elements of the session will be **most useful** to you?

- Interaction
- The strategies being ranked was highly helpful
- Alignment with strategic goals – attributes of effective councils
- The whole process
- Moving towards common ground
- Having board desire to work as team

I'm **glad** that the facilitator(s)...

- Rewarded us with early release
- Did interviews ahead of time
- Brought everyone together

- Worked well with the entire group
- Worked well with board
- Were joyful and effective

I **wish** the facilitator(s) would have...

- Nothing to add

**Other Comments:**

- Excellent job
- You're awesome!

## ADVISORY COMMITTEE

---

**Date:** August 25, 2022  
**From:** General Manager/CAO, Patrick Mathews  
**Title:** Update on the Sun Street Transfer Station Closure and Relocation of the Recycling Facility and the Household Hazardous Facility

---

A presentation will be given at the meeting.



## ADVISORY COMMITTEE

---

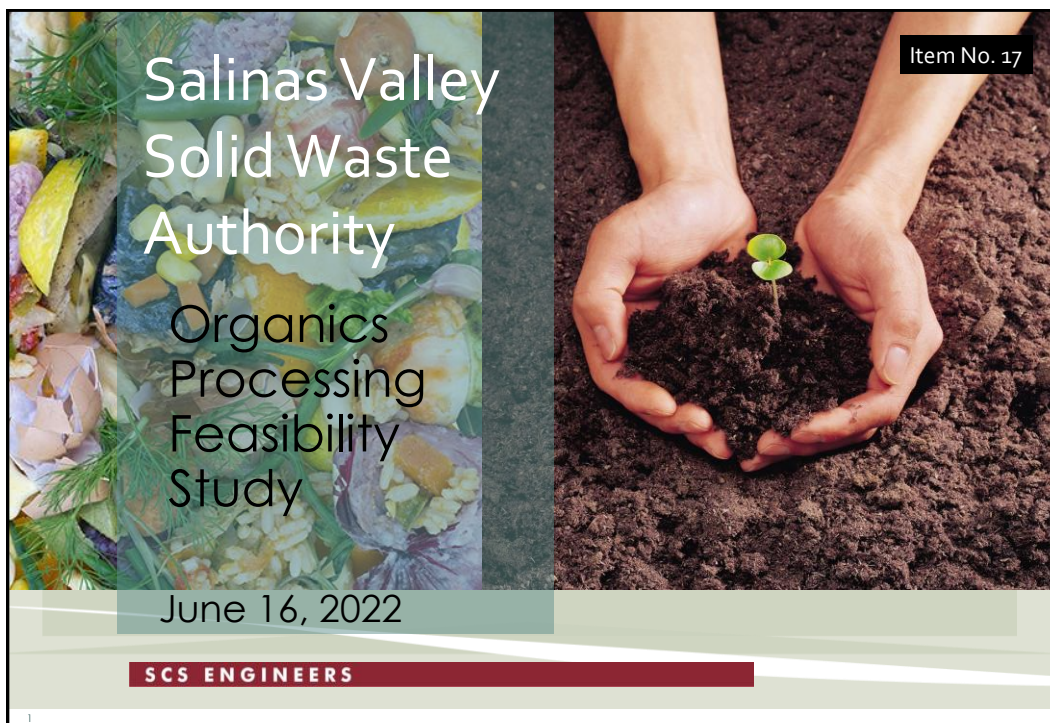
**Date:** August 25, 2022  
**From:** Mandy Brooks, Resource Recovery Manager  
**Title:** New Strategic Planning Priority: Explore Alternative and Emerging Technologies to Reduce Landfill Dependence

---

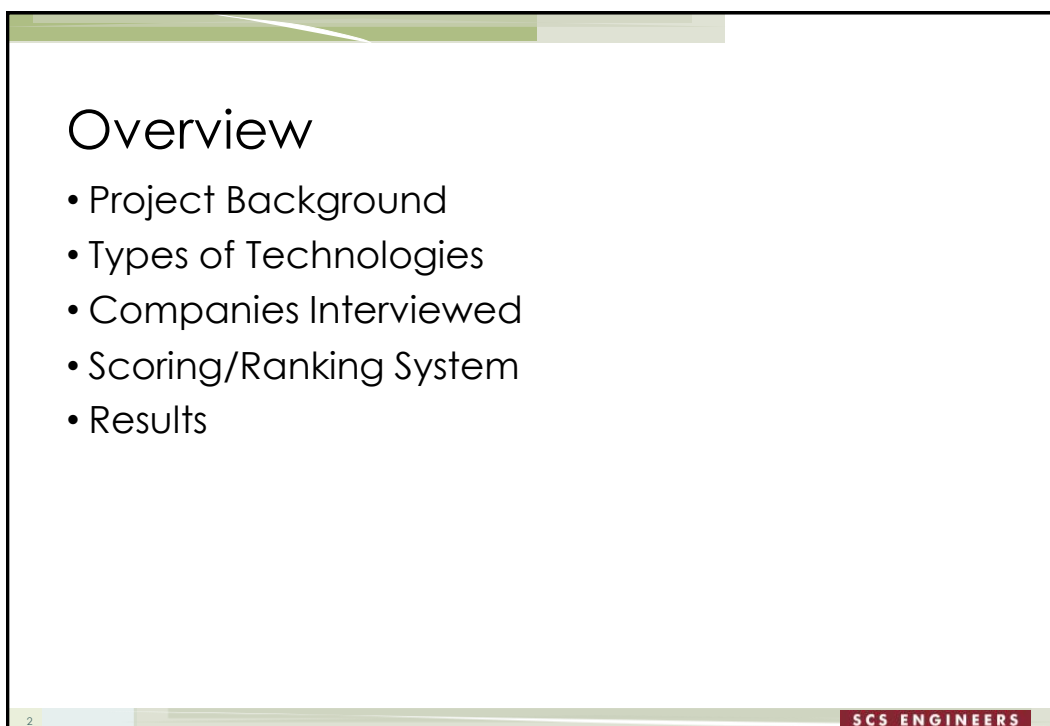
**A report will be given at the meeting.**

**Attachments:**

1. SVR Board Meeting Presentation Item No. 17
2. Machado & Sons Construction, Inc. Presentation



1



2

## Project Background

- Consider various options to process organics.
- Achieve high level of organics diversion and compliance with SB 1383.
- Understand different anaerobic digestion (AD), autoclave, and pre-processing technologies to help provide an informed decision by SVSWA staff.
- Interested in the financial and technical viability of these technologies

3

SCS ENGINEERS

3

## SCS Role

- Developed key criteria and scoring/ranking methodology for evaluating the technologies
- Researched potential technologies
- Scored and ranked each technology
- Developed a matrix to compare scores

4

SCS ENGINEERS

4

## Types of Technologies

- Pre-processing
- Wet AD
- High solids AD
- Autoclave



5

SCS ENGINEERS

5

## Selecting Companies to Interview

- SCS provided SVSWA with an initial list of 46 companies
- SCS narrowed down the list to:
  - 7 pre-processing companies
  - 7 high solids AD companies
  - 7 wet AD companies
  - 3 autoclave companies




6





SCS ENGINEERS

6

# Pre-Processing

- Anaergia
- Doda
- Komar Industries
- DRANCO (formerly OWS)
- Scott Equipment Company
- Van Dyk Recycling Solutions (Smicon)
- Tiger





7

SCS ENGINEERS

7

# High Solids AD

- Convertus
- BIOFerm
- Biogest
- Hitachi Zosen
- DRANCO (formerly OWS)
- Thoni
- Zero Waste Energy





8

SCS ENGINEERS

8

# Wet AD

- **Anaergia**
- BioConstruct
- BioStar Renewables
- BTS Biogas
- CH Four Biogas
- Quasar
- **StormFisher**






9

SCS ENGINEERS

9

# Autoclave

- **Hughes**
- **NOWON**
- **WastAway**



10

SCS ENGINEERS

10

Scoring/Ranking System: Technology Criteria

Criteria	Weight	Scoring Details	Point Scale
A. TECHNOLOGY CRITERIA			
Status of technology	5	Commercial	2
		Demo/Pilot	1
		None	0
Years of operating history	4	>5 years	2
		2-5 years	1
		<2 years	0
Vendor Qualifications (company structure, legal history, environmental compliance)	3	High	2
		Medium	1
		Low	0
Feedstock Material	4	Mixed Waste	2
		Source Separated Organics	1
		Other	0
Landfill diversion (percent by weight of post processed material sent to landfill)	5	>90%	2
		75%-90%	1
		<75%	0
Mixed Waste Material (if accepts as feedstock) - Organics Yield of Landfill Diversion (percent by weight of feedstock sent to landfill that is still organic material- SB1383)	5	>10%	2
		10%-25%	1
		<25%	0
Source Separated Organics (if accepts as feedstock) - Organics Yield of Landfill Diversion (percent by weight of feedstock sent to landfill that is still organic material- SB1383)	5	N/A	0
		>10%	2
		10%-25%	1
		<25%	0
		N/A	0

Criteria	Weight	Scoring Details	Point Scale
A. TECHNOLOGY CRITERIA			
90% of Material Reused, Recycled Etc. Large Diversion Discharge Facility	1	Yes	2
		No	0
Quantity of water required	1	<100 gal/ton	2
		100-300 gal/ton	1
		>300 gal/ton	0
Power requirements	1	<200 kWh/ton or 10% of parasitic load	2
		200-400kWh/ton or 10%-15% of parasitic load	1
		>400kWh/ton or >15% of parasitic load	0
Does company have a turn-key operation including Anaerobic Digestion and pre/post processing?	2	Yes	2
		Partial	1
		No	0
Material appropriate for composting	1	Yes	2
		No	0
Creation of Green Jobs	1	0	0
		0-5	1
		>5	2

Scoring/Ranking System: Financial Criteria

Criteria	Weight	Scoring Details	Point Scale
B. FINANCIAL CRITERIA			
Capital costs (\$/ton of daily capacity)	4	<\$200,000/ton	2
		\$200,000-\$400,000/ton	1
		>\$400,000/ton	0
Unit operating cost	3	<\$50/ton	2
		\$50-75/ton	1
		>\$75/ton	0
Tipping fee (based on reference facility(ies))	3	<\$55/ton	2
		\$55-\$100/ton	1
		>\$100/ton	0
By-Product revenue	3	>\$80/ton (High)	2
		\$50-80/ton (Medium)	1
		<\$50/ton (Low)	0
Company Provides Financing Options	3	Yes	1
		No	0
Markets for By-Products	3	Local	2
		Regional	1
TOTAL			

## Additional Criteria for Pre-Processing

Criteria	Weight	Scoring Details	Point Scale
<b>A. TECHNOLOGY CRITERIA</b>			
Material appropriate for wet Anaerobic Digester	1	Yes	2
		No	0
Material appropriate for dry Anaerobic Digester	1	Yes	2
		No	0
Material appropriate for composting	1	Yes	2
		No	0

## Results: Pre-Processing

Criteria	TECHNOLOGY SCORE						
	Anaergia	Doda	Komar Industries	Scott Equipment	Van Dyk Recycling Solutions (Smicon)	DRANCO Long Retention Drums	Tiger (Ecoverse, Doppstadt)
A. TECHNOLOGY	73	63	38	59	73	76	77
B. FINANCIAL	23	12	17	17	14	0	20
TOTAL	96	75	55	76	87	76	97

- Tiger and Anaergia:
  - relatively low cost
  - products appropriate for wet and high solids AD, as well as composting
  - lower power and water requirements
  - able to provide the a turn-key AD system



## Results: High Solids AD

Criteria	TECHNOLOGY SCORE						
	BIOFerm	Hitachi Zosen	DRANCO	Thoni	Zero Waste Energy	Biogest	Convertus
A. TECHNOLOGY	36	56	76	74	34	50	45
B. FINANCIAL	3	20	12	23	6	0	0
TOTAL	39	76	88	97	40	50	45

- Thoni, DRANCO, and Hitachi Zosen:
  - are able to provide a turn-key AD system
  - low power and water requirements
  - create new green jobs
- DRANCO and Thoni send less than 10% of incoming organics to landfill

15

SCS ENGINEERS

15

## Results: Wet AD

Criteria	TECHNOLOGY SCORE						
	Anaergia	BioConstruct	BioStar Renewables	BTS Biogas	CH Four Biogas	StormFisher	Quasar
A. TECHNOLOGY	76	24	32	36	29	70	0
B. FINANCIAL	32	0	0	0	0	17	0
TOTAL	108	24	32	36	29	87	0

- Anaergia:
  - able to process mixed waste material at a low cost
  - has over a 90% landfill diversion rate
  - able to provide turn-key AD system, create 30 green jobs
- StormFisher:
  - can also process mixed waste feedstock
  - able to provide turn-key AD system, create 20-25 green jobs

16

SCS ENGINEERS

16

## Results: Autoclave

Criteria	TECHNOLOGY SCORE		
	Hughes	NOWON	WastAway
A. TECHNOLOGY	74	67	76
B. FINANCIAL	11	26	23
TOTAL	85	93	99

- All three companies:
  - able to process MSW and send less than 10% of the incoming organics to landfill
  - have low water usage and power requirements
- NOWON's landfill diversion rate is a bit lower than the other two technologies

17

SCS ENGINEERS

17

## Additional Findings

- For most technologies, a lot will depend on the actual composition of the feedstock
- Most companies plan to produce RNG
  - Other end products could include: compost, biochar, pellets that can replace coal
- Companies have varying levels of concern about processing the organic fraction of municipal solid waste (OFMSW) vs. source-separated organics (SSO)

18

SCS ENGINEERS

18



19



**MACHADO & SONS**  
**CONSTRUCTION, INC.**

Established 1984

## Primary Markets



### Utility

Transmission &  
Distribution of Electricity  
& Natural Gas



### Industrial

Processing,  
Manufacturing &  
Distribution



### Education

Universities, Colleges  
& Primary Education

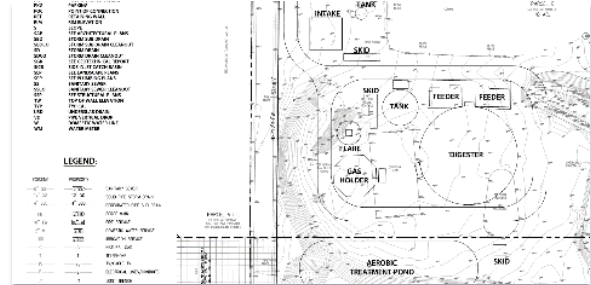
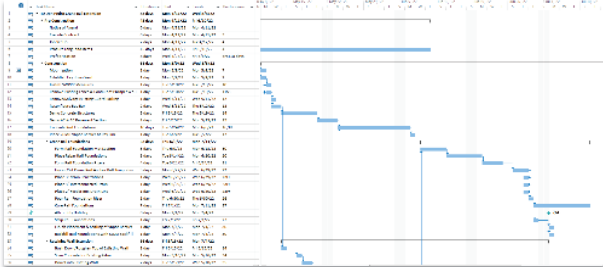


### Special Projects

Renewable Energy,  
Data Centers,  
Technology &  
Government

# Management Capabilities

Machado & Sons provides management services to compliment its self performance capabilities. Incorporating construction management and self perform capabilities increases cost control and mitigates risk.



## Pre-Construction

Constructability  
Bid Coordination

## Scheduling

Critical Path Scheduling  
Phasing Analysis  
Weekly Pull Meetings

## Subcontractors

Prequalification  
Scoping/Analysis  
Change Management  
Change Avoidance

## Construction

Self Perform Capability  
Multiple sites, subs & crew  
coordination

## Documentation

Permit Tracking  
Document Management  
Project Close Out

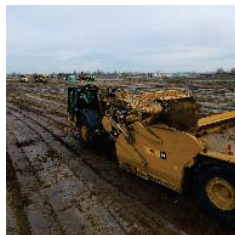
# Self Perform Capabilities

Machado & Sons provides turn key civil services to its primary markets. Self-performing of complete packages adds value to our projects. Self-performing critical scopes on our projects provides owners with greater safety, increased efficiency & schedule certainty.



## Underground Utilities

Wet Utilities  
Dry Utilities



## Grading & Excavation

Rough & Fine Grade  
Trench Excavation



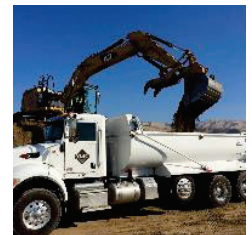
## Structural & Site Concrete

Foundations  
Vaults  
Site Concrete



## Paving

Trench Paving  
Overlays  
Road Reconstructs



## Trucking

Internal fleet supporting  
grading, paving &  
excavation services



# Example Projects

## CDI Turlock Solar Thermal

- Management Scope
  - Coordination of design & engineering
  - Development of full plan set for permitting
  - Submission & coordination of permits
    - City of Turlock
    - Union Pacific Railroad
  - Subcontractors
    - Bid coordination
    - Analysis, award & contract execution
    - Ongoing management
  - Coordinate procurement & logistics
- Self Perform Scope
  - Demolition
  - Grading & paving
  - Underground
  - Structural concrete
  - Pile Driving
  - Racking assembly & panel mounting



## Luciana Solar 80 MW

- Management & Development Scope
  - Negotiated EPC agreement
  - Managed subcontractors throughout project
    - Civil
    - Mechanical
    - Electrical
    - Substation interconnection
  - Managed logistics for owner supplied equipment
  - Maintained CPM Schedule
- Status
  - Achieved substantial competition 4/12/22
  - COD 5/1/22

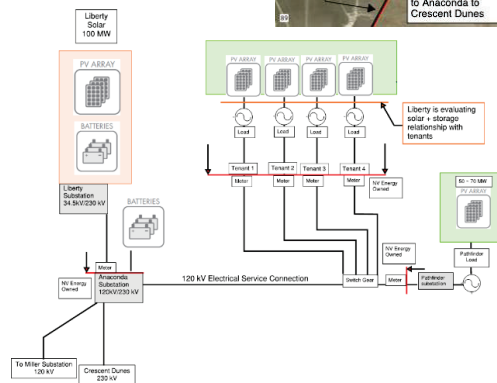
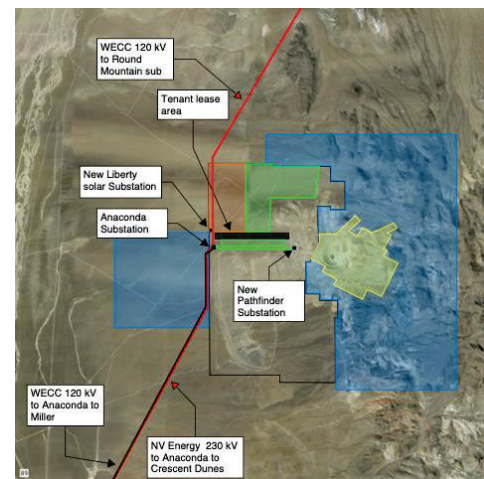


MACHADOANDSONS.COM

7

## Liberty 100 MW Solar + Storage

- Manage project design for owner
  - NVE large generator interconnection process
    - Preliminary power flow model
  - Preliminary solar design
    - Fixed vs. single axis design optimization
    - PVsyst and SAM output modeling
    - Behind the meter integration
    - Optimize grading plan
    - Substation interconnection
  - Preliminary storage design
    - AC vs. DC system coupled considerations
    - Optimize AC/DC inverter ratio and GCR
- Status
  - Large generator interconnection submitted to NVE 2022 spring queue
  - Continuing with preliminary design



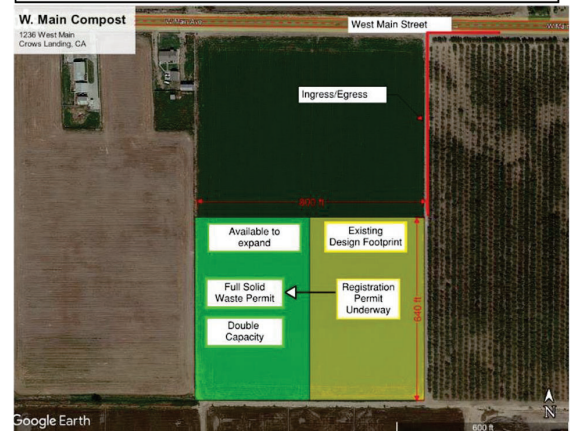
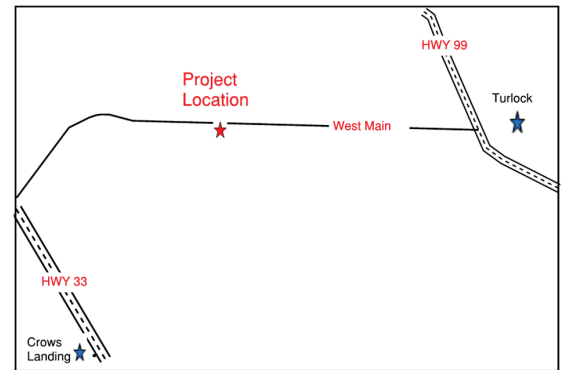
MACHADOANDSONS.COM

8



# West Main Compost

- Registration Tier permit – vegetative-green waste
  - ASP preliminary design underway
  - Budgetary pricing from material/equipment/construction
- Preliminary Approvals
  - Air Board approval at favorable emissions factor
  - Water board technical report completed and approved by water board
  - CalRecycle Odor Minimization Plan complete
- Site is potentially expandable under a full solid waste permit
- Experienced team – development, permitting, engineering & construction
- Long-term lease of property

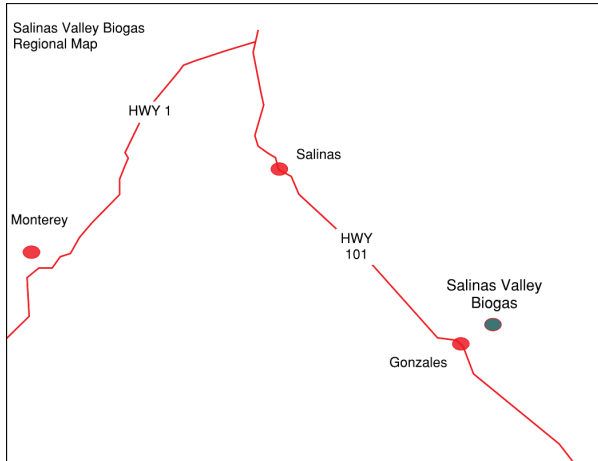


# Salinas Valley Biogas





# Salinas Valley Biogas



## Value Proposition

### 01. Construction

Leveraging self perform construction capabilities to ensure a bankable, properly built, on-schedule facility.

### 02. Relationships

Ownership group has longstanding relationships with land owners, community leaders, feedstock suppliers & PG&E.

### 03. Location

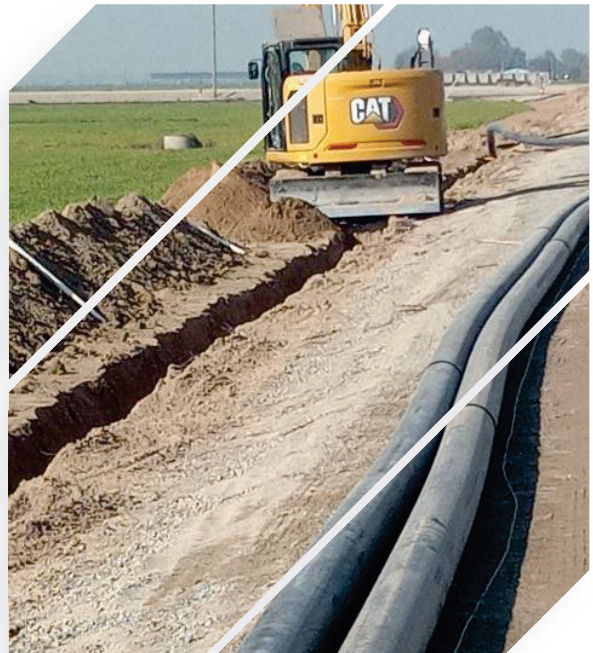
The facility is strategically located in the Salinas Valley close to Highway 101, And favorably located for the waste haulers to deliver the feedstock.

### 04. Experience Technology

Biogest has been in business for 30 years, and has completed 170 projects globally.

### 05. Advanced Design

Machado has assembled a complete design-build team and conducted a detailed budget based on a preliminary design.



# Taylor Farms Feedstock

100,000 tons feedstock per year

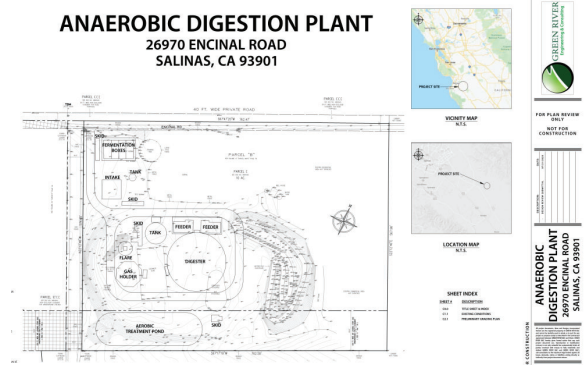


This feedstock represents 25% of the culls waste available regionally.

MACHADOANDSONS.COM 15

## Project History

- Feedstock supply agreement with Taylor Farms 2019
- Initial Monterey county permit application 2019
- Pilot plant commissioned for Taylor feedstock testing
- Previous development effort:
  - Monterey county permit response started including In-vessel digestion plan
  - Engineering and technical studies completed
  - Abandoned site due to length of the interconnection
- Teaming relationship with local haulers



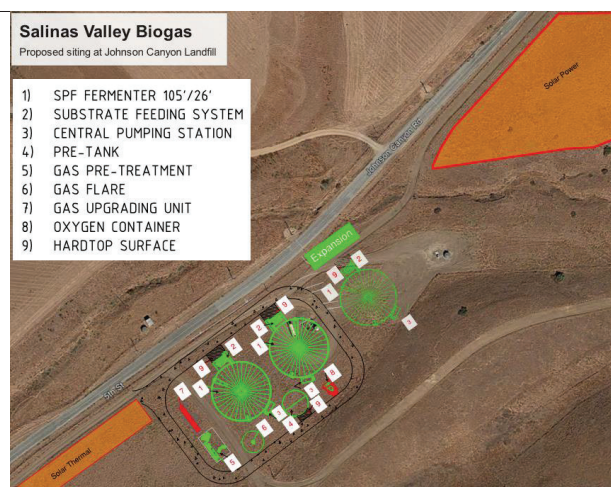
# Salinas Valley Biogas

## Development Status

- Multiyear development
- Feedstock LOI's in place for food process organic waste
- Salinas Valley Waste Authority is willing partner ready to provide access to land and additional feedstock.
- Design Status:
  - Design based on Biogest design concept
- Permit Status
  - Site will require full solid waste permit: 9 mo. - 1 year timeline
  - Johnson Canyon EIR is complete – no further work is expected
  - Full entitlement proposals/budget in place.
- Development Status
  - PG&E can accept all produced RNG gas in pipeline – feasibility study available
  - Detailed turnkey budget in place – Haskell Corp.
  - Technical proposals in place – Biogest, Guild
  - Off-take being negotiated

## SVR Proposal

- Locate digester on 7.5 acres at Johnson Canyon Landfill
- Feedstock under contract 300 t/dy from Taylor Farms,
- Facility is being designed to accommodate expansion through additional feedstock, additional feedstock available up to 450 t/dy
- 70,000+ gallons per day of digestate. Developing offtake strategies: compost moisture control and carbon sequestration via land application and regenerative farming.
- Project would alleviate waste congestion issues at land fill and potentially provide additional SB 1383 compliance by diverting process residue from landfills.
- Unique organic waste application as an energy park: biogas, methane from landfill, solar power and solar thermal applications.



## SVR Benefits

- SB 1383 Compliance
- Carbon sequestration
- Maintain water content in compost system
- Avoided methane emissions
- Long-term lease potential and useful application of land



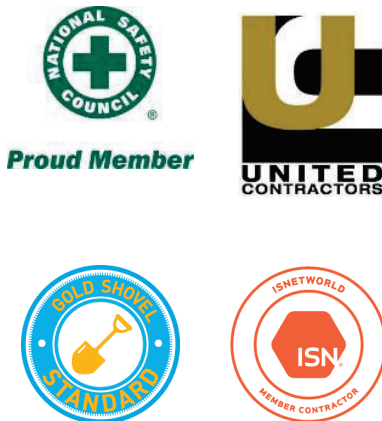


## About US

Machado & Sons Construction, Inc. was founded by Manuel Machado in 1985 and is now lead by his three sons. Throughout the years, a focus on family values, continuous improvement and forming solid relationships with clients has established Machado & Sons Construction as a respected contractor.

The company maintains a highly skilled work force and operates throughout the state of California.

## Memberships



## Affiliations



## License

California Contractors License # 719936

Classifications:

- A – General Engineering
- B – General Building
- C8 – Concrete
- C12 – Earthwork & Paving
- C61/D06 – Specialty Services
- C61/D30 – Pile Driving

# Safety



## Safety is the First Priority.

Every team member is thoroughly trained and provided with state of the art safety equipment. We pride ourselves on our safety record & current EXMOD rating of 0.71, well below the industry average of 1.00

## To help facilitate our goal of zero work injuries/incidents, MSC has established a culture of safety that includes:

- A detailed Injury and Illness Prevention Program
- OSHA 10 & 30 HR Training
- CPR/ First Aid Certification
- Daily Job Hazard Analysis
- Weekly project specific safety meetings
- Company wide drug testing
- IS Network certification and contractor qualification
- Gold Shovel Program member

Safety Manager: Marlene Tacas  
[mtacas@machadoandsons.com](mailto:mtacas@machadoandsons.com)