# CUPERTINO SANITARY DISTRICT SANITARY BOARD MEETING WEDNESDAY, OCTOBER 2, 2019

# A\_G\_E\_N\_D\_A

Meeting to be held at 7:00 p.m. in the Stevens Creek Office Center, Suite 100, 20863 Stevens Creek Boulevard, Cupertino, California.

### 1. ROLL CALL:

### 2. MINUTES:

- A. APPROVAL OF THE MINUTES OF SEPTEMBER 18, 2019
- B. APPROVED MINUTES OF SEPTEMBER 4, 2019

### 3. PERSONAL PRESENTATIONS:

THIS PORTION OF THE MEETING IS RESERVED FOR PERSONS DESIRING TO ADDRESS THE BOARD ON ANY MATTER NOT ON THE AGENDA. SPEAKERS ARE LIMITED TO THREE (3) MINUTES.

ALL STATEMENTS REQUIRING A RESPONSE WILL BE REFERRED TO STAFF FOR FURTHER ACTION. IN MOST CASES, STATE LAW WILL PROHIBIT THE BOARD FROM MAKING ANY DECISIONS WITH RESPECT TO A MATTER NOT LISTED ON THE AGENDA.

### 4. CORRESPONDENCE:

NONE

### 5. MEETINGS:

- A. REGULAR MEETING OF THE SAN JOSE/SANTA CLARA TREATMENT PLANT TECHNICAL ADVISORY COMMITTEE (TAC) TO BE HELD OCTOBER 08, 2019
- B. REGULAR MEETING OF THE SAN JOSE/SANTA CLARA TREATMENT PLANT ADVISORY COMMITTEE (TPAC) TO BE HELD OCTOBER 10, 2019

### 6. REPORTS:

**NONE** 

### 7. UNFINISHED BUSINESS:

A. BIOSOLIDS USE IN SAN DIEGO AND ORANGE COUNTIES

# CUPERTINO SANITARY DISTRICT SANITARY BOARD MEETING WEDNESDAY, OCTOBER 2, 2019

### 8. NEW BUSINESS:

NONE

### 9. STAFF REPORT:

- A. VALLCO/FLOW THROUGH CITY OF SANTA CLARA
- **B. PROSPECT PUMP STATION**

### 10. CLOSED SESSION:

A. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION in accordance with government code section Paragraph (1) of Subdivision (d) of Section 54956.9, existing litigation. Name of Case: County Sanitation District 2-3, West Valley Sanitation District, Cupertino Sanitary District, Burbank Sanitary District and the City of Milpitas v. The City of San Jose, The City of Santa Clara and Does 1 through 50 inclusive.

### 11. NEXT MEETING:

A. NEXT REGULAR DISTRICT BOARD MEETING IS SCHEDULED TO BE HELD ON WEDNESDAY, OCTOBER 16, 2019

### 12. ADJOURNMENT

# CUPERTINO SANITARY DISTRICT MEETING/EVENT SCHEDULE

# OCTOBER 2019

10/02: 1st Regular Meeting

10/08: TAC 10/10: TPAC

10/16: 2<sup>nd</sup> Regular Meeting

		00	CTOBER 20	19		
Sunday	Monday	Tuesday	Wednesday	Thursday	friday	Saturday
		ī	37 Regular Meeting	3	4	5
6	7	8	9	10	11	12
		TAC		TPAC		
13	14	15	2 <sup>nd</sup> Regular Meeting	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

# **NOVEMBER 2019**

11/06: 1st Regular Meeting (Saadati absent)

11/11: TAC

11/14: TPAC

11/20: 2<sup>nd</sup> Regular Meeting

11/28-29: Holiday-Office Closed

NOVEMBER 2019						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6 1st Regular Meeting	7	8	9
10	TAC	12	13	TPAC	15	16
17	18	19	20 2nd Regular Meeting	21	22	23
24	25	26	27	28 Holid	29  ay	30

# **DECEMBER 2019**

12/02: SCCSDA Meeting

12/04: 1st Regular Meeting

12/09: TAC

12/12: TPAC

12/18: 2<sup>nd</sup> Regular Meeting

12/25: Holiday-Office Closed

	DECEMBER 2019					
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4 1st Regular	5	6	7
	SCCSDA		Meeting			
8	9	10	11	12	13	14
	TAC			TPAC		
15	16	17	2 <sup>nd</sup> Regular Meeting	19	20	21
22	23	24	25 Holiday	26	27	28
29	30	31				

### CUPERTINO SANITARY DISTRICT BOARD MEETING MONDAY, SEPTEMBER 18, 2019

The Sanitary Board of the Cupertino Sanitary District convened this date at 7:00 p.m. in the Stevens Creek Office Center, 20863 Stevens Creek Boulevard, Suite 100, Cupertino, California.

### 1. ROLL CALL:

President Kwok called the meeting to order and the following proceedings were had to wit: Roll call was taken, with the following members in attendance:

Directors present: Patrick S. Kwok, Taghi S. Saadati, John M. Gatto, and William A. Bosworth. Director Angela S. Chen was on excused absence.

Staff present: District Manager Benjamin Porter, District Advisor Richard K. Tanaka, and Counsel Marc Hynes.

### 2. MINUTES & BILLS:

- A. On a motion by Director Gatto, seconded by Director Saadati, by a vote of 3-0-1, the minutes of Wednesday, September 4, 2019 were approved with revision. Director Bosworth abstained due to his absence on 9/4/2019 Board Meeting.
- B. By consensus, the Minutes of Wednesday, August 19, 2019 are to be Noted & Filed.
- C. The Board reviewed the August financials for payment. The Board discussed Jones Hall, postage and printing for public mailing, and tracking permit costs for small permits and permits that require greater review and installer's agreements. On a motion by Director Gatto, seconded by Director Saadati, by a vote of 4-0-0, payment of bills was approved as written.
- D. The Directors submitted their August 2019 timesheets to Staff.

### 3. PERSONAL PRESENTATIONS:

There were none.

### 4. CORRESPONDENCE:

There was none.

### 5. MEETINGS:

There were none.

### 6. REPORTS:

A. Director Bosworth was unable to attend the Santa Clara County Special Districts Association regular meeting held September 9, 2019.

### CUPERTINO SANITARY DISTRICT BOARD MEETING MONDAY, SEPTEMBER 18, 2019

- B. Manager Porter reported on the regular meeting of the San Jose/Santa Clara Treatment Plant Technical Advisory Committee (TAC) meeting held September 9, 2019. Discussion included biosolids market analysis.
- C. Director Gatto reported on the regular meeting of the San Jose/Santa Clara Treatment Plant Advisory Committee (TPAC) meeting held September 12, 2019. Discussion included biosolids market analysis combined with preliminary dewatering design.

### 7. UNFINISHED BUSINESS:

A. The Board discussed District loan, bank accounts, and potential revenue sharing commercial credit card. Loan process closed on September 12, 2019 and proceeds have been deposited into two new accounts at California First Bank and Trust. There was no Board action.

### 8. NEW BUSINESS:

There was none.

### 9. STAFF REPORTS:

- A. Manager Porter reported on the Forum Pump Station. The Wetwell wizard installation appears to be working as expected to reduce FOG and odor.
- B. Manager Porter reported on the Silicon Valley Fall Festival. The festival was a success with over 150 visitors who asked questions related to responsible use of the sanitary sewer system to be rewarded with either a shopping bag or candy for the children
- C. Advisor Tanaka reported on the Prospect Pump Station. The project has been awarded and construction is expected to begin in the end of September.
- D. Manager Porter and Advisor Tanaka reported on the status of wastewater flow report to City of Santa Clara.
- E. Manager Porter reported on the monthly maintenance report. It was a very successful month of maintenance with no spills.

### 10. CLOSED SESSION:

President Kwok adjourned the regular meeting session and opened the closed session at 8:12 p.m. in accordance with government code section Paragraph (1) of Subdivision (d) of Section 54956.9, existing litigation. Name of Case: County Sanitation District 2-3, West Valley Sanitation District, Cupertino Sanitary District, Burbank Sanitary District, and the City of Milpitas v. The City of San Jose, The City of Santa Clara, and Does 1 through 50 inclusive.

President Kwok adjourned the closed session and the regular meeting was called to order at 8:27 p.m.

There was no reportable action.

## CUPERTINO SANITARY DISTRICT BOARD MEETING MONDAY, SEPTEMBER 18, 2019

# 11. NEXT MEETING:

The next regular District Board meeting is scheduled to be held on Wednesday, October 2, 2019. Director Saadati informed the Board he will not attend the regular meeting scheduled for November 16, 2019.

# 12. ADJOURNMENT:

12. ADJOURINMENT.	
On a motion properly made and seconded, at 8	3:28 p.m. the meeting was adjourned.
Secretary Pro-Tem of the Sanitary Board	President of the Sanitary Board

# **Approved**

# CUPERTINO SANITARY DISTRICT BOARD MEETING WEDNESDAY, SEPTEMBER 04, 2019

#### **AMENDED**

The Sanitary Board of the Cupertino Sanitary District convened this date at 7:00 p.m. in the Stevens Creek Office Center, 20863 Stevens Creek Boulevard, Suite 100, Cupertino, California.

### 1. ROLL CALL:

President Kwok called the meeting to order and the following proceedings were had to wit: Roll call was taken, with the following members in attendance:

Directors present: Angela S. Chen, Taghi S. Saadati, John M. Gatto, and Patrick S. Kwok. William A. Bosworth was on excused absence.

Staff present: District Manager Benjamin Porter, District Advisor Richard K. Tanaka, and Counsel Marc Hynes.

### 2. MINUTES:

- A. On a motion by Director Gatto, seconded by Director Saadati, by a vote of 4-0-0, the minutes of Monday, August 19, 2019 were approved as written.
- B. By consensus, the Minutes of Wednesday, August 7, 2019 are to be Noted & Filed.

### 3. PERSONAL PRESENTATIONS:

There were none.

### 4. CORRESPONDENCE:

There was none.

### 5. MEETINGS:

- A. Director Bosworth is unable to attend the regular meeting of the Santa Clara County Special Districts Association regular meeting to be held September 9, 2019.
- B. Manager Porter and Advisor Tanaka both plan to attend the regular meeting of the San Jose/Santa Clara Treatment Plant Technical Advisory Committee (TAC) meeting to be held September 9, 2019.
- C. Director Gatto plans to attend the regular meeting of the San Jose/Santa Clara Treatment Plant Advisory Committee (TPAC) meeting to be held September 12, 2019.

# CUPERTINO SANITARY DISTRICT BOARD MEETING WEDNESDAY, SEPTEMBER 04, 2019

### **AMENDED**

### 6. REPORTS:

The Board and Staff attended CASA Conference held August 21-23, in San Diego, CA. Director Saadati reported on the CSRMA pre-CASA conference training held on August 21, 2019. In his opinion, the topics were good this year. President Kwok commented on diversity. Director Chen attended the Ethics Training workshop.

### 7. UNFINISHED BUSINESS:

A. The Board discussed the loan agreement with Zion. Staff was instructed to prepare a balance sheet on a regular basis.

### 8. NEW BUSINESS:

- A. Staff reported on the new Cal Bank account. The funds will go into a District account, requests for payment will be made by staff and will require signature by two Board members. On a motion by Director Gatto, seconded by Director Saadati, by a vote of 4-0-0, the Board approved opening two bank accounts (one checking and one saving).
- B. Staff reported on the Prospect Pump Station bid result and staff recommendation for contract award and payment to City of Saratoga. On motion by Director Gatto, seconded by Director Saadati, by a vote of 4-0-0, the Board approved award of contract to Con-Quest Contractors, Inc. and payment to the City of Saratoga for Encroachment Permit fees.
- C. The Board discussed Vallco draft Installer's Agreement. The Board instructed staff to change "may" to "shall" on page 2 of the agreement and talked about other developments in Cupertino. On motion by Director Gatto, seconded by Director Saadati, by a vote of 4-0-0, the Board approved draft of the Installer's Agreement and to provide copy to the Installer for review and ultimately for Board's approval.

### 9. STAFF REPORTS:

- A. District Manager Porter reported on the District's Annual Report. The Board instructed staff to review the formatting as printed so that bold font does not appear where it is inappropriate and to make sure picture boxes are aligned.
- B. District Manager Porter reported on flow through City of Santa Clara and the Board and staff discussed that new developments may be water-tight. Using the Peak Wet Weather Flow to Average Dry Weather Flow ratio determined by the existing condition may not apply to future developments.

## CUPERTINO SANITARY DISTRICT BOARD MEETING WEDNESDAY, SEPTEMBER 04, 2019

### **AMENDED**

- C. District Advisor Tanaka reported on CSDA membership. The Board's membership will run through December 2020.
- D. District Manager Porter reported on the District's annual audit.

## 10. CLOSED SESSION:

President Kwok adjourned the regular meeting session and opened the closed session at 9:05 p.m. in accordance with government code section Paragraph (1) of Subdivision (d) of Section 54956.9, existing litigation. Name of Case: County Sanitation District 2-3, West Valley Sanitation District, Cupertino Sanitary District, Burbank Sanitary District, and the City of Milpitas v. The City of San Jose, The City of Santa Clara, and Does 1 through 50 inclusive.

President Kwok adjourned the closed session and the regular meeting was called to order at 9:11 p.m.

There was no reportable action.

### 11. NEXT MEETING:

A. Next regular District Board meeting is scheduled to be held on Wednesday, September 18, 2019. Director Chen is excused from the meeting.

### 12. ADJOURNMENT:

9:15 p.m. the meeting was adjourned.
President of the Sanitary Board

(760) 438-3941 ■ inquiry@encisajpa.com





# **Biosolids Use**

In the past, solids removed by the wastewater treatment process were dewatered using belt filter presses to produce class B biosolids, which were approximately 16% solids. This heavy material was hauled to Arizona and applied to farmland used to grow crops for nonhuman consumption.

In 2009, EWA completed its Phase V plant upgrade, which included implementation of heat drying technology that produces Class A biosolids. Class A biosolids have unrestricted use, which provides EWA with more options for reuse of the product. The new processes are described below.



# **Dewatering & Drying**

After 15-20 days in the digesters, wastewater solids are pumped to the dewatering building for additional treatment. The EWPCF utilizes Alfa Laval centrifuges (which spin the solids) to remove excess water. The resultant product, which is approximately 23% solids, is considered Class B biosolids.

Solids from the centrifuges are then pumped to an Andritz DDS 40 rotating drum dryer. The dryer has a large furnace at the front that can be fueled by natural gas or by methane gas produced by the digesters. This heats the solids to approximately 200°F, which drives off moisture and kills pathogens. The heat drying process produces pellets that are >90% solids and are considered Class A Biosolids



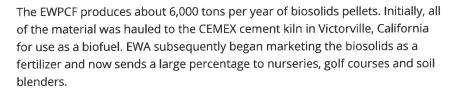
# Sorting & Storing

Pellets from the dryer are then dropped from a hopper into a shaker screen for sizing. Rejected pellets are recycled back into the dryer, while those of the correct size go through a pellet cooler and are then transferred into storage silos. The pellets are sprayed with Camelina oil for dust control and are then loaded into trucks to be transported to their final destination.



# Clean, Dry Material

The biosolids pellets produced by the heat drying process consist of a clean, dry, stable, granular material. They are a renewable resource that can be used as a biofuel or an organic fertilizer. As a biofuel, they have a heating value that is about 60% that of coal. As a slow release fertilizer, they have a Nitrogen-Phosphorous-Potassium (NPK) value of 5-6-0.





# Measurable Savings

Implementation of the heat drying process has greatly reduced EWA's costs for biosolids disposal. In the past, 4-5 truckloads per day of biosolids were hauled to Yuma. Now, due to the reduction in volume, only one truckload leaves the EWPCF each day. In addition, EWA is generating revenue from the sale of PureGreen fertilizer. As a result, the total savings is about \$2 million per year.











CREATE ACCOUNT / LOGIN (HTTPS://ONLINE.IRWD.COM/MRCJAVA/SERVLET/MRC.LOGIN? LIB=MRCIRWD2)



(https://www.irwd.com/)

SEPTEMBER 27, 2019 1 10:33AM

FACILITIES (/CONSTRUCTION/FACILITIES-CONSTRUCTION) SAVE WATER & MONEY (HTTP://RIGHTSCAPENOW.COM)

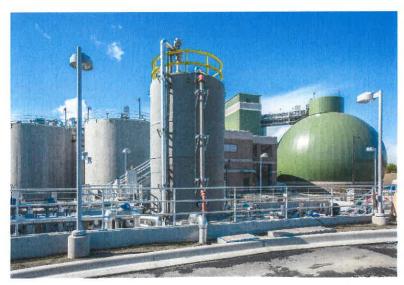
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DOING BUSINESS (/DOING-BUSINESS) ABOUT US (/ABOUT-US)

Construction (/construction/construction-projects) / Biosolids & Energy Recovery Project

# Biosolids & Energy Recovery Facilities



The Biosolids Energy & Recovery Facilities Project integrates a new state-of-the-art organics-handling system at the Michelson Water Recycling Plant. This new system includes biosolids processing, biogas management, and energy recovery systems. The system makes efficient and sustainable use of locally generated renewable resources by creating a beneficial use of biosolids and biogases that are produced during the wastewater treatment/recycling process. This project aligns with green and sustainable business practices, while at the same time creating an effective cost management of wastewater services for IRWD customers. Total Resource Management

The project is co-located at the existing MWRP, at 3512 Michelson Drive, Irvine, CA 92612. The biosolids project is being constructed within a 4.6-acre rectangular-shaped site adjacent to the MWRP. The MWRP is part of a larger property owned by IRWD, which is approximately 452 acres and includes the San Joaquin Wildlife

Contact Information: For questions or concerns, please email <a href="mailto:info@irwd.com">info@irwd.com</a> or call 949-453-5500. For emergencies during non business hours please call 949-453-5300 (24 hours).

### **Quick Links**

FY 18-19 Prop 218 Notices (/services/proposed-rates)

Board Meetings & Agendas (/about-us/board-calendar)

<u>District Election Evaluation</u> <u>Process (/about-us/district-election-evaluation-process)</u>

<u>Dam Safety Program</u> (<u>/construction/dam-safety-program)</u>

<u>Transparency & Compensation</u> (/about-us/transparency-center)

Water Quality Information (/services/water-quality-report)

Equal Access to Groundwater (/about-us/equal-access-groundwater)

IRWD Rosedale Rio Bravo
WISP Application
(/services/water#paragraph9)

Water Desalination Information (/about-us/water-desalination-information)

What are Biosolids?

Biosolids are a nutrient rich natural by-product of converting wastewater into the recycled water used throughout Irvine for landscape irrigation. Biosolids are the organics removed during the water treatment process. Biosolids contain energy that can be harnessed in two ways: The biosolds undergo further biological and heat treatment to be converted into pellets. Pellets may be used for fertilizer or an e-fuel. The biological treatment also produces biogas that will be used to generate electricity.





Project Updates

Project Map

RIGHTSCAPE

### RIGHT PLAN. RIGHT PLANTS.

For plant ideas, designs & drought tolerant landscape information

MORE INFO » (HTTPS://RIGHTSCAPENOW.COM)

### **Latest Events**

<u>UC ANR Urban Living Expo: September 28, 2019</u> (/component/jevents/eventdetail/17861/69|71/uc-arurban-living-expo-september-28-2019?filter\_reset

SEP 28, 2019 | 09:00am - 02:00pm

UC ANR Urban Living Education Expo -September 28, 2019 9:00 AM PM

7601 Irvine Blvd.

Irvine, CA 92618

For more information please click <u>here (http://screc.ucanr.edu/?calitem=458837)</u>

Butterfly Garden Volunteer Day. (/component/jevents/eventdetail/17837/69|71/buttegarden-volunteer-day?filter\_reset=1)

OCT 01, 2019 | 09:00am - 10:30am

Join us the first Sunday of every month for our Mason Butterfly Garde Volunteer Day. No gardening experience needed! Meet new friends, new gard.

Irvine Regional Farmer Market (/component/jevents/eventdetail/17799/69/17/irvin regional-farmer-market?filter\_reset=1)

OCT 01, 2019 | 09:00am - 01:00pm

Every Tuesday: Shop from a delightful selection of produce, eggs, an more from local vendors, including some that are certified organic. Ta your fr.

### **Featured News**



(/home/liquid-news/program-puts-efficiencyon-the-menu)

SEP 09,2019 | 16:57 PM

Program Puts Efficiency on the Menu (/home/liquid-news/program-puts-efficiency-on-the-menu)



(/backflow-prevention/liquid-news/o-c-sfilipino-american-chamber-presents-itsgreenest-company-award-to-irwd)

SEP 09,2019 | 16:31 PM

O.C.'s Filipino American Chamber Presents Its Greenest Company Award to IRWD (/backflowprevention/liquid-news/o-c-s-