



Central Marin Sanitation Agency

COMMISSION REGULAR MEETING AGENDA

February 11, 2025

Hybrid Meeting

6:00 p.m.

NOTE: This is a Hybrid Board meeting and will be held in-person in the Board Room of the Central Marin Sanitation Agency located at 1301 Andersen Drive, San Rafael CA 94901 and via Zoom®.

If you would like to participate via Zoom, click the link below or copy and paste the address into your browser. You may also phone-in at the number below.

Join Zoom Meeting

Online:

<https://us06web.zoom.us/j/88928139347>

Phone in:

+1 253 215 8782

Meeting ID:

889 2813 9347

Public Comment: Members of the public may directly address the Board on any item appearing on the Agenda. They may address the Board when the item is called by the Board Chair and he/she indicates it is the time for the public to speak to the agenda item. Public comments can also be submitted via email to the Recording Secretary at telam@cmsa.us.

The public comment period opens when the agenda is posted online and will close two hours prior to the start of the meeting. Include your name and the item you'd like to provide written comment on. Written comments submitted will be shared with the Board before the meeting, summarized during the Open Period for Public Participation, and included in the meeting proceedings.

To provide comments virtually during the meeting:

- If in the Zoom teleconference, use the “raise hand” feature. The Host will notify and unmute you when it is your turn to speak.
- If on a phone, press *9 (“star + 9”), and the Host will notify and unmute you when it is your turn to speak.

If you experience an issue providing comments in the meeting, please email those comments to the Recording Secretary at telam@cmsa.us.

CONTINUED ON NEXT PAGE

AGENDA

1. **6:00 p.m.: Call Meeting to Order**

2. **Pledge of Allegiance**

3. **Roll Call**

4. **Agenda Review & Approval**

5. **Open Period for Public Participation**

Open time for public expression, up to two minutes per speaker, on items within CMSA’s jurisdiction and not on the Board of Commissioners’ agenda. The Board will not discuss or take action during open time, but Board members may briefly respond to statements made or questions proposed by the public, ask for clarification from staff, refer the matter to staff, or request staff to report back to the body at a subsequent meeting concerning any matter, or take action to direct staff to place a matter of business on a future agenda.

6. **Consent Calendar**

a)	Minutes – Regular Board Meeting, January 14, 2025
b)	Treasurer’s Report – January 2025
c)	January 2025 NPDES Permit Compliance, Treatment Process, and Maintenance Activities Report
d)	Performance Metric Report – January 2025
e)	FY25 Second Quarter Budget Status Report
f)	Revised Administrative Policies #14: Internship Program Guidelines
g)	Marin Airporter Site License Agreement Amendment #2

7. **Presentation on the 2024 CWEA Engineering Achievement Award – “Achieving Energy Positive Wastewater Treatment while Tackling SB1383 Climate Goals: A 15 Year Journey”**

Recommendation: Receive the presentation highlighting the projects that formed the basis of the 2024 CWEA Engineering Achievement Award, and provide comments and/or direction to the General Manager, as appropriate.

8. **FY25 Parking Lot Rehabilitation Project – Construction Contract Award**

Recommendation: Award the construction contract for the FY25 Parking Lot Rehabilitation Project to E.E. Gilbert Construction for \$303,555, and authorize the General Manager to execute the contract agreement.

9. **Hydrogen Peroxide Facility Relocation Feasibility Study**
Recommendation: Approve hiring Carollo Engineers to perform a feasibility study to relocate the San Quentin hydrogen peroxide facility to CMSA, and provide direction to the General Manager, as appropriate.
10. **January 2025 Informational Items**
Recommendation: Informational, provide comments or direction to the General Manager, as appropriate.
11. **North Bay Watershed Association (NBWA) Report***
12. **Oral Reports by Commissioners***
13. **Oral Reports by General Manager***
14. **Adjourn to Closed Session - Conference Legal Counsel – Anticipated Litigation**
*Significant exposure to litigation pursuant to California Government Code Section 54956.9(d)(2).
Number of Potential Cases: One (1).*
15. **Reconvene in Open Session**
Report on any action taken in Closed Session.
16. **Open Period for Public Participation**
Open time for public expression, up to two minutes per speaker, on items within CMSA’s jurisdiction and not on the Board of Commissioners’ agenda.
17. **Next Scheduled Regular Meeting**
Tuesday, March 11, 2025 at 6:00 p.m.

*Information not furnished with Agenda

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact Central Marin Sanitation Agency at 415-459-1455. For auxiliary aids or services or other reasonable accommodations to be provided by the Agency at or before the meeting, please notify the Agency at least 3 business days in advance of the meeting date (meeting is the second Tuesday of each month). If the Agency does not receive timely notification of your reasonable request, the Agency may not be able to make the necessary arrangements by the time of the meeting.



Central Marin Sanitation Agency

COMMISSION REGULAR MEETING MINUTES

January 14, 2025

Via Hybrid Meeting

NOTE: The minutes are an official record of the Board meeting. There are also official audio and video recordings available on the Agency's website at www.cmsa.us. The time stamps on these minutes refer to the items' start times on the video recording of the meeting.

Please contact CMSA at 415-459-1455 for information about receiving a copy of these records.

1. Call Meeting to Order

Chair Beckman called the meeting to order at 6:00 p.m. A quorum was present.

2. Pledge of Allegiance

3. Roll Call

00:00:28

Present: Commissioners Eli Beckman, Maribeth Bushey, Dean DiGiovanni, Doug Kelly, and Mary Sylla.

Absent: None

Staff Present: Jason Dow, General Manager; Nick Talbot, Treatment Plant Manager; Peter Kistenmacher, Technical Services Manager/Assistant General Manager; Corey Spray, Administrative Services Manager; and Tiffany Elam, Recording Secretary

Public Present: None

4. Agenda Review

00:00:46

The Board approved the agenda.

5. Open Period for Public Participation

00:00:55

There were no comments from members of the public.

6. Consent Calendar

00:01:31

a)	Minutes – Regular Board Meeting, December 10, 2024
b)	Treasurer's Report – December 2024
c)	December 2024 NPDES Permit Compliance, Treatment Process, and Maintenance Activities Report
d)	Performance Metric Report – December 2024
e)	FY25 Asset Management Program – 2nd Quarter Report
f)	Revised Financial Policies – Signature Authority and Contracting
g)	Revised Administrative Policies #8, #11, #12, and #13
h)	Revised Maintenance Supervisor and Assistant Maintenance Supervisor Job Descriptions

Comments from the Public

There were no comments from members of the public.

ACTION:	Commissioner DiGiovanni moved to approve Consent Calendar items 6a through 6h; second, Commissioner Bushey.	
DIRECTION:	None	
VOTE:	The item was passed unanimously.	
	AYES:	Beckman, Bushey, DiGiovanni, Kelly, Sylla
	NAYS:	None
	ABSTAIN:	None

7. 2024 Performance Metric Report

00:01:56

GM Dow stated staff prepare monthly and annual performance metric reports with the annual report summarizing ten years of selected metric data. 2024 report highlights included wastewater treated, biosolid and biogas generated, low employee overtime numbers, and Agency awards which included GFOA and CWEA awards. GM Dow noted this was the 7th consecutive year the Agency received the NACWA Peak Performance award for 100% performance compliance.

The Board stated they were pleased with the work and congratulated GM Dow on the good work.

ACTION:	Commissioner Bushey moved to Accept the Agency’s 2024 Performance Metric Report; second, Commissioner DiGiovanni.	
DIRECTION:	None	
VOTE:	The item was passed unanimously.	
	AYES:	Beckman, Bushey, DiGiovanni, Kelly, Sylla
	NAYS:	None
	ABSTAIN:	None

8. Authorization to Bid the Grit Classifiers Replacement Project

00:04:53

GM Dow stated the project design has been completed and the construction contract is ready for public bidding. The scope of work includes the demolition and replacement of three aging grit classifiers with two new grit washers and replacement of five grip pumps. GM Dow noted the Board previously approved the pre-purchase of the grit washers and grit pumps, and the sole source authorization for the piping and distribution panel components.

The Board discussed the project scope and engineer’s estimate exceeding the CIP budget.

GM Dow noted the scope of the project expanded during the design work to include higher capacity grit pumps, structural seismic modification to the Grit room floor, and the inclusion of variable frequency drives for operational flexibility to accommodate a range of pump flow rates.

The Board discussed the upgrades.

ACTION:	Commissioner Sylla moved to adopt the construction contract documents for the Grit Classifiers Replacement Project and authorize the General Manager to advertise the project for public bidding; second, Commissioner Kelly.	
DIRECTION:	None	
VOTE:	The item was passed unanimously.	
	AYES:	Beckman, Bushey, DiGiovanni, Kelly, Sylla
	NAYS:	None
	ABSTAIN:	None

9. 2024 California Water Environment Association Awards – Redwood Empire Section 00:08:46

GM Dow stated the Agency won six awards from the California Water Environment Association (CWEA) for the Redwood Empire Section, which includes agencies in Marin, Sonoma, Napa, and parts of Mendocino and Solano counties. The Agency received awards for Safety Program of the Year, Engineering Achievement Award, and Treatment Plant of the Year, with three staff members receiving personal awards for Electrical/Instrumentation Person of the Year – Sean Clementz, Mechanical Technician of the Year – Brian Carr, Pretreatment, and Pollution Prevention (P3) Person of the Year – Eromosele Esoimeme.

The Board discussed the awards process and thanked the CMSA team for their work.

Comments from the Public

There were no comments from members of the public.

ACTION:	Commissioner DiGiovanni moved to Adopt the Resolution of Appreciation (No. 365) for Agency staff receiving the 2024 awards from the Redwood Empire Section of the California Water Environment Association; second, Commissioner Sylla.	
DIRECTION:	None	
VOTE:	The item was passed unanimously.	
	AYES:	Beckman, Bushey, DiGiovanni, Kelly, Sylla
	NAYS:	None
	ABSTAIN:	None

10. Authorization to Bid the Chlorine Contact Tank No. 4, and Primary Clarifier No. 2 and 3 Coatings and Concrete Rehabilitation Project 00:11:17

GM Dow stated last fiscal year the Agency rehabilitated Primary Clarifier No. 1 and noted the Capitol Improvement Plan (CIP) includes rehabilitated the other primary clarifiers over the next several years. GM Dow stated the scope of work for Primary Clarifier No. 2 and No. 3 will be similar to the work done to Primary Clarifier No. 1. GM Dow explained the project also includes removing a

failed coating and reapplying a new waterproofing coating along the entire length of the Chlorine Contact Tank No. 4 North wall, and applying new deck coatings on various horizontal walkways to prevent water intrusion. GM Dow stated the Agency will update the CIP in May 2025 and include funds for this additional project work.

Commissioner Kelly asked clarifying questions regarding the coating project.

GM Dow responded.

Commissioner DiGiovanni commented that he believed it was a good thing to include all the coating work at one time to complete it all as efficiently as possible.

Comments from the Public

There were no comments from members of the public.

ACTION:	Commissioner Kelly moved to adopt the construction contract documents for the Chlorine Contact Tank No. 4, and Primary Clarifier No. 2 and 3 Coatings and Concrete Rehabilitation Project and authorize the General Manager to advertise the Project for public bidding; second, Commissioner Sylla.	
DIRECTION:	None	
VOTE:	The item was passed unanimously.	
	AYES:	Beckman, Bushey, DiGiovanni, Kelly, Sylla
	NAYS:	None
	ABSTAIN:	None

11. Power Delivery Program Update

00:16:07

GM Dow stated the graph illustrates the renewable power generation for December 2024 which shows the Agency demand and how much power is generated each day, with additional power sold to Marin Clean energy. GM Dow noted the Agency was running at 119% energy positive for the month of December and 103% energy positive for the 2024 year. GM Dow stated the Agency goal is to become energy positive every day.

The Board congratulated the Agency, were excited about the revenue source for rate payers, and the Agency becoming more efficient to combat the climate crisis.

Commissioner Kelly asked GM Dow clarifying questions regarding PG&E savings.

GM Dow responded the Agency saves over one million dollars a year by generating its own energy.

Comments from the Public

There were no comments from members of the public.

12. Marin LAFCO Central Marin Wastewater Study: Public Draft

00:20:23

GM Dow stated the Agency received the LAFCO Study public draft, and he proposed several comments on the CMSA profile section and clarification on the San Quentin Village section.

Commissioner Sylla commented that RVSD planned on sending a letter to LAFCO with comments she believed to be presumptive, regarding the SRSD and CMSA consolidation and the inclusion of the organization chart. Commissioner Sylla noted that RVSD believes the consolidation has unexplored consequences. Commissioner Sylla asked GM Dow clarifying questions regarding his conversations with LAFCO regarding the LAFCO assumptions on the SRSD operations contract.

GM Dow clarified that the Agency spoke to LAFCO at the start of the contract development process, with LAFCO requesting to be kept in the loop. GM Dow noted LAFCO is being provided with copies of the Ad hoc committee agenda packets.

Comments from the Public

There were no comments from members of the public.

ACTION:	Commissioner Beckman moved to Review and discuss the Marin LAFCO Central Marin Wastewater Study, and provide comments and proposed changes to the General Manager; second, Commissioner Bushey.	
DIRECTION:	GM Dow to send comments to LAFCO.	
VOTE:	The item was passed unanimously.	
	AYES:	Beckman, Bushey, DiGiovanni, Kelly, Sylla
	NAYS:	None
	ABSTAIN:	None

13. December 2024 Informational Items

00:25:14

This item was informational, no action was taken.

Comments from the Public

There were no comments from members of the public.

14. North Bay Watershed Association (NBWA) Report

00:25:30

Nothing to report.

15. Oral Reports by Commissioners

00:25:40

Commissioner Bushey commented that there was a new Board Member appointed for SRSD, Dennis Rodini.

Comments from the Public

There were no comments from members of the public.

16. Oral Reports by General Manager

00:26:44

GM Dow referred to his handout and reported:

- Summary of Ad Hoc SRSD Contract Development expenses.

- Rescheduled January Ad Hoc meeting to February, after discussion with Chair Beckman. Noting that the Agency was preparing a tentative contract approval schedule and would be adding additional clarity to the scope of work.
- Preliminary finding of the Kennedy Jenks Seismic Study were the Primary Clarifiers, Biotowers, and Aeration Tanks are seismically sound, which frees up \$200,000 in the CIP budget.

17. Next Scheduled Meeting

00:29:42

The Board has scheduled a Regular meeting for February 11, 2025, at 6:00 p.m.

Chair Beckman adjourned the meeting at 6:30 p.m.

Respectfully submitted,

Tiffany Elam, Recording Secretary

Mary Sylla, Secretary

TREASURER'S REPORT
As of the Month Ended January 31, 2025

Description	Account Type	Book Value	Market Value (1)	% Portfolio	Budget / Proj Year End
Cash and Investments:					
WestAmerica Bank (See Schedule 1 for Account Activity)	Operating Acct	\$ 2,880,532.12	\$ 2,880,532.12		
US Bank 2015 & 2020 Revenue Bonds (Restricted)	Debt Serv Acct	9,403.09	9,403.09		
US Bank 2022 Pension Oblig Bonds (Restricted)	Debt Serv Acct	1,009.54	1,009.54		
Keenan Benefit Trust (Restricted) Dec 2024	Pension Stab Trust	930,923.48	930,923.48		
CAMP Cash Reserve Pool: 4.55%	Investment Acct	432,499.86	432,499.86		
Local Agency Investment Fund (LAIF): 4.434% Dec 2024	Investment Acct	20,182,305.61	20,182,305.61		
Total cash and investments		\$ 24,436,673.70	\$ 24,436,673.70	100.0%	
Designations of Cash and Investments:					
Current Operating Fund (2)		2,519,537.53	2,519,537.53	10.3%	
Debt Service Accounts (Restricted)		10,412.63	10,412.63	0.0%	
Employee Benefit Trust (Restricted)		930,923.48	930,923.48	3.8%	
Capital Reserves (Restricted) (3) - See Schedule 2		1,186,257.20	1,186,257.20	4.9%	1,125,100
Operating Reserve (Unrestricted) (4)		4,302,500.00	4,302,500.00	17.6%	4,302,500
Capital Reserves (Unrestricted) (5) - See Schedule 2		14,987,042.86	14,987,042.86	61.3%	7,477,169
Contingency and Emergency Reserve (Unrestricted)		500,000.00	500,000.00	2.0%	500,000
Total designations of cash and investments		\$ 24,436,673.70	\$ 24,436,673.70	100.0%	

NOTES:

- (1) Market values are per the fiscal agent's respective monthly statements
(2) Current operating fund is the residual of the other designations
(3) Includes capacity charges and debt service coverage

- (4) Operating reserves calculated at 25% operating budget
(5) Includes capital fee

Statement of Compliance

The above portfolio of investments is in compliance with the Agency's investments policy, adopted annually, and California Code Section 53601, authorized investments, and 53646, investments policy. In addition, the Agency does have the financial ability to meet its cash flow requirements for the next six months.


Corey Spray, CPA
Administrative Services Manager

Central Marin Sanitation Agency
Schedule 1 - Operating Account Activity Schedule
For the Month of January 2025

Beginning Balance at January 1, 2025	\$ 1,907,325.03
 <i><u>Cash Receipts (Deposits into Westamerica):</u></i>	
JPA Service Charges (FY25 Q3: SD#2, SRSD)	1,884,373.88
Debt Service Charges (FY25 Final payment: SD#2, SRSD)	341,360.42
Capacity Charges from RVSD: (Update to December- RVSD reported in January 1 SFD & 158 FU)	-
Permit and Inspection Fees	8,455.52
Laboratory Services (Verily Life Sciences <Nov-Dec>; & Marin County <Nov-Dec>)	3,472.00
Revenue from Septage Haulers & RVs	6,417.76
Revenue from Organic Waste Programs	18,871.54
Health & Safety Program Revenue (NSD: FY25 3Q Salary/Benefits)	24,975.98
SD#2 Operations & Maintenance Contract (FY25 November)	39,174.00
SQ Village Operations & Maintenance Contract (FY25 Nov-Dec)	1,414.71
Marin Airporter Property Use (FY25 January)	6,125.25
Marin Clean Energy electricity generation (FY25 October)	2,485.90
Interest Income: Westamerica Bank Sweep Account	1,979.06
Conference and employee reimbursement	1,231.46
Bank reconciliation period posting adjustment	99.08
Voided check(s)	15,384.08
	<u>15,384.08</u>
Total Cash Receipts	\$ 2,355,820.64
 <i><u>Cash Disbursements (Withdrawals from Westamerica):</u></i>	
January 2025 Operating account disbursements register (see Schedule 1a)	\$ 905,185.22
Regular Payroll paid 01/10/25	199,303.14
Regular Payroll paid 01/24/25	165,941.99
Board compensation reported as full stipend on Disbursement Register (paid January payroll)	(1,125.00)
Transfers to EFTPS Federal Payroll Taxes (01/10, 01/24)	100,230.42
Lost check reported prior month replaced	12,633.70
January bank reconciliation adjustment	0.01
Bank and Credit Card Fees	444.07
	<u>444.07</u>
Total Cash Disbursements	\$ 1,382,613.55
Ending balance at January 31, 2025	<u><u>\$ 2,880,532.12</u></u>

Central Marin Sanitation Agency
Schedule 1a - Operating Account Disbursements Register
For the Month of January 2025

Number	Date	Vendor/Payee	Amount	Description
2026311				Last check from prior month's register
2026312	01/02/2025	Byron Jones	185.08	Reimbursement for monthly retiree health benefits
2026313	01/02/2025	Phillip Frye	185.08	Reimbursement for monthly retiree health benefits
2026314	01/07/2025	EDIS	10,744.36	Dental replenishment and monthly fee, January 2024
2026315	01/07/2025	California State Disbursement	348.92	Garnishment for pay date 01/10/2025
2026316	01/10/2025	California State Disbursement	685.50	Garnishment for pay date 01/10/2025
2026317	01/10/2025	Aleshire & Wynder LLP	912.00	Legal Services: Employment law, January 2025
2026318	01/14/2025	California Association of Sanitation Agencies	695.00	Registration 2025 Winter Conference, Peter Kistenmacher
2026319	01/14/2025	CSRMA	105,410.00	FY25 Pooled Liability Premium, 12/31/24-2025
2026320	01/14/2025	Garrett Dossett	1,213.24	Employee reimbursement: SRJC tuition and books
2026321	01/14/2025	Jason Dow	852.61	Travel per-diem/employee reimbursement: CASA Winter Conference and CASA Airfare
2026322	01/14/2025	Grace Buell	41.98	Employee reimbursement: Office supplies-coffee
2026323	01/14/2025	Liebert Cassidy Whitmore	2,325.00	ERC membership for 2026
2026324	01/14/2025	Marin Water	4,092.85	Water service (3 invoices), 10/11-12/06/2024
2026325	01/14/2025	PG&E	1,828.78	Electricity service, 11/30-12/31/24 (2 Invoices)
2026326	01/14/2025	Angelo Sacerdote	230.00	Employee reimbursement: Grade III certification application fee
2026327	01/15/2025	BWS Distributors, Inc.	5,967.18	Safety equipment for confined space entry
2026328	01/15/2025	Don & Wolf Associates Inc	14,507.85	TESTO 350 Emissions analyzer instrument
2026329	01/15/2025	Environmental Express Inc.	527.92	Consumable single-use BOD bottles
2026330	01/15/2025	Fastenal Company	2,048.17	Facility air handler filters supplies, and vending machine replenishment (2 invoices)
2026331	01/15/2025	Hach Company	37,163.61	Inline Ammonia monitor, communication card for conductivity probes, tubings, TSS meters (4 invoices)
2026332	01/15/2025	Idexx Distribution Inc	771.96	Laboratory 290 mL vessels
2026333	01/15/2025	Northeast-Western	707.86	Cam shaft timing pickup sensor for Jenbacher engine
2026334	01/15/2025	Pace Supply Corp.	8,974.89	SD2: Force main air release valves (2 invoices) (Note B)
2026335	01/15/2025	Pure Effect Inc	2,517.04	Siloxane media disposal
2026336	01/15/2025	Sentry	4,000.00	Sentry subscription for aeration basins and Sentry probes services (Final) (2 invoices)
2026337	01/15/2025	Sta-Clean Services Inc	3,800.00	Janitorial service, December 2024
2026338	01/15/2025	Yamaha Golf Cars Of California, Inc	24,024.08	2 electric Yamaha carts
2026339	01/17/2025	Lystek International LTD	15,213.29	Biosolids beneficial reuse fee, December 2024
2026340	01/17/2025	Polydyne, Inc.	76,357.34	Clarifloc (1 Delivery)
2026341	01/17/2025	Thatcher Company of California, Inc.	8,412.57	Sodium Bisulfite (1 delivery)
2026342	01/17/2025	Univar USA Inc	102,604.88	Sodium Hypochlorite (6 deliveries)
2026343	01/17/2025	USP Technologies	14,938.62	Hydrogen Peroxide (1 delivery)
2026344-2026389	01/17/2026	46 employees	13,500.00	CWEA RES 2024 Safety, Treatment Plant, Engineer Achievement Awards
2026390	01/24/2025	California State Disbursement	685.50	Garnishment for pay date 01/24/2025
2026391	01/24/2025	California State Disbursement	348.92	Garnishment for pay date 01/24/2025
2026392	01/24/2025	Airgas USA, LLC	107.61	Welding supplies
2026393	01/24/2025	Allied Fluid Products Corp	477.97	24" gaskets for Ross Valley interceptor
2026394	01/24/2025	American Society of Safety	260.00	ASSP Professional membership fee
2026395	01/24/2025	Caltest Analytical Laboratory	689.70	Nutrient Removal Project: Sludge testing
2026396	01/24/2025	Claremont EAP	4,500.00	Employee Assistance Program flat annual rate
2026397	01/24/2025	Comcast	224.11	Internet service back-up, 01/04-02/03/2025

Central Marin Sanitation Agency
Schedule 1a - Operating Account Disbursements Register
For the Month of January 2025

Number	Date	Vendor/Payee	Amount	Description
2026398	01/24/2025	CWEA TCP	900.00	CWEA RES Annual Awards Dinner (18 attendees)
2026399	01/24/2025	Department of Industrial Relations	350.00	Elevator state permit fee
2026400	01/24/2025	Diamond Tire Center	50.00	Electric cart tire repair (2 invoices)
2026401	01/24/2025	Environmental.com	99.31	Laboratory sample containers
2026402	01/24/2025	Fastenal Company	260.02	Stainless steel hardware
2026403	01/24/2025	GFOA	710.00	FY24 ACFR and FY24 PAFR application fees
2026404	01/24/2025	Grainger	1,898.35	Rain bib, rubber coupling, conduit covers, v-belts, Draeger tubes, hose bibs for tank#5, jigsaw blades, manual reset switch wedge anchors, lead acid RV battery, saw blades (11 invoices). SQPS: pressure switch (1 invoice) (Note B)
2026405	01/24/2025	Gutierrez, Christopher	239.00	Employee reimbursement: CWEA membership renewal
2026406	01/24/2025	Hach Company	92.95	Nitrate calibration
2026407	01/24/2025	Horizon Dist. Inc	118.74	PVC pipe cutter tool
2026408	01/24/2025	Idexx Distribution Inc	293.82	Laboratory micro vessels
2026409	01/24/2025	Industrial Heat Tech Inc	1,672.41	Gaskets for Waukesha heat exchanger
2026410	01/24/2025	Kemira	17,288.12	Ferric Chloride (1 delivery)
2026411	01/24/2025	Kone Inc	202.71	Elevator monthly maintenance, January 2025
2026412	01/24/2025	Marin Color Service	469.84	Paint and painting supplies, December 2024
2026413	01/24/2025	Marin County Tax Collector	2,642.25	Legal Services: General counsel, October-December 2024
2026414	01/24/2025	Marin Sanitary Service - 0004321	1,119.60	Recycling disposal, December 2024
2026415	01/24/2025	Marin Sanitary Service - 0033224	1,141.00	Rag bins, December 2024
2026416	01/24/2025	Pace Supply Corp.	211.65	Saw blades, and service charge (2 invoices)
2026417	01/24/2025	Peter Kistenmacher	118.00	Employee Per Diem: CASA Winter Conference
2026418	01/24/2025	Platt	472.28	Electrical ground lid, emergency light fixture, voltage labels (3 invoices)
2026419	01/24/2025	Progent Corporation	99.95	IT support, January 2025
2026420	01/24/2025	Rexel	118.88	SD2: Conduit, union fitting, and explosion proof fitting (2 invoices) (Note B)
2026421	01/24/2025	Robert Emter	353.46	Employee reimbursement: Grade 5 certification fee
2026422	01/24/2025	Ryan Word	300.00	CWEA RES 2024 Safety, Treatment Plant, Engineer Achievement Awards
2026423	01/24/2025	Sacerdote Angelo	190.25	Employee reimbursement: IWT1-A, IWT1-B courses
2026424	01/24/2025	Tiffany Elam	300.00	CWEA RES 2024 Safety, Treatment Plant, Engineer Achievement Awards
2026425	01/24/2025	UBEO Business Services	977.75	Usage payment for three printer/copiers, 10/17-12/24/2024
2026426	01/24/2025	VWR International	3,221.16	Laboratory filters, nitrile gloves, 10 ml tubes, pipettes, agar, deionized water, water test strips, chemicals sulfide and conductivity chemicals, weighing dish, broths, dehydrated culture (13 invoices)
2026427	01/24/2025	Water Components & Bldg. Supp.	107.84	Epoxy and ball valve (2 invoices)
2026428	01/24/2025	Wells Fargo Vendor	757.22	Lease payment for 3 printers, 01/20-2/19/25
2026429	01/24/2025	Western Exterminator Co., Inc.	288.68	Pest control, December 2025
2026430	01/29/2025	Yamaha Golf Cars of California, Inc	200.32	Electric cart volt reducer
2026431	01/24/2025	MSA Corporate Center	2,364.60	SD2: LEL sensor for Paradise pump station (Note B)
TOTAL - CHECKS			512,711.63	

Payments by ACH:

Date	Vendor/Payee	Amount	Description
01/27/2025	Amazon	1,163.08	Communication mod, ethernet, dialer, batteries (7 invoices)
01/02/2025	Cal Public Medical	96,368.83	Medical insurance for January 2025
01/03/25	Cal-Card	31,827.57	State of California purchase card for November-December 2024
01/10/2025	CalPERS	48,075.62	Retirement pension contribution: Agency and employees, PPE 01/10/2025 (Note C)
01/24/2025	CalPERS	48,223.19	Retirement pension contribution: Agency and employees, PPE 01/24/2025 (Note C)
01/10/2025	Employment Development Department	21,144.66	State and SDI Taxes, PPE 01/10/2025
01/24/2025	Employment Development Department	17,442.40	State and SDI Taxes, PPE 01/24/2025

Central Marin Sanitation Agency
Schedule 1a - Operating Account Disbursements Register
For the Month of January 2025

Number	Date	Vendor/Payee	Amount	Description
	01/16/2025	Carollo Engineers, Inc.	37,968.57	Prof Svcs: Nutrient Removal Alternatives Evaluation, December 2024 (payment #3)
	01/15/2025	Dean DiGiovanni	309.50	Travel Per-diem, CASA 2025 Winter Conference (\$210.82 to be reimbursed)
	01/15/2025	IEDA, Inc.	994.52	Labor relations consulting, January 2024
	01/02/2025	Lincoln Financial Group	2,963.14	Life insurance, January 2025
	01/10/2025	MissionSquare Retirement Trust-457	1,550.00	Deferred compensation contributions, PPE 01/10/2025 (Note A)
	01/24/2025	MissionSquare Retirement Trust-457	1,550.00	Deferred compensation contributions, PPE 01/24/2025 (Note A)
	01/10/2025	Nationwide Retirement	30,663.98	Deferred compensation contributions, PPE 01/10/2025(Note A)
	01/24/2025	Nationwide Retirement	31,004.34	Deferred compensation contributions, PPE 01/24/2024 (Note A)
	01/10/2025	Navia Benefit Solutions	900.07	Flexible spending account, PPE 01/10/2025
	01/24/2025	Navia Benefit Solutions	782.76	Flexible spending account, PPE 01/24/2025
	01/10/2025	Public Agency Retirement Svcs	36.24	Retirement pension contribution: Part-time employees, PPE 01/10/2025
	01/24/2025	Public Agency Retirement Svcs	648.68	Retirement pension contribution: Part-time employees, PPE 01/24/2025
	01/10/2025	Retiree Medical Benefits	13,357.05	Reimbursement for retiree health benefits, January 2024
	01/24/2025	SEIU Local 1021	1,175.45	Union dues, PPE 01/10/2025
	01/24/2025	SEIU Local 1021	1,175.45	Union dues, PPE 01/24/2025
	01/27/2025	Tyler Technologies	12.50	In-site transaction fee, 10/1/24-12/31/24
	01/02/2025	Vision Service Plan (CA)	1,764.78	Vision insurance, January 2025
		TOTAL - ACH	391,102.38	

Board Member Compensation:

Date	Vendor/Payee	Amount	Description
01/24/2025	Eli Beckman	225.00	Stipend for 01/14/25 CMSA Commission Meeting
01/24/2025	Maribeth Bushey	225.00	Stipend for 01/14/25 CMSA Commission Meeting
01/24/2025	Dean DiGiovanni	225.00	Stipend for 01/14/25 CMSA Commission Meeting
01/24/2025	Doug Kelly	225.00	Stipend for 01/14/25 CMSA Commission Meeting
01/24/2025	Mary Sylla	225.00	Stipend for 01/14/25 CMSA Commission Meeting
TOTAL - BOARD MEMBER COMPENSATION		1,125.00	

GRAND TOTAL	904,939.01
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Notes:

- A: Not an Agency Expense. Expense funded through Payroll deduction.
- B: Not an Agency Expense. CMSA will be reimbursed for this expense.
- C: CMSA is partially reimbursed for this expense per Employee Labor Agreements.

**CENTRAL MARIN SANITATION AGENCY
SCHEDULE 2 - CAPITAL RESERVES ACTIVITY SCHEDULE**

Year-to-Date as of the Month Ended January 31, 2025

	Monthly Amounts Received (Used)	YTD Amounts Received (Used)
Restricted Capital Reserves Sources and Uses		
Capacity charges revenue	\$ -	\$ 375,662
Debt coverage collection revenue	68,272	1,027,203
Total restricted capital reserve funding sources	68,272	1,402,865
Capacity charges usage for capital (1st)	-	(375,662)
Debt coverage usage for capital (2nd)	(8,404)	(966,198)
Total restricted capital reserve uses	(8,404)	(1,341,860)
Net change		61,005
Balance - beg of year		1,125,252
Balance - end of month/year		\$ 1,186,257
Unrestricted Capital Reserves Sources and Uses		
Capital fee revenue	\$ 200,285	\$ 988,035
Cal Recycle grant proceeds received	-	761,195
Unrestricted operating-reserve-transfer-in	-	-
Total unrestricted capital reserve funding sources	200,285	1,749,230
Capital fee usage to fund CIP (3rd)	-	(433,263)
Unrestricted capital reserve draw (4th)	-	(430,403)
Unrestricted operating-reserve-transfer-out	-	(1,000,000)
Total unrestricted capital reserve uses	-	(1,863,666)
Net change		(114,435)
Balance - beg of year		15,101,478
Balance - end of year		\$ 14,987,043
Total capital reserve balances		\$ 16,173,300
Total approved CIP budget		\$ 10,364,562
Total CIP funded from capital reserve sources		(2,205,525)
Total approved capital budget remaining		\$ 8,159,036



BOARD MEMORANDUM

February 6, 2025

To: CMSA Commissioners and Alternates

From: Nicholas Talbot, Treatment Plant Manager

Approved: Jason Dow, General Manager

Subject: January 2025 NPDES Permit Compliance, Treatment Process, and Maintenance Activities Report

Recommendation: Accept the January 2025 NPDES Permit Compliance, Treatment Process, and Maintenance Activities Report.

I. NPDES Permit Compliance

NPDES permit testing for January demonstrated the treatment plant effluent was in compliance with all permit limits. The Monthly Compliance Summary Table shows the results by permitted parameter, the sample’s frequency, the sample results, and the permit limit. CMSA’s NPDES permit specifies monitoring the six-week rolling geometric mean of enterococcus bacteria which shall be calculated weekly. The rolling enterococcus geometric mean was 9.1 MPN, which is significantly lower than the permit limit of 255 MPN. The average ammonia concentration for the month was 25.7 mg/L, which is less than the monthly limit of 60 mg/L.

II. Influent and Effluent Flows

In January, 0.28 inches of rainfall was measured by the Agency’s on-site rain gauge. There were zero blend events recorded. Table 1 summarizes CMSA’s daily influent and effluent flows. Table 2 provides the daily average and total monthly influent flows for the CMSA treatment plant and its satellite collection agencies.

Table 1: CMSA Influent and Effluent Flow Summary

Flow Location	Daily Maximum	Hourly Maximum	5 Minute Maximum	Daily Average
Influent	15.66 MG	23.58 MG	25.36 MG	11.36 MG
Effluent	15.39 MG	19.02 MG	20.44 MG	9.40 MG

Table 2: Satellite Collection Agency and Total Flow Summary

Flow Type	SRSD	RVSD	SD2	San Quentin	CMSA Totals
Average Daily (MGD)	4.15 MGD	5.39 MGD	1.20 MGD	0.62 MGD	11.36 MGD
Total for Month (MG)	128.54 MG	167.26 MG	37.03 MG	19.33 MG	352.16 MG
Percent of Flow	36.5%	47.5%	10.5%	5.5%	100%

III. Treatment Process

In January, the plant operated in dry weather mode due to minimal rainfall. Operations drained and cleaned primary clarifiers, two aeration basins, one secondary clarifier, two chlorine contact tanks, and the effluent storage pond. On January 9, a 12" force main broke on the hillside outside of CMSA's fence line adjacent to the final effluent vault. Operations, laboratory, and maintenance staff responded immediately, tested the water for ammonia and chlorine, and determined it was a potable water line. Marin Municipal Water District was notified and repaired the force main. On January 17, operations assisted maintenance in clearing blockages in the Administration Building sewer drain. On January 18, operators isolated, drained, and locked out & tagged out each aeration influent line, allowing maintenance to weld new sample ports. These new sample port locations minimize clogging and ensure consistent flow to the aeration influent composite sampler, ammonia nitrate analyzer, and Sentry probes. On January 21, CMSA, San Quentin Pump Station, and San Quentin Village Pump Station experienced utility power failures. All backup generators started and ran as designed until utility power was restored, with staff resetting tripped equipment as needed. On January 22, staff cleared a clog in the discharge line of a primary clarifier scum pump. On January 23, Delta Diablo staff toured CMSA's waste activated sludge thickening facilities to assess the rotary drum thickeners, while Los Angeles County Sanitation District representatives visited that same day to discuss CMSA's Organic Waste Receiving Facility, power production, and energy efficiency capabilities.

The Mixed Liquor Suspended Solids inventory averaged 865 mg/l, which aligned with the target Mean Cell Residence Time of 3.0 days. Graph #3 shows the enterococcus MPN, which represents the effectiveness of the disinfection system. The enterococcus rolling average was 9.1 MPN/100mL, below the Agency's KPI average of 35 MPN and below the permit limit of 255 MPN.

Graph #4 shows the TSS, a good indicator of effluent quality. The TSS monthly average was 6.5 mg/l, which is 43.3% of the Agency's KPI of 15 mg/l and 21.6% of the permit's monthly average limit of 30 mg/l.

IV. Maintenance Activities

In January, the cogeneration systems supplied 99.5% of the Agency's power, with MCE providing the remainder (Graph #8). On January 6, maintenance replaced the internal hose and lubricant in digester feed pump after a rupture. On January 8, a final effluent sample pump developed a pinhole leak and was replaced with an in-stock spare. On January 16, temporary total suspended solids probe installations were completed at No. 1 & 5 primary clarifier effluent locations. On January 22, E/I technicians removed digital input wires and replaced with ethernet cables to the effluent pump station and chlorine contact tank valve actuators for upgraded PLC Modbus integration. On January 24, all return activated sludge pump variable frequency drive replacement installations were completed. On January 28, maintenance investigated irregular chemical dosing on a sodium hypochlorite water champ flash mixer. Staff found a cracked chemical fitting and replaced it to restore normal operation. Staff also added relays to the water champ mixers to enable automated restarts after a utility failure, ensuring adequate and constant chemical dosing.

Attachment:

- January 2025 NPDES Permit Compliance, Treatment Process, and Maintenance Activities Report.

NPDES Permit Compliance, Treatment Process, and Maintenance Activities Report

January 2025

Staff attending and receiving awards at the CWEA Redwood Empire Section Annual Banquet



Monthly Compliance Summary Table
Central Marin Sanitation Agency
January, 2025
Final Effluent Monitoring

Parameter	Limit Type	NPDES Monitoring Frequency	CMSA Monitoring Frequency	Results	Units	Limit
Carbonaceous Biochemical Oxygen Demand (cBOD)	Weekly Maximum Average	1/Week	3/Week	8.8	mg/L	Maximum 40
	Monthly Average	1/Week	3/Week	6.9	mg/L	Maximum 25
cBOD Removal	Monthly Average	1/Week	3/Week	96	%	Minimum 85
Total Suspended Solids (TSS)	Weekly Maximum Average	2/Week	3/Week	7.0	mg/L	Maximum 45
	Monthly Average	2/Week	3/Week	6.5	mg/L	Maximum 30
TSS Removal	Monthly Average	2/Week	3/Week	96	%	Minimum 85
Chlorine Residual	Hourly Maximum	Continuous	Continuous	0.05	mg/L	Maximum 0.56
Ammonia	Monthly Average	2/Month	1/Week	25.7	mg/L	Maximum 60
	Daily Maximum	2/Month	1/Week	33.0	mg/L	Maximum 120
pH	Instantaneous	Continuous	Continuous	6.4	SU	Minimum 6
	Instantaneous	Continuous	Continuous	7.4	SU	Maximum 9
Bacteriological Analysis						
Enterococcus	6-Week Geomean	2/Week	3/Week	9.1	MPN/100mL	Maximum 255
	10% Maximum	2/Week	3/Week	16.0	MPN/100mL	Maximum 1,055
Metals Analysis						
Copper	Daily Maximum	Monthly	Monthly	4.9	ug/L	Maximum 84
	Monthly Average	Monthly	Monthly	4.9	ug/L	Maximum 48
Cyanide	Daily Maximum	Monthly	Monthly	J1.1	ug/L	Maximum 37
	Monthly Average	Monthly	Monthly	J1.1	ug/L	Maximum 21
Semiannual and Quarterly Analysis						
Mercury	Weekly Average	Quarterly	Quarterly	0.0065	ug/L	Maximum 0.072
	Monthly Average	Quarterly	Quarterly	0.0065	ug/L	Maximum 0.066
	Annual Load	Quarterly	Quarterly	0.035	kg/yr	Maximum 0.11
Chronic Toxicity (EFF-002)	Pass/Fail	Semiannual	Semiannual	*	Pass/Fail	Pass Minimum
	Effect	Semiannual	Semiannual	*	%	50% Maximum
Chronic Toxicity (SUR-001)	Pass/Fail	Semiannual	Semiannual	*	Pass/Fail	Pass Minimum
	Effect	Semiannual	Semiannual	*	%	50% Maximum
Permit Analysis						
Dioxin - TEQ Sum	Daily Maximum	1/Permit	1/Permit	*	ug/L	Maximum 2.8E-08
	Monthly Average	1/Permit	1/Permit	*	ug/L	Maximum 1.4E-08
PCB Aroclor Sum	Sum	1/Permit	1/Permit	*	ug/L	Maximum 0.012

* Monitoring Not Required This Month ND = None Detected X = Data not available at report time J = Detected but not Quantified

Glossary of Terms

NPDES Permit Compliance Summary Table

- **Ammonia:** We analyze the final effluent for ammonia due to its toxicity to aquatic organisms and potential for providing nutrients to algae in the San Francisco Bay. The permit has a maximum daily limit of 110 mg/L and a monthly average limit of 60 mg/L.
- **Carbonaceous Biochemical Oxygen Demand (cBOD):** The amount of dissolved oxygen needed by microorganisms (biomass) to reduce organic material in the effluent. Effluent permit limits require removal of 85% influent cBOD, a monthly average of concentration of less than 25 mg/L cBOD and a weekly average concentration of less than 40 mg/L.
- **Chlorine Residual:** The secondary effluent is disinfected with hypochlorite (chlorine), and then the residual chlorine is neutralized with sodium bisulfite to protect the Bay environment. The final effluent chlorine residual hourly average limit is 0.56 mg/L, which is monitored continuously.
- **Chronic Bioassay:** A 7-day test of *Mysida* shrimp's exposure to final effluent in a static renewed tank to determine their survivability. The permit requires that we maintain a less than a 50 percent survival effect.
- **Copper:** Our permit requires monitoring of the final effluent for a variety of different metals and has limits for Copper and Mercury. The Copper monthly average limit is 48 ug/L, and the daily maximum limit is 84 ug/L. The remaining metals are monitored only.
- **Cyanide:** A byproduct of potential source control activities and is also a by-product of the disinfection process, and our permit requires monthly sampling and analysis. The Cyanide monthly average limit is 21 ug/L, and the daily maximum limit is 37 ug/L.
- **Dioxin:** Our permit requires monitoring of 17 dioxin-like compounds once per permit cycle. It has a limit for the weighted sum of these 17 dioxin compounds, referred to as the Dioxin Toxic Equivalency (TEQ). The Dioxin TEQ monthly average limit is 0.014 pg/L and daily maximum limit is 0.028 pg/L.
- **Enterococcus:** Enterococcus bacteria are the indicator organisms for the determination of the effectiveness of the disinfection process. The Enterococcus six-week rolling geometric mean limit is 255 MPN/100mL and the Enterococcus 10 percent monthly maximum limit is 1,055 MPN/100mL.
- **pH:** pH is a measurement of acidity, with pH 7.0 being neutral and higher pH values being basic and lower pH values being acidic. Our effluent pH must stay within the range of 6.0 to 9.0, which we monitor continuously.
- **Mercury:** Our permit requires monitoring of the final effluent for a variety of different metals, and has limits for Copper and Mercury. The Mercury monthly average limit is 0.066 ug/L, the weekly average limit is 0.072 ug/L, and the annual average loading limit is 0.11 kg/yr. The remaining metals are monitored only.
- **Total Suspended Solids (TSS):** Measurement of suspended solids in the effluent. Our permit requires removal at least 85% of the influent TSS, and that the effluent limit is less than 45 mg/L as a weekly average and less than 30 mg/L as a monthly average.

EXECUTIVE SUMMARY PROCESS PERFORMANCE DATA
January 2025

The removal efficiencies shown are based on the monthly average of the following treatment processes that were in service.

PRIMARY CLARIFIER PERFORMANCE

Total Suspended Solids (TSS) in:	448.9	mg/l	<i>Expected removal efficiencies as outlined in Metcalf & Eddy Wastewater Engineering Manual.</i>
TSS out:	60.6	mg/l	
Percent Removal Achieved:	86.5	%	Design 50-70% Removal
Total Biochemical Oxygen Demand (BOD) in:	218.8	mg/l	
BOD out:	144.0	mg/l	
Percent Removal Achieved:	34.2%		Design 25-40% Removal
Plant Influent Flows:	11.4	MGD	

SECONDARY SYSTEM PERFORMANCE
AERATION TANKS/ACTIVATED SLUDGE

Dissolved Oxygen set point:	2.3	mg/l
MLSS:	865	mg/l
MCRT:	3.0	Days
SVI:	173	

SECONDARY CLARIFIERS

WAS concentration:	5,553	mg/l
TSS out:	8.4	mg/l
Secondary System TSS Removal	86.1	%

FINAL EFFLUENT

Effluent TSS for the month:	6.5	mg/l	(Maximum Limit: 30mg/l)
Week #1 weekly average	6.6	mg/l	(Maximum Limit: 45mg/l)
Week #2 weekly average	6.6	mg/l	"
Week #3 weekly average	6.0	mg/l	"
Week #4 weekly average	7.0	mg/l	"
Week #5 weekly average	6.6	mg/l	"
Monthly average TSS removal efficiency through the plant:	96	%	(Minimum Limit: 85%)

Effluent CBOD:	6.9	mg/l	(Maximum Limit: 25mg/l)
Week #1 weekly average	5.0	mg/l	(Maximum Limit: 40mg/l)
Week #2 weekly average	6.3	mg/l	"
Week #3 weekly average	6.0	mg/l	"
Week #4 weekly average	8.8	mg/l	"
Week #5 weekly average	8.5	mg/l	"
Monthly average CBOD removal efficiency through the plant:	96	%	(Minimum Limit: 85%)

Disinfection Dosing Rate:	2.5	mg/l	monthly average
Ammonia Monthly Average:	25.6	mg/l	(Maximum 120)
Enterococcus six-week Geometric Mean:	9.1	MPN	(Maximum 255)
Enterococcus 10% Maximum:	16.0	MPN	(Maximum 1,055 MPN)
Effluent pH for the month:	Min	6.4	(Min 6.0)
	Max	7.4	(Max 9.0)

DIGESTER TREATMENT

Thickened Waste Concentration from the RDT:	5.38	%
Volatile Solids destroyed:	85.9	%
Cubic feet of biogas produced:	9,585,090 (Total)	309,196 (Daily Average)
Temperature of the digesters:	101.8	degrees Fahrenheit

EXECUTIVE SUMMARY PROCESS PERFORMANCE DATA
January 2025

The removal efficiencies shown are based on the monthly average of the following treatment processes that were in service.

DEWATERING

Centrifuge feed concentration:	2.5	%
Biosolids concentration:	25.3	%
TSS of the centrate:	234	mg/l
Centrifuge solids capture:	99.33	%
Polymer use per dry ton of biosolids:	18.71	#/dry ton
Polymer feed rate per run:	3.42	gpm
Concentration of the polymer batches:	0.328	%
Sludge feed rate per run:	47.5	gpm

Comments:

The treatment plant performed well, and all online equipment operated without incident.

Graph #1:

Depicts the total influent flow (from all collection agencies) entering the treatment plant.

The red graph line represents total influent flows; and the blue bars depict the CMSA rain gauge recordings for the month.

Graph #2:

Depicts individual collection agency flows.

The Y-axis is in the flow range of 0-30 MGD.

Graph #3:

Depicts the enterococcus most probable number (MPN) results which are an indication of the performance of the disinfection system.

The 6-week geometric mean of 9.1 MPN for the month remained well below the Agency KPI of 35 MPN and permit limit of 255 MPN.

Graph #4:

Depicts the total suspended solids in the effluent.

Our monthly average was 6.5 mg/l versus our KPI of 15 mg/l and NPDES permit monthly average limit of 30 mg/l.

Graph #5:

Depicts the effluent CBOD which is measuring the oxygen demand of the wastewater.

The effluent CBOD average was 6.9 mg/l, below our NPDES limits of 40 mg/l weekly and 25 mg/l for the month. The effluent CBOD remained below the Agency KPI of 15 mg/l for the entire month.

Graph #6:

Depicts the degree to which the biosolids have been dewatered.

Our biosolids % concentration met or exceeded our KPI of 25% for most of the month. On ten days, biosolids % were below KPI due to training being completed with newer operators. Biosolids % concentration increased at the end of the month as newer operators dialed in centrifuge parameters. No dewatering operations were conducted on one day, 1/19.

Graph #7:

Depicts the amount of biogas that is produced in the digesters, measured by a flow meter, and then used to produce electricity.

Biogas production averaged 309,196 cubic feet per day, above our monthly KPI of 200,000 cubic feet per day.

Graph #8:

This graph depicts the amount of energy produced through cogeneration versus the energy purchased from MCE for Agency operations, and the green line represents power exported to the grid. The Agency exported 99,867 kWh in January.

Glossary of Terms

Process Performance Data Sheet

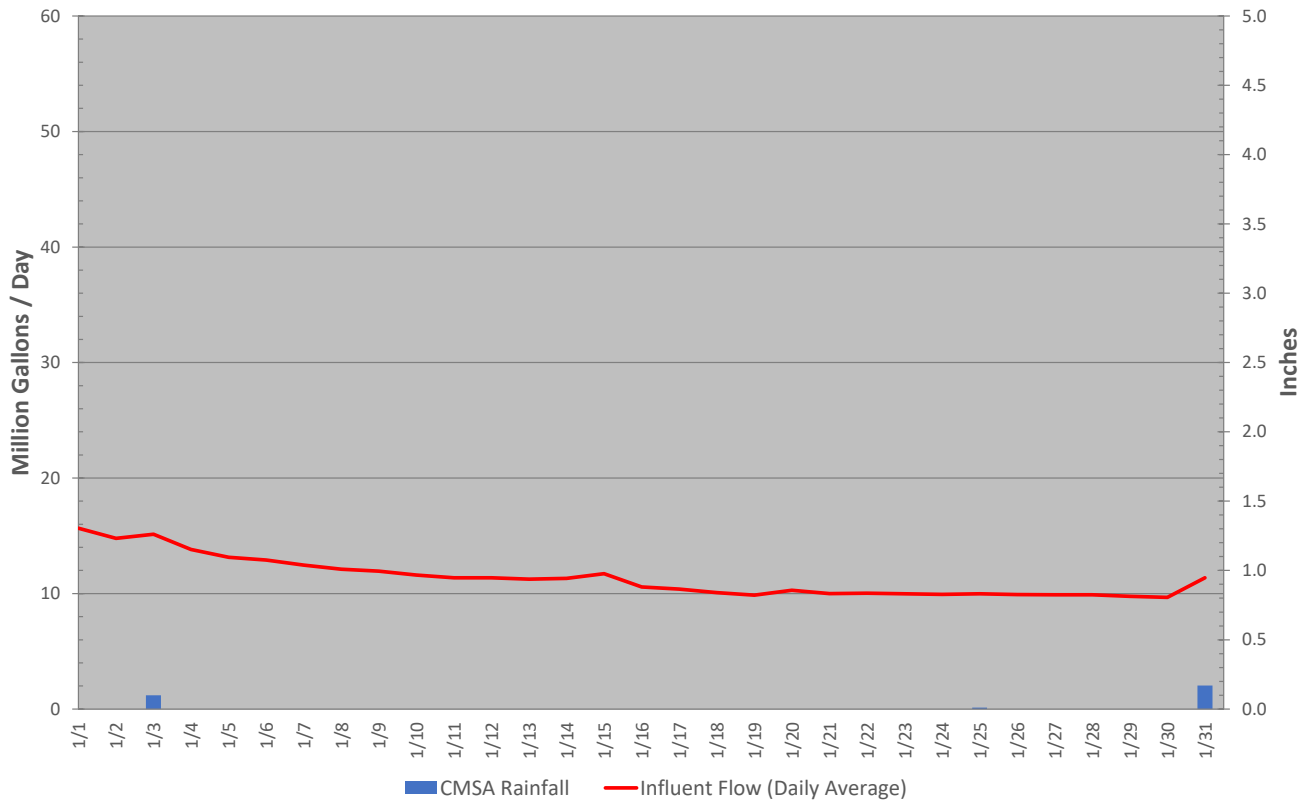
- **Aeration Tanks:** A biological process that takes place after the biotowers, where biomass (microorganisms) is mixed with the wastewater to feed on dissolved and suspended organic material. High speed blowers are used to provide compressed air to mix the tank contents.
- **Anaerobic Digesters:** In the anaerobic digestion process, organic material removed in the primary and secondary clarifiers is digested by anaerobic bacteria. The end products are methane, carbon dioxide, water, stabilized organic matter, and some inorganic material.
- **Biosolids:** Anaerobically digested solids that are removed from the two digesters, dewatered, and then beneficially reused. Beneficial reuse may include landfill alternate daily cover (ADC), land application in the summer as a soil amendment and fertilizer, or converted into a liquid fertilizer for agricultural applications.
- **Biotower:** A biological treatment process, occurring after the primary clarifiers and before the aeration tanks, in which the wastewater trickles over a biomass-covered media. The biomass feeds on the dissolved and suspended solids in the wastewater.
- **Centrifuge:** Process equipment used to dewater biosolids prior to beneficial reuse.
- **Cogeneration System:** A system comprised of a dual-fuel engine coupled to an electric generator that is used to produce energy to power the Agency facilities. Fuels the system uses are methane biogas produced in the anaerobic digesters and, when biogas is not available, purchased natural gas. As well as generating electricity, the system supplies heat for plant processes and building heating.
- **Chlorine Contact Tanks (CCTs):** The final treatment process is disinfection and de-chlorination. The CCTs allow contact time for injected chlorine solution to disinfect the wastewater. Sodium bisulfite, the de-chlorination chemical, is introduced at the end of the CCTs to neutralize any residual chlorine to protect the San Francisco Bay environment.
- **Rotary Drum Thickener (RDT):** Waste activated sludge removed from the secondary clarifiers is thickened in rotary drum thickeners before being transported to the anaerobic digesters. Thickening removes some of the sludge's water content, to decrease hydraulic loading to the digesters.
- **Final Effluent:** After all the treatment processes are completed, the final effluent is discharged into to central San Francisco Bay through a 10,000-foot-long deep-water outfall.
- **Mean Cell Residence Time (MCRT):** An expression of the average time that a microorganism will spend in the secondary treatment system.
- **Mixed Liquor Suspended Solids (MLSS):** The liquid in the aeration tanks is called MLSS and is a combination of water, solids, and microbes. Suspended solids in the MLSS measured in milligrams per liter (mg/l).

- **Most Probable Number (MPN):** Concentrations, or number of colonies, of total coliform bacteria are reported as the “most probable number.” The MPN is not the absolute count of the bacteria but a statistical estimate of their concentration.
- **Polymer:** Polymer is added to digested sludge prior to dewatering to improve solids coagulation and water separation.
- **Primary Clarifier:** A physical (as opposed to biological) treatment process where solids that settle or float are removed and sent to the digesters for further processing.
- **Return Activated Sludge (RAS):** The purpose of returning activated sludge (biomass) to the aeration tanks is to maintain a sufficient concentration of microbes to consume the wastewater’s dissolved solids.
- **Secondary Clarifiers:** Provides settling for the biomass after aeration. Most of the settled biomass is returned to the aeration tank as return activated sludge (RAS) and some is sent to the RDT unit as waste activated sludge.
- **Sludge Volume Index (SVI):** This is a calculation used to indicate the settling ability of the biomass in the secondary clarifiers.
- **Thickened Waste Activated Sludge (TWAS):** Waste activated sludge is thickened in the RDTs, and then the TWAS product is pumped to the digester for processing.
- **Volatile Solids:** Organic content of the wastewater suspended solids.
- **Waste Activated Sludge (WAS):** Biomass that is removed from the secondary clarifiers pumped to the RDTs for thickening.

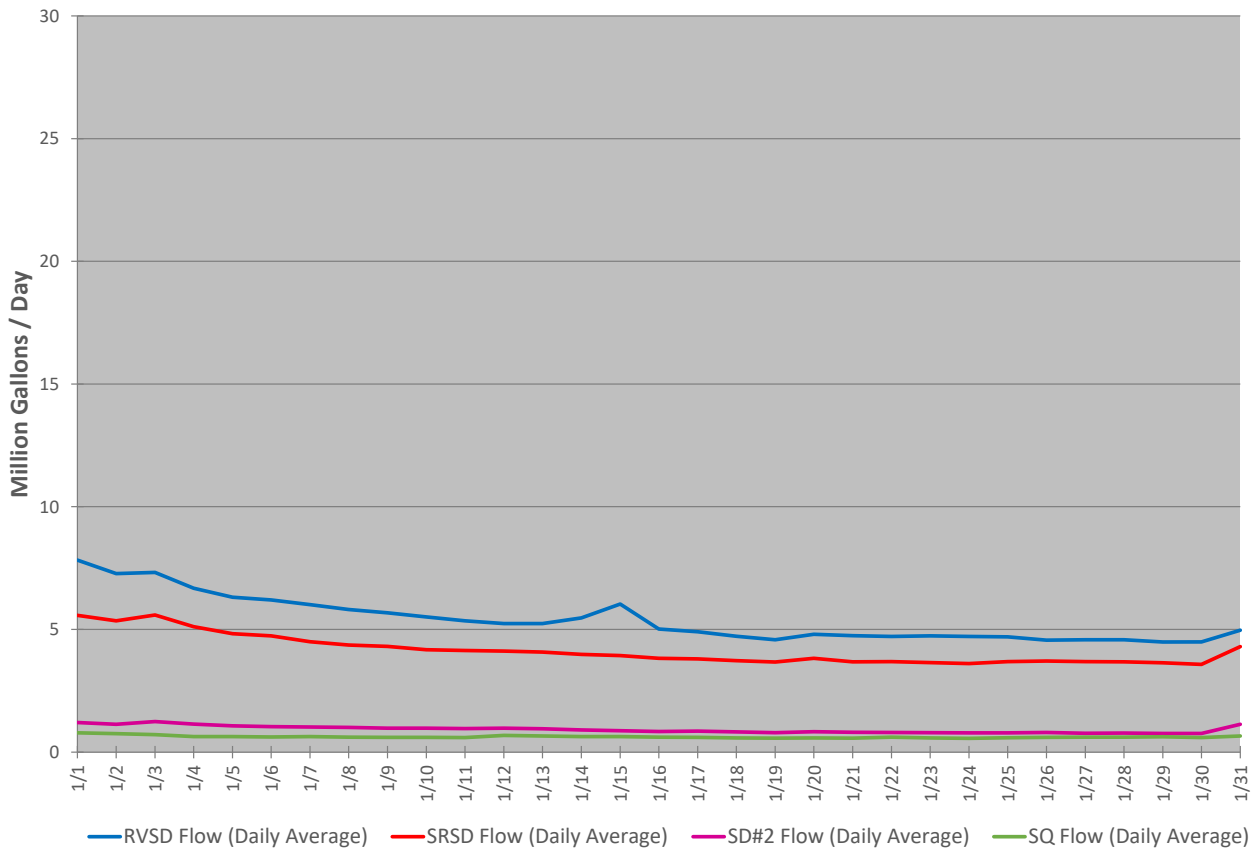
Units of Measurement

- kg/month (Kilograms per Month): 1 kilogram = 2.205 lbs.
- KPI (Key Performance Indicators): The Agency’s process performance goals.
- Kwh (Kilowatt Hours): A unit of electric power equal to using 1 Kw for 1 hour.
- Milligrams per Liter (mg/L): A measure of the concentration by weight of a substance per unit volume. For practical purposes, one mg/L is equal to one part per million (ppm).
- MPN/100mL (Most Probable Number per 100 milliliters): Statistical estimate of a number per 100 milliliters of a given solution.
- Percent by Mass (% by mass): A measure of the combined mass of a solute + solvent.
- Percent by Volume (% by vol): A measure of the volume of a solution.
- ug/L (Micrograms per Liter of Solution): Mass per unit volume.

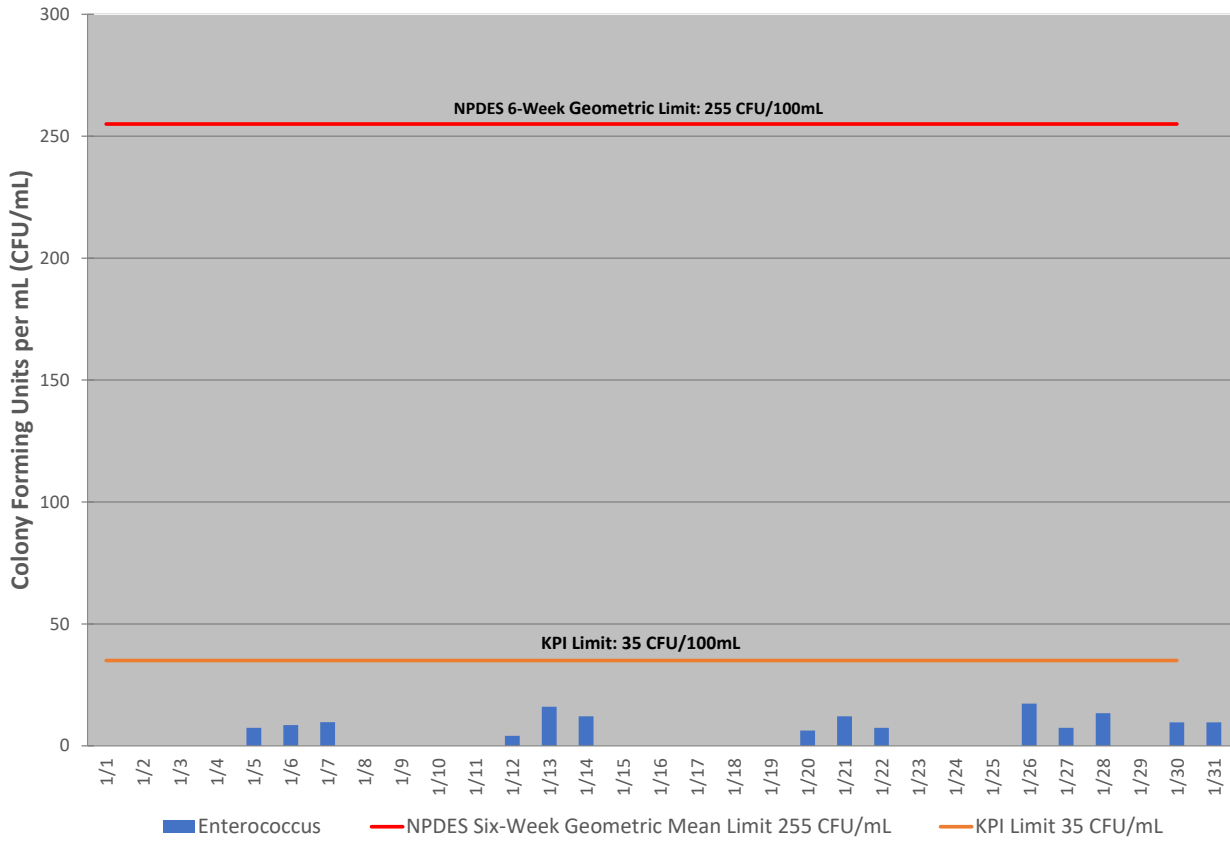
Graph #1: CMSA Influent Flow and Rainfall



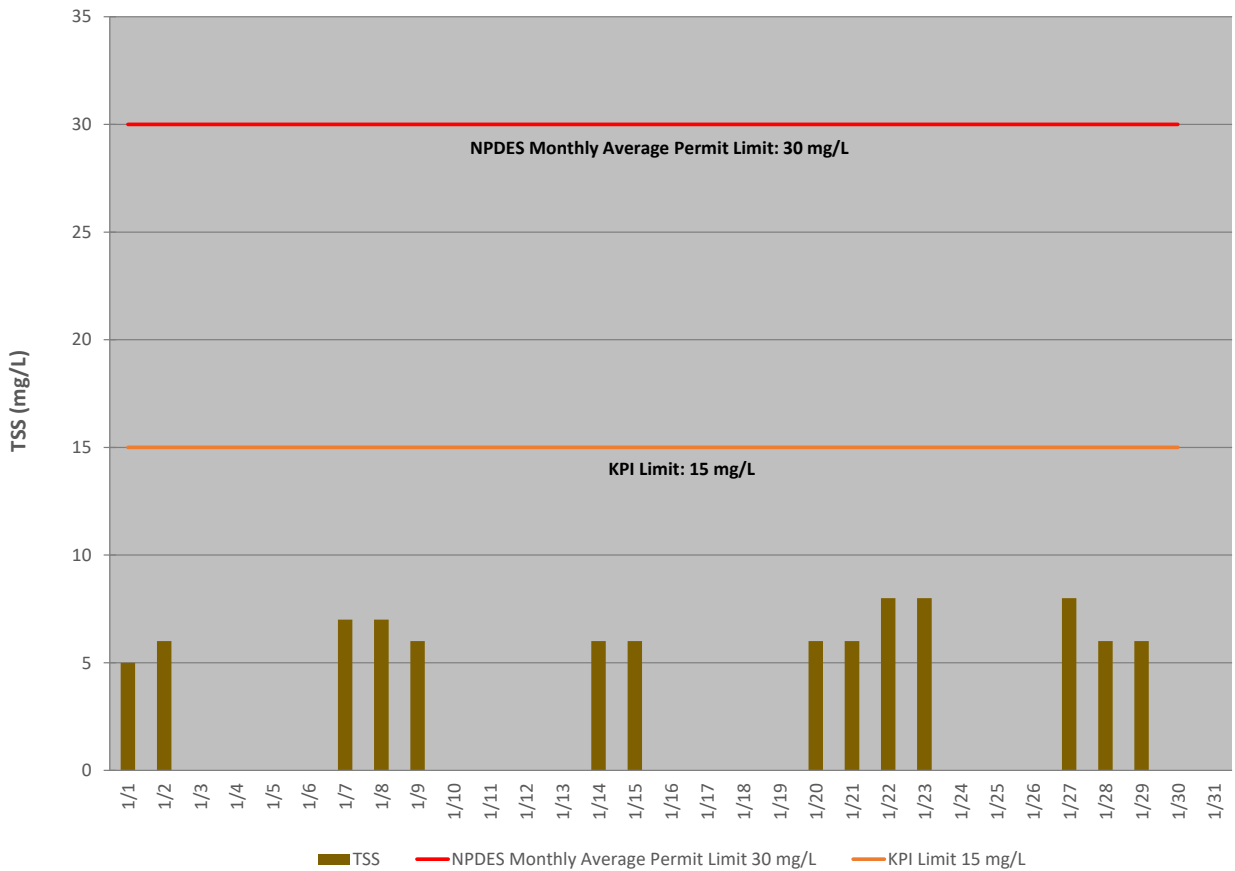
Graph #2: Collection System Influent Flows



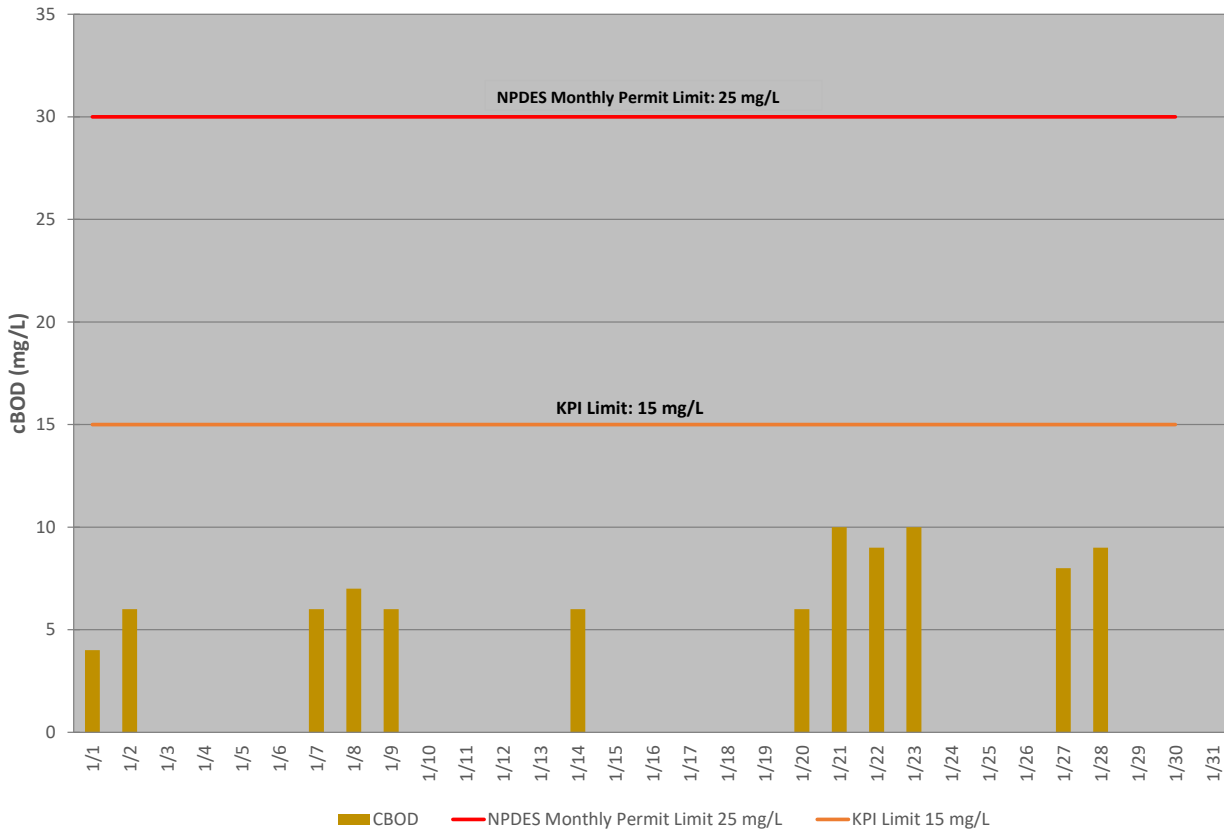
Graph #3: Enterococcus



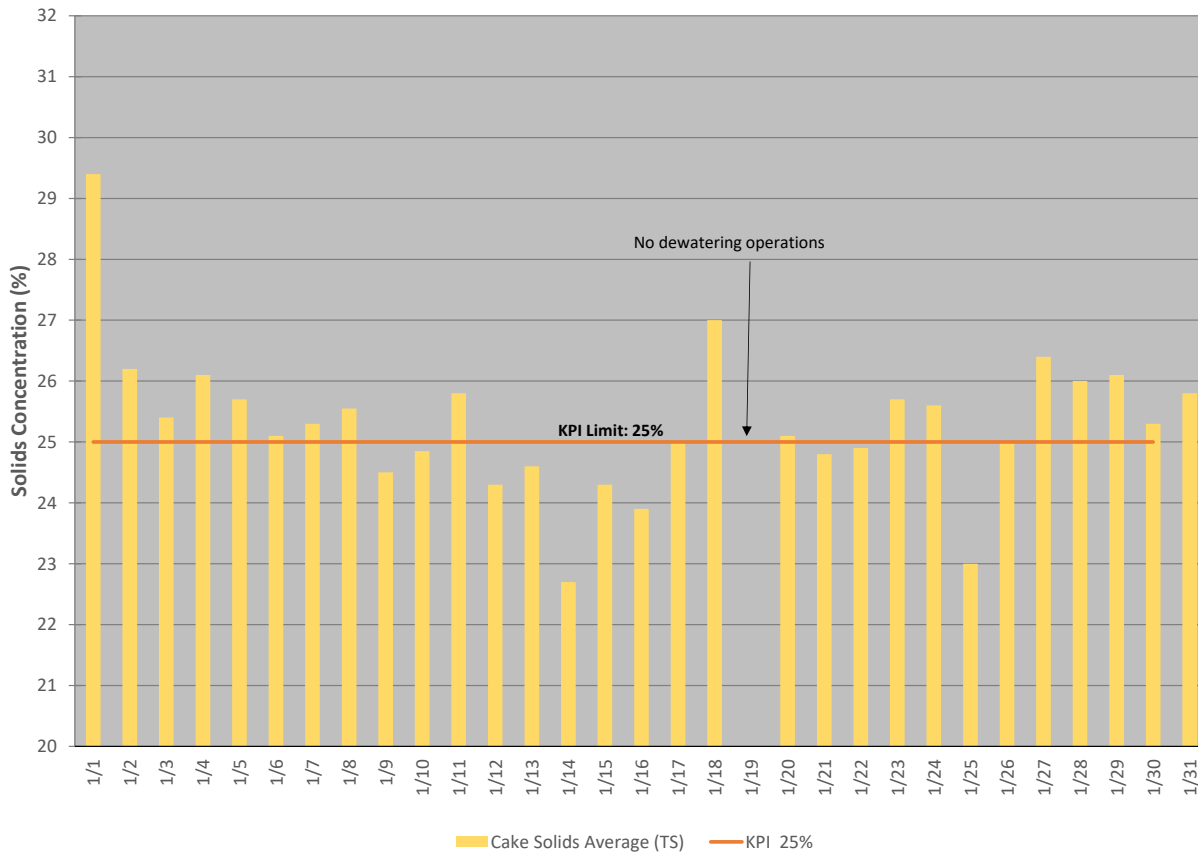
Graph #4: Final Effluent Total Suspended Solids



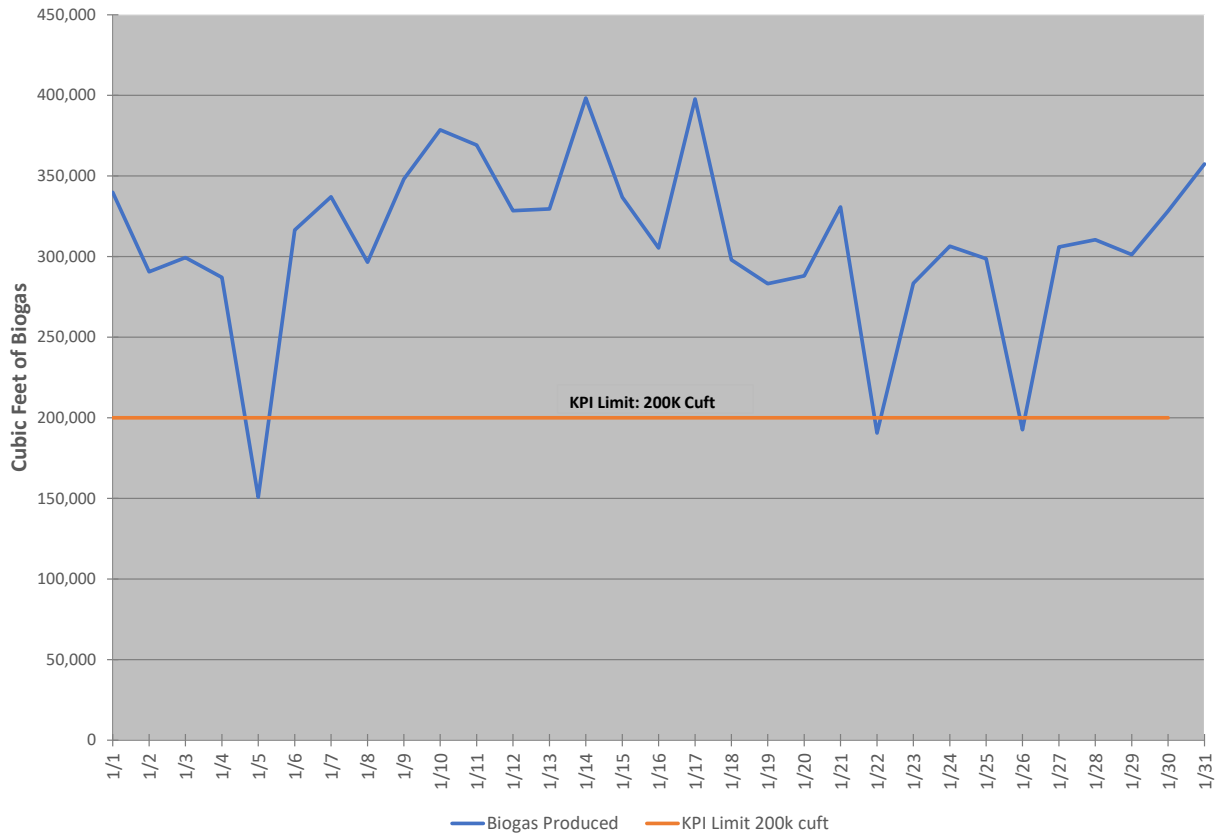
Graph #5: Carbonaceous Biochemical Oxygen Demand (cBOD)



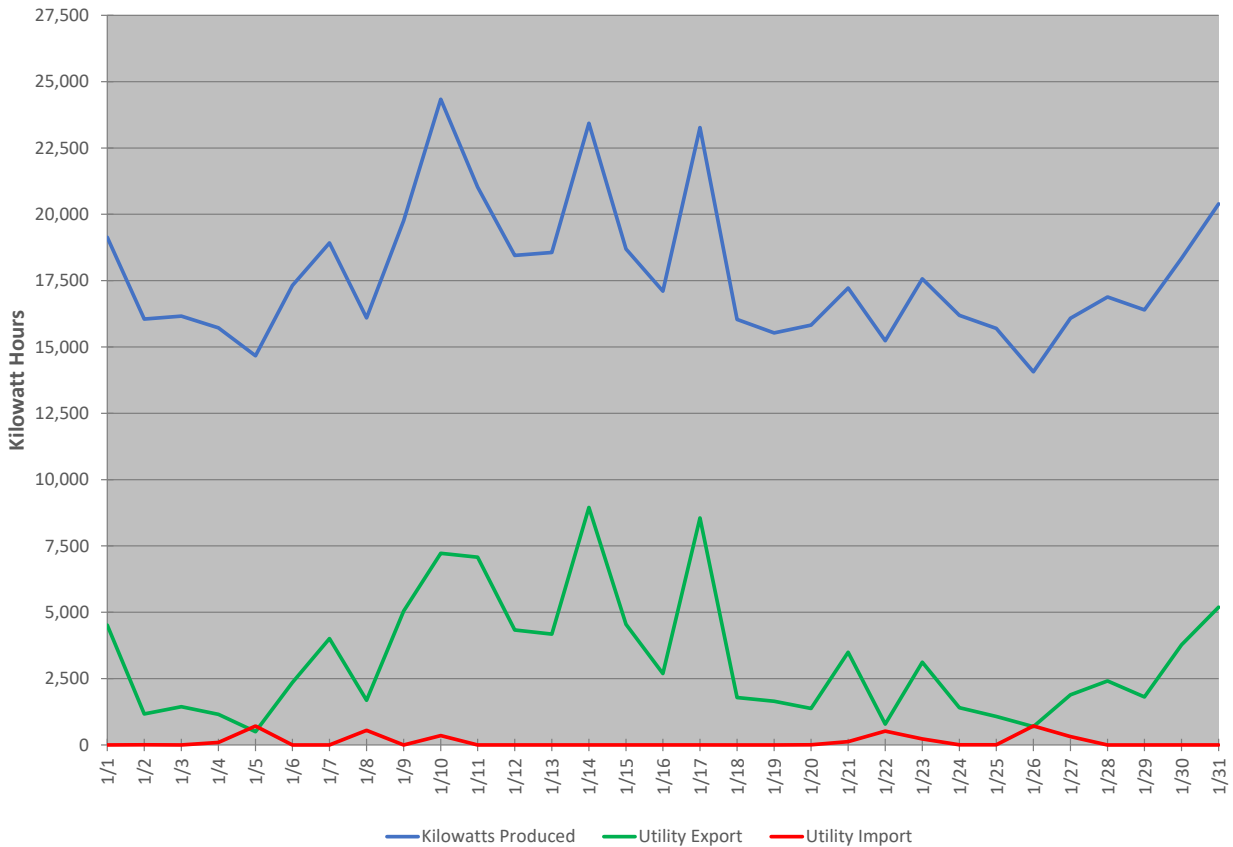
Graph #6: Biosolids Solids Concentration



Graph #7: Biogas Production



Graph #8: Power Distribution





BOARD MEMORANDUM

February 6, 2025

To: CMSA Commissioners and Alternates

From: Jason Dow, General Manager

Subject: Performance Metric Reports – January 2025

Recommendation: Accept the January 2025 Performance Metric Reports.

Performance Summary: The Agency’s performance in operations and maintenance activities, regulatory and environmental compliance, public education, and outreach met or exceeded, with a couple exceptions, all our metric goals/targets. Noteworthy metrics or variances are described below.

Table I – Treatment/Process Metrics

January was an unusually dry month during the wet weather season, and there were only two minor rain events. Due to a continued high number of organic waste deliveries over the month, several of the Power Produced metrics (Item 8) exceeded their ranges, such as power produced from biogas and natural gas, power produced from biogas and delivered to MCE, and cogeneration system uptime.

Table II – Employee Metrics

Training over the month included professional development training for several staff; many staff completing their assigned virtual employment law training on Preventive Workplace Violence and Preventing Harassment and Discrimination; several employees taking Welding and Cutting Safety Training; and operations, maintenance, and environmental services staff participating in the Marin CUPA training on Underground Storage Tank Monitoring systems.

One employee completed web-based training on Introduction to Incident Command System Basics and Incident Command System for Initial Response. Nine other employees will take this training over the next few months.

The General Manager and Technical Services Manager/AGM attended the CASA Winter Conference in Palm Springs.

Table III – Public Outreach

Five odor notifications were posted to the Agency website in January, and there were no public odor complaints. Four notifications were for draining primary clarifiers, aeration tanks, and secondary clarifiers on various days after rain events as influent flows subsided, and one notification was for draining a chlorine contact tank to perform routine preventative maintenance.

Monthly public education events may include staff attendance at public outreach events, school classroom and/or juggler show presentations, and Agency tours, as presented below.

Public Outreach Events

There were not any public education events in January.

School Events – Juggler Show Presentations and Classroom Events

Rock Steady Juggling provides elementary school outreach presentations, and gave one presentation in January.

Date	School	Attendees
1/29	St. Isabella School in San Rafael	221

CMSA Tours

Date	Group	Attendees
1/17	Leadership Academy Mentor	1
1/22	LA County Sanitation Agency	7
1/23	Delta Diablo Sanitation District	9

Table IV – Environmental and Regulatory Compliance Metrics

There were no final effluent or air permit exceedances during the month.

Attachment:

- January 2025 Performance Metric Report

TABLE I - TREATMENT/PROCESS METRICS

Metric	Definition	Measurement	Range/Target/Goal
1) Wastewater Treated	Volume of wastewater influent treated in million gallons (Mg); <i>Year to date in billion gallons (Bg)</i>	352.2 Mg; 0.35 Bg	165 – 820 Mg/month
2) Recycled Water Use	Volume of recycled water produced and used on-site, in million gallons (Mg) Volume delivered at the truck fill station, in thousand gallons (Kg)	25.4 Mg 58.0 Kg	25 - 40 Mg variable
3) Biosolids Reuse	Reuse at the Redwood Landfill, in wet tons (wt) Fertilizer and soil amendment at land application sites, in wet tons (wt) Bio-Fertilizer production at the Lystek facility, in wet tons (wt)	297.5 wt 0 wt 175 wt	360 – 665 wt
4) Conventional Pollutant Removal	Removal of the conventional NPDES pollutants - Total Suspended Solids (TSS) and Biological Oxygen Demand (BOD) a. tons of TSS removed; % TSS removal b. tons of BOD removed; % BOD removal <i>(a) BOD data for January 27-29, 2025, were not available at time of report generation.</i>	204 tons; 96% 232 tons; 96% ^(a)	> 85% > 85%
5) Priority Pollutants Removal	Diversion of priority NPDES metals from discharge to the San Francisco Bay: a. % Mercury, for current quarter b. % Copper	82 % 73 %	88 – 99% 75 – 90%
6) Total Inorganic Nitrogen	Total Inorganic Nitrogen in final effluent (Permitted May – September) a. % of Monthly Total Limit b. May – September rolling monthly average	N/A N/A	<100% <1300 kg
7) Biogas Production	Biogas generated in our anaerobic digesters, in million cubic feet (Mft ³) Natural gas equivalent of the biogas, in million cubic feet (Mft ³)	9.58 Mft ³ 6.13 Mft ³	7.0 - 10.5 Mft ³ 4.5 - 6.7 Mft ³
8) Power Produced	Power produced from cogeneration of biogas and purchased natural gas - in kilowatt hours. (kWh) Power produced from cogeneration of biogas and delivered to the MCE Cogeneration system runtime on biogas, <i>in hours (hrs.); % time during month</i> Agency power demand supplied by renewable power, % Cogeneration system uptime, <i>in hours; % time during month</i> Biogas value (natural gas cost equivalent).	550,143 kWh 99,867 kWh 699.94 hrs; 94.0% 95.0% 740.63 hrs; 99.5% \$59,909	380 - 480,000 kWh 40,000 - 70,000 kWh 600 hrs; 80% 80 - 100% 650 hrs; 87% \$30,000 - \$60,000
9) Efficiency	The cost to operate and maintain the treatment facilities per million gallons of wastewater treated, in dollars per million gallons. (\$/Mg) Energy used, kilowatt hours, per million gallons treated. (kWh/Mg)	\$3,137/Mg 1,572Wh/Mg	\$2,500 - \$5,400/Mg (wet - dry) 670 - 2,400 kWh/Mg

CMSA CY24 PERFORMANCE METRICS – January 2025

Table II – EMPLOYEE METRICS

Metric	Definition	Measurement	Target/Goal
1) Employee Training	Hours of internal training – safety, virtual, project, vendor, etc. Hours of external training – employment law, technical, regulatory, etc.	Internal = 106.25 External = 48	variable
2) Work Orders	Preventative maintenance (PM) labor hours Planned corrective maintenance (CM) labor hours; % of CM+UCM hrs. Unplanned corrective maintenance (UCM) labor hours; % of CM+PM hrs. Ratio of PM to total corrective maintenance (CM + UCM);	396.5 hrs 589.5 hrs (98.7%) 7.5 hrs (1.3%) 0.67	800 - 1,100 hrs ≥ 70% total CM hrs ≤ 30% total hours ≥ 0.45
3) Overtime Worked	Monthly hours of overtime worked; <i>Year to date hours of overtime</i> % of regular hours worked; % <i>Year to date</i>	137.5 hrs; (137.5 hrs) 1.9%; (1.9%)	< 5%
4) Internship Program	Number of high school and college student interns work hours; <i>Year to date hours</i>	0 hrs; (0 hrs)	Variable

Table III- PUBLIC OUTREACH

Metric	Definition	Measurement	Target/Goal
1) Public Education Events	Attendance at public education outreach events; # of booth visitors; <i>(YTD)</i>	0; (0)	3,000/year
2) School Events	Participation or sponsorship in school outreach events; attendees; <i>(YTD)</i>	221; (221)	variable
3) Agency Tours	Tours given to students and the public; # of people, <i>(YTD)</i>	17; (17)	variable
4) Odor Notifications	Number of odor alerts posted to the Agency website	5	1-10
5) Odor Complaints	Number of odor complaints received from the public	0	0

CMSA CY24 PERFORMANCE METRICS – January 2025

Table IV - ENVIRONMENTAL AND REGULATORY COMPLIANCE METRICS

Metric	Definition	Measurement	Range/Target/Goal
1) Permit Exceedances	# of NPDES permit exceedances # of BAAQMD permit exceedances	0 0	0 0
2) Regulatory Analyses	# of analyses by the CMSA laboratory for NPDES, stormwater, and biosolids regulatory compliance monitoring and reporting.	325	200-500
3) Process Control Analyses	# of analyses by the CMSA laboratory for process control monitoring	702	400-900
4) Contract Laboratory Analyses	# of analyses by contract laboratories for regulatory compliance reporting, and source control program monitoring.	74	25-150
5) Quality Control Testing	# of CMSA performed laboratory analyses for QA/QC purposes.	1,271	500-1,500
6) Water Quality Sample Analyses	# of ammonia, total and fecal coliform, enterococcus, and/or sulfide analyses performed for the CMSA member agencies, and occasionally source control monitoring analyses.	75	50-500
7) Source Control Inspections	Inspections of industrial and commercial businesses in the Agency’s and LGVSD’s source control programs and Novato Sanitary District’s Mercury Reduction Program – 188 businesses and 97 dental offices.	22	10-30
8) FOG Program Inspections	Inspections of food service establishments (FSEs) in the Almonte, TCSD, SD2, RVSD, SRSD, and LGVSD service areas – approx. 343 FSEs are regulated.	34	30 – 50
9) Permits Issued/Renewed	Permits issued for the source control programs – pretreatment, pollution prevention, food service establishments, and ground water discharge.	40	variable

BOARD MEMORANDUM

February 6, 2025

To: CMSA Commissioners and Alternates

From: Corey Spray, Administrative Services Manager

Approved: Jason Dow, General Manager

Subject: FY25 Second Quarter Budget Status Report

Recommendation: Review and accept the Second Quarter Budget Status Report for FY25.

Discussion: We are pleased to present the budget status report for the second quarter ended December 31, 2024. Tables for revenues by source, expenses by function, and Capital Improvement Program (CIP) by major classes of capital projects are reflected below with analytical information for each.

Highlights for the first quarter ended December 31, 2024, are as follows:

- Second quarter total revenues are at 65.7% of budget.
- Sewer service charges are at 50% as billed.
- Debt service contributions are at approximately 86.4% collected for the second quarter for debt service billed-as-due for JPA members and billed monthly for San Quentin State Prison.
- Debt service contributions include 25% coverage required by revenue bond indenture provisions, used as a financing source for the capital program.
- Capacity charges are collected at approximately 951% of budget for the second quarter through December 31, 2024.
- Total operating expenses incurred are at approximately 51.9% of budget.
- Tables for expenses by function and department are shown on page 4 of this report.
- The CIP consists of 34 different projects classified within four categories with a total FY25 budget of approximately \$10.4M and actual spent or encumbered of \$6.6M.

Description	FY25 Budget	YTD Act+Encum ⁽¹⁾	Amount (Over) Under	% Coll Spent
Total Collected Revenues	\$ 23,518,100	\$ 15,445,142	\$ 8,072,958	65.7%
Total Operating Expenses	17,257,651	8,953,549	8,304,102	51.9
Total Debt Service Payments	4,500,300	3,951,241	549,059	87.8
Total Capital Expenditures	\$ 10,364,562	\$ 6,620,470	\$ 3,744,092	63.9

⁽¹⁾ Encumbrances apply to operating expenses and capital expenditures only.

Collected Revenues by Source

Description	FY25 Budget	YTD Actual	Amount (Over) Under	% Coll
Sewer Service Charges	\$ 14,823,000	\$ 7,411,500	\$ 7,411,500	50.0%
Contributions for Debt Service	5,625,400	4,858,322	767,078	86.4
Contract Services	1,945,600	1,189,388	756,212	61.1
Program Revenues	133,900	69,647	64,253	52.0
Haulers, Permits, & Inspection Fees	355,500	282,107	73,393	79.4
Other Non-Operating Revenues	270,000	958,195	(688,195)	354.9
Interest Income	325,200	300,322	24,878	92.4
Capacity Charges	39,500	375,661	(336,161)	951.0
Total Revenues & Financing Sources	\$ 23,518,100	\$ 15,445,142	\$ 8,072,958	65.7%

Sewer Service Charges: Sewer service charges are billed at the beginning of each quarter to the JPA member agencies for operating and capital funding and are due upon receipt. Sewer service charges are the largest revenue source.

Contributions for Debt Service: Debt service contributions, including coverage, are billed to the JPA member agencies in August and February, prior to each debt service payment. San Quentin’s contributions are billed monthly and have been received through December.

Contract Services and Program Revenues: These revenues have separate tables and analytical information for each as shown on the following page.

Haulers, Permits, and Inspection Fees: Revenue from haulers is at approximately 79.4%. This revenue type represents septic receiving-facility-use-charges, organic waste disposal tipping fees, industrial waste discharge permit fees, reimbursement of costs for source control program discharger permits, and other related services.

Other Non-Operating Revenues: Other non-operating revenues consists of small dollar items, infrequent cost reimbursements, grant proceeds, and insurance dividends. The Agency is applying for reimbursement of project costs under the CalRecycle program, of which the total collection from FY23 through FY25 thus far is \$2.3M. Payment of retention is expected to be paid in the current fiscal year in the amount of approximately \$250,000.

Interest Income: California Asset Management Program (CAMP) posts interest monthly and is currently at 4.73% and the Local Agency Investment Fund (LAIF) posts interest quarterly and is currently at 4.434% of applicable account balances. Investments in LAIF have become subject to market value adjustment that is reflected as an increase or decrease to interest income.

Capacity Charges: Budgeted capacity charges are a placeholder for five residential new connections from the JPA members. Actual capacity charges received represent new connections and increased fixture units for existing connections. The Agency received proceeds for 332 new fixtures (117 SRSD, 158 RVSD, 57 SD2) and 5 new connections (4 SRSD, 1 RVSD).

Contract Service Revenues

Description	FY25 Budget	YTD Actual Collections	YTD Actual Expenses	Invoice Frequency
Marin Airporter Property Use	\$ 75,400	\$ 36,752	NA	Monthly
Marin Clean Energy	43,200	29,868	NA	NA
SQSP Wastewater Services	815,000	543,333	543,333	Monthly
SQSP Pump Station Maintenance	458,900	298,655	244,599	Monthly
SQ Village Wastewater Services	20,000	13,915	11,396	Monthly
SD2 Pump Stations	450,000	209,662	171,714	Monthly
LGUSD – FOG & Pollution Prevention	15,100	5,996	4,915	Quarterly
RVSD – FOG	23,400	20,590	18,718	Quarterly
SRSD – FOG	29,700	2,354	2,140	Quarterly
TCSD – FOG	1,500	1,177	965	Quarterly
SD2 – FOG	7,700	1,279	1,162	Quarterly
Almonte SD – FOG	1,200	1,365	1,119	Quarterly
NSD – Dental Amalgam	4,500	-	-	Annual
SRSD contract development	-	20,672	20,672	Monthly
NBWA treasurer services	-	3,770	5,894	Annual
Total Contract Service Revenues	\$ 1,945,600	\$ 1,189,388	\$ 1,026,627	

Contract Services: The Agency provides services to sanitary districts and other government entities for wastewater treatment, collection system operations and maintenance, pump station maintenance, and source control program services. Contract service revenues in total are at approximately 61.1% of budget for the second quarter. The Agency contracts with San Quentin State Prison (SQSP) for wastewater treatment services and pump station operation and maintenance, San Quentin Village (SQV) for collection system operation and maintenance, and SD2 for pump station and force main operation and maintenance. FOG and pollution prevention program activities completed through the second quarter have been billed to the respective contract agencies, and we anticipate payments in January and February.

Contract service revenues are billed to participating entities for the direct costs of materials, use of Agency equipment and supplies, along with total compensation for employee staff time at weighted labor rates. Overhead rates are in accordance with contract provisions and range from 10%-22.1% depending upon the contract. Wastewater treatment services for SQSP are based on flow and strength of the prison’s wastewater as a proportion of the total cost of CMSA operation plus capital.

Program Revenues

Description	FY25 Budget	Total Revenue	Actual Expenses	Invoice Frequency
Revenue for Health & Safety Program	\$ 98,900	\$ 55,596	\$ 52,949	Quarterly
Countywide Education Program	35,000	14,050	12,218	Quarterly
Total Contract Service Revenues	\$ 133,900	\$ 69,647	\$ 65,166	

Program Revenues: The Agency administers joint venture programs for Health and Safety (H&S) with the Novato Sanitary District (NSD) and a Countywide Education Program (CWP) with five participating wastewater agencies in Marin County. Costs of the H&S program are allocated between the Agency and NSD for salary and benefits, incidental program expenses, and outside safety training costs. The Agency manages the H&S program and charges an administrative fee to NSD, accordingly. Revenue for the H&S program is at approximately 52%.

CWP participants plan their programs as a group and budget respective annual shares of program costs based upon percentages established in the CWP agreement at the beginning of each fiscal year. The Agency purchases program materials on behalf of CWP participants and recognizes revenue for reimbursed expenditures plus an administrative fee. The CWP revised its bylaws to simplify the process to purchase program materials directly. This change was effective with the start of the current fiscal year that began on July 1, 2024.

Expenses by Function

Description	FY25 Budget	YTD Act+Encum	Amount (Over) Under	% Spent + Encum
Salaries and Benefits	\$ 11,314,650	\$ 5,578,598	\$ 5,736,052	49.3%
Biosolids Management	632,000	214,638	417,362	34.0
Chemicals and Fuel	2,063,000	1,028,624	1,034,376	49.9
Permit Testing and Monitoring	252,765	201,159	51,606	79.6
Repairs and Maintenance	827,072	539,807	287,265	65.3
Insurance	634,050	549,953	84,097	86.7
Utilities	444,200	210,442	233,758	47.4
General and Administrative	1,089,914	630,327	459,588	57.8
Total Expenses by Function	\$ 17,257,651	\$ 8,953,549	\$ 8,304,102	51.9%

Expenses by Department

Description	FY25 Budget	YTD Act+Encum	Amount (Over) Under	% Spent + Encum
Administration	\$ 4,053,164	\$ 2,243,529	\$ 1,809,636	55.4%
Health and Safety	303,900	126,078	177,822	41.5
Technical Services	3,578,665	1,836,453	1,742,212	51.3
Operations	5,230,400	2,669,553	2,560,847	51.0
Maintenance	4,091,522	2,077,937	2,013,585	50.8
Total Expenses by Department	\$ 17,257,651	\$ 8,953,549	\$ 8,304,102	51.9%

Salary and Benefits: Salary and benefit expenses include 13 of 26 payrolls that, in total, are at about 50% for the second quarter. Benefit costs include pension obligation bond debt service plus a provision to the employee benefits trust to assist the Agency with managing its pension related obligations with CalPERS. The YTD expenses include the cash-out of accrued leave balances for two retiring management employees.

General Purchasing Information: Expenses and capital disbursements follow purchasing procedures established by policies to ensure protection of public assets, fairness in the purchasing process, and transparency to the public. Purchases are recognized as expenses or additions to capital projects when the goods are received or the services performed.

General and Administrative (G&A): Expenditures are tracking at 57.8% of budget reflecting strong purchasing across all account classifications within general and administrative. The G&A expense category includes professional services (legal, financial, regulatory, etc.), operating permits, memberships in local, state, and national wastewater organizations, employee certifications, conferences, safety supplies, training, software renewals, and office expenses.

Insurance: Insurance is at 86.7% spent for the YTD reflecting annual premiums that are paid in the first half of the fiscal year. The schedule below provides the payment status for insurance coverage. Insurance premiums are paid following when policies are renewed. Workers’ Compensation insurance experienced a 28% decrease due to lower claims over the past fiscal year. Property insurance increased only 9% going into FY25, which is lower than the Agency’s anticipated 25% increase given CSRMA’s expectations on the property market activity. General liability insurance increased 8% going into FY25 primarily due to both actual losses experienced within the insurance pool and current investment market activity. Though in aggregate, the Agency is still experiencing savings in its insurance budget.

Description	FY25 Premium	Status
General Liability and Auto	107,989	FY25 paid in full
Pollution Liability	-	FY25 to be paid in April 2025
Officers Fidelity Bonds	-	FY25 (3-yr staggered terms – none billed Q1)
Commercial Crime Insurance	3,938	FY25 paid in full
Workers Compensation	172,800	FY25 paid in full
Property Insurance	265,226	FY25 paid in full

Repairs and Maintenance: Repair and maintenance expenditures currently represent approximately 65.3% of the annual budget. These expenditures encompass planned maintenance on pumps, gates, process equipment, and procurement of air purification media. Expenditure levels alone do not directly indicate the quality or volume of repair and maintenance activities. For instance, higher expenditures may reflect the purchase of materials and supplies in preparation for upcoming maintenance, while lower expenditures may indicate staff performing planned maintenance utilizing existing parts inventory. As of the end of the first quarter, the parts inventory is valued at approximately \$2.4 million, ensuring readiness for essential maintenance needs.

Chemicals and Fuel: The current fiscal year budget utilization is at 49.9%, aligning with projected expenditures. Diesel prices have remained stable. Chemical usage fluctuates throughout the year based on weather conditions. For example, warmer weather typically requires increased use of calcium nitrate and hydrogen peroxide for odor control, while disinfection and dechlorination chemicals are used more frequently during rain events when flows increase. In the first quarter and early second quarter, there tends to be higher usage of calcium nitrate and hydrogen peroxide. Higher usage of sodium hypochlorite and bisulfite is expected in the second and third quarters during the wet season. Fuel consumption for vehicles remains steady year-round.

Table of Chemical Purchases:

Description	% Budget	Number of Deliveries
Ferric Chloride	47.2%	6 delivery(s) through December 2024
Polymer	32.6%	1 delivery(s) through December 2024
Calcium Nitrate (odor control)	66.0%	18 delivery(s) through December 2024
Hydrogen Peroxide (odor control)	54.9%	13 delivery(s) through December 2024
Sodium Hypochlorite (disinfection)	54.2%	23 delivery(s) through December 2024
Sodium Bisulfite (dichlorination)	34.1%	10 delivery(s) through December 2024

Biosolids Management: Expenditures were at 34% of budget for the second quarter. Management expenses vary and are primarily dependent upon seasonal weather-related circumstances: (1) land application and alternate daily cover at the Redwood Landfill results in lower hauling and reuse tipping fee costs when compared to biofertilizer production at the Lystek facility, and (2) the volume for beneficial reuse is lower during the warmer weather spring and summer months. Lystek biofertilizer production, increased second quarter expenditures. Costs for this area are still on track for the second quarter of this budget.

Permit Testing and Monitoring: Permit testing and monitoring are at approximately 79.6% for costs associated with purchases of lab supplies and equipment rentals, NPDES and source control monitoring, and other types of monitoring/testing that were approximated at the beginning of the fiscal year to cover the entire fiscal year. Contract purchase orders for NPDES permit compliance analyses and source control monitoring have been encumbered for the entire fiscal year, resulting in the year-to-date balance. Costs for this area are on track for the second quarter of this budget.

Utilities: Utilities costs are approximately 47.4% of budget for the second quarter. The FY25 budget usage is currently at 44.0% for electricity, 32.1% for natural gas, 47.6% for water, and 54.6% for garbage, all of which align closely with projected consumption.

Debt Service Payments

Description	FY25 Budget	YTD Actual	Amount Remaining	% Spent	Debt Invoice
Principal	\$3,325,000	\$3,325,000	\$ -	100.0%	JPA-Annual SQSP-Monthly
Interest	1,175,300	626,241	549,059	53.3%	Same
Total Debt Service Payments	\$4,500,300	\$3,951,241	\$ 549,059	87.8%	

The debt service amounts shown above consist of full annual principal and interest for the 2015 and 2020 revenue bonds. The first installment paid on September 1st for each issue, contains full principal and partial interest, and the second installment paid on March 1st is interest only. Both debt service payments have been made and annual debt service for FY25 is approximately 87.8% paid. The 2022 Pension Obligation Bond’s debt service is paid in lieu of the required annual UAL cost paid to CalPERS following the Agency’s pension funding plan.

Debt service amounts are invoiced to the JPA members approximately one month in advance of when the debt service payments are due. San Quentin Prison is invoiced monthly for its proportionate share.

Capital Improvement Program

Description	FY25 Budget	YTD Actual	Encum	Amount (Over) Under	% Spent + Encum
Facility Improvements	1,918,019	558,768	91,700	1,267,552	33.9
General Equipment	764,409	447,511	15,411	301,487	60.6
Liquids Treatment Equipment and Systems	4,822,019	831,775	2,142,009	1,848,234	61.7
Solids Treatment and Energy Generation Equip and Systems	2,860,115	354,420	2,178,877	326,819	88.6
Total Cap Improv Program	\$ 10,364,562	\$ 2,192,474	\$ 4,427,996	\$ 3,744,092	63.9%

Total capital program expenditures amount to approximately \$6.6M through the second quarter, with encumbrances for outstanding contracts in the amount of approximately \$4.4M. There are payments made for numerous projects with each of the capital improvement program categories (1) Facility Improvements, (2) General Equipment, (3) Liquids, Treatment Equipment, and Systems, and (4) Solids Treatment and Energy Generation Equipment and Systems. Salaries and benefits for in-house staff are charged through time-entry to projects, where applicable, for cost reimbursement purposes such as those financed through grants or certain federal programs.

Attachment:

- Second Quarter Capital Program Budget Report



Central Marin Sanitation Agency, CA

Capital Program Budget Report FY25 Q2 (As of 12/31/2024)

		Original Total Budget	Current Total Budget	Period Activity	Fiscal Activity	Encumbrances	Variance Favorable (Unfavorable)	Percent Used	
Facility Improvements									
100-0230-550-8203	Industrial Coatings/Concrete Rehabilitation	401,700.00	401,700.00	-	-	3,350.00	398,350.00	0.83	Urban Waterproofing was retained to repair concrete cracks in Galleries B & L.
100-0230-550-8204	Outfall Inspection & Repairs	640,700.00	640,700.00	-	548,840.00	-	91,860.00	85.66	Tidal Marine was retained to remove the solids from the outfall pipeline. The work was completed in Q2.
100-0230-550-8205	Facility Improvements	197,500.00	201,819.38	-	3,505.51	31,385.00	166,928.87	17.29	Materials were procured for replacing the headworks building skylights.
100-0230-550-8206	Facility Paving/Site Work	193,600.00	193,600.00	-	3,509.00	-	190,091.00	1.81	GSE construction added a concrete step on the primary clarifier staircase in Q1.
100-0230-550-8209	SHB Elevator Control Replacement	233,000.00	233,000.00	-	-	-	233,000.00	0.00	Staff developed a scope of work for the elevator system assessment, design, and construction management support. A contract with JE Sellen for \$25.9k was executed in January 2025.
100-0230-550-8210	Facility Structures Seismic	247,200.00	247,200.00	-	2,913.30	56,964.70	187,322.00	24.22	A contract with Kennedy/Jenks Engineers for \$56.9k was executed in October 2024 to perform a seismic study on the primary clarifiers, biotowers and aeration tanks. Consultant visited the site in December and reported preliminary results in January. The final report and recommendations are expected in Q3.
	Facility Improvements Total:	1,913,700.00	1,918,019.38	-	558,767.81	91,699.70	1,267,551.87	33.9%	
General Equipment									
100-0110-550-8301	Process control	88,400.00	88,400.00	-	3,115.65	2,398.90	82,885.45	6.24	Public address system amplifiers were purchased and installed. Account funded retired annuitant labor for process control work.
100-0110-550-8302	Security/Fire Systems	23,300.00	23,300.00	-	5,319.06	2,850.00	15,130.94	35.06	An additional safety camera was installed at the treatment plant front entry road.
100-0110-550-8304	IT Hardware/Communication Equipment	70,300.00	70,300.00	-	41,524.21	-	28,775.79	59.07	55 staff workstations were purchased and are being deployed. Wireless access points were purchased and installed. Three facility phones were replaced. Two iPads for operations were purchased.
100-0230-550-8306	Laboratory Equipment	35,500.00	65,302.19	-	46,732.17	2,244.14	16,325.88	75.00	A residual encumbrance balance of \$2.2k is related to the replacement of a laboratory dishwasher with a lower priced unit and will be removed in Q3.
100-0350-550-8303	Fuel Storage Tanks	13,000.00	13,000.00	-	896.94	-	12,103.06	6.90	No account activity during this period.
100-0350-550-8305	Agency Vehicle Replacement	327,000.00	327,000.00	-	298,555.53	-	28,444.47	91.30	Two replacement Yamaha service golf carts for the operations department were purchased for \$24k.
100-0350-550-8307	Electrical Equipment	109,000.00	109,000.00	(205.72)	17,883.29	4,539.86	86,576.85	20.57	Six replacement RAS Variable Frequency Drives were purchased and installed for \$13.6k. A \$205 credit was issued for an unused RAS VFD key pad. A new Cummins load bank breaker rebuild kit was ordered.
100-0350-550-8309	Process Instrumentation	53,600.00	53,600.00	19,326.20	30,154.37	3,377.66	20,067.97	62.56	Final effluent turbidity and pH analyzers were ordered and installed. A Testo 350 Emissions Analyzer was purchased to measure emissions on the cogeneration engines.
100-0350-550-8310	Electrical Distribution System Rehabilitation	-	14,506.64	-	3,330.25	-	11,176.39	22.96	No account activity during this period.
	General Equipment Total:	720,100.00	764,408.83	19,120.48	447,511.47	15,410.56	301,486.80	60.6%	
Liquids Treatment Equipment and Systems									
100-0230-550-8412	Process piping inspection/repairs/rehabilitation	95,000.00	41,100.00	-	17,677.97	-	23,422.03	43.01	Top Line Engineers completed the pond drain headwall crack repair in November and was issued the full contract payment of \$17.2k. Maintenance also purchased 24" gaskets to replace the blind flange at the San Quentin Junction Box on the Ross Valley Interceptor.
100-0230-550-8416	Influent Flow Meter Improvement	-	70,000.00	-	-	68,543.45	1,456.55	97.92	The Board authorized the pre-purchase of the influent flowmeter for the Ross Valley Interceptor in October, and a purchase order of \$68.5k was issued to GWF. The CIP budget allocated for the pre-purchase in FY26, but the project timeline was accelerated to proactively replace the aging flowmeter before it fails. The current total budget is \$70k per Board approval in October.
100-0230-550-8417	Nutrient Removal	1,000,000.00	1,000,000.00	66,412.66	176,420.27	441,982.98	381,596.75	61.84	Carollo Engineers and Hazen & Sawyer have held several workshops to discuss sampling improvements, interim operational improvements, and nutrient removal technology screening criteria, and submitted meeting minutes, a funding matrix, and technical memoranda for staff
100-0230-550-8418	Recycled Water	100,000.00	100,000.00	-	-	-	100,000.00	0.00	No account activity during this period.
100-0350-550-8402	Plant Pumps	109,300.00	109,300.00	-	3,407.76	44,059.75	61,832.49	43.43	A replacement sump pump was ordered and installed in Gallery C sump. Encumbrance is for the secondary tank drain pump.
100-0350-550-8403	Chemical Pumps	73,200.00	73,200.00	-	18,828.24	2,619.63	51,752.13	29.30	Replacement diaphragm valves and pulsation dampeners were ordered and installed on the SBS pumps. Ferric pump rebuild kits were ordered and installed.
100-0350-550-8404	Gates Rehabilitation	253,000.00	253,000.00	-	-	225,777.50	27,222.50	89.24	Aeration basin effluent gates and chlorine contact tank inlet gates have been ordered and are awaiting delivery.
100-0350-550-8405	Headworks Equipment	1,847,000.00	1,963,737.31	6,781.50	145,112.11	1,290,031.51	528,593.69	73.08	Carollo Engineers submitted the final project plans and specifications, and has reviewed the submittals for the pre-purchased grit washers and grit pumps. The project will go out to bid in Q3.
100-0350-550-8408	Primary Clarifier Rehabilitation	1,110,500.00	1,127,981.20	20,765.79	452,128.20	25,708.84	650,144.16	42.36	The rehabilitation of Primary Clarifier No. 1 was completed in Q1 and the \$20.76k retention was released in Q2. A purchase order was issued for \$25.7k for two total suspended solids probes to monitor solids concentrations in the primary clarifiers.
100-0350-550-8413	Chemical Tanks	53,700.00	53,700.00	-	743.53	35,804.87	17,151.60	68.06	SBS replacement chemical tank no. 1 has been ordered and is awaiting delivery.
100-0350-550-8414	Piping-Valves-Operators	30,000.00	30,000.00	140.97	17,456.79	7,480.71	5,062.50	83.13	A 6" pressure reducing valve for the facility potable water line has been ordered. Replacement PVC fittings have been installed facility-wide and stocked to replenish inventory.
	Expense Total:	4,671,700.00	4,822,018.51	94,100.92	831,774.87	2,142,009.24	1,848,234.40	61.7%	



Capital Program Budget Report FY25 Q2 (As of 12/31/2024)

		Original Total Budget	Current Total Budget	Period Activity	Fiscal Activity	Encumbrances	Variance Favorable (Unfavorable)	Percent Used	
Solids Treatment and Energy Generation Equipment and Systems									
100-0230-550-8501	Emergency Generator Improvement	65,000.00	65,000.00	-	-	-	65,000.00	0.00	No account activity during this period.
100-0230-550-8505	New Cogeneration System	421,800.00	438,800.00	-	124,633.25	306,428.00	7,738.75	98.24	The \$306.4k retention for Western Energy Systems is being withheld until all the the engine controls testing activities are completed in Q3.
100-0230-550-8514	Liquid Org Waste Storage & Biogas Trmt Upg	-	6,415.00	-	6,415.00	-	-	100.00	GHD Inc. completed the as-built record drawings and the project was closed in Q1. The project was previously expected to be completed in FY24, but was delayed.
100-0350-550-8503	Centrifuge Replacement	2,025,000.00	2,025,000.00	-	168,993.31	1,798,218.72	57,787.97	97.15	Black & Veatch reviewed the centrifuge submittals and developed the 60 percent design. A design workshop was held in December. The encumbrance includes the pre-purchased centrifuges in the amount of \$1,456k and remaining consultant fees. Final design is expected to be completed in Q4.
100-0350-550-8506	Hot Water Systems	36,300.00	36,300.00	-	-	-	36,300.00	0.00	No account activity during this period.
100-0350-550-8510	Biosolids Hoppers-Maintenance	80,000.00	80,000.00	-	1.52	-	79,998.48	0.00	No account activity during this period. A check issued to a vendor during a prior period was lost which included a vendor discount. This resulted in a new check being posted outside the vendor discount period, incurring posted differential cost of \$1.52.
100-0350-550-8511	Organic Waste Receiving Facility	103,100.00	103,100.00	-	481.07	25,275.39	77,343.54	24.98	Odor abatement filters have been ordered and installed. A replacement odor scrubber tank has been ordered.
100-0350-550-8513	Jenbacher Cogeneration Maintenance	72,000.00	105,500.00	4,698.72	53,895.48	48,954.52	2,650.00	97.49	Routine long term service agreement operating hour payments were processed. Encumbrance is for the BlueSky annual source testing.
Expense Total:		2,803,200.00	2,860,115.00	4,698.72	354,419.63	2,178,876.63	326,818.74	88.6%	
Report Total:		10,108,700.00	10,364,561.72	117,920.12	2,192,473.78	4,427,996.13	3,744,091.81	63.9%	



BOARD MEMORANDUM

February 6, 2025

To: CMSA Commissioners and Alternates

From: Jason Dow, General Manager

Subject: Revised Administrative Policies #14: Internship Program Guidelines

Recommendation: Approve the revised Administrative Policy #14: *Internship Program Guidelines*.

Discussion: CMSA has Personnel, Financial, Administrative, and Safety Policy Manuals, and management staff periodically review and revise policies and procedures in each manual. In November, staff began the process to review and update the Administrative Policy Manual, which is comprised of 51 general, financial, human resources, contract administration, safety, security, and information technology policies and procedures. Several of the policies are Board approved, and staff plan to bring these individually to Board meetings over the next several months, after they are updated by staff, for consideration of approval.

Over the past couple months, the Board has approved revised policies for Disposal of Surplus Assets (#3), Cost Savings Award Program (#8), Beneficial Use of Agency Products (#11), Use of Board/Conference Room by Outside Organizations (#12), and Filming and Photographing on Agency Property (#13). Noteworthy revisions to the Internship Program Guidelines policy are shown below, and the proposed policy changes are shown in the attachment in red text.

- 1) Employment Status: The internship term may be extended beyond six months. This provides a longer term for intern training and development, and to support Agency business needs.
- 2) Procedure I.B: An intern's mentor can be any Agency employee.
- 3) Procedure II.B: Interest intern applicants are not required to meet with an academic advisor. Some applicants may not have an advisor, such as a recent graduates.

Attachment:

- Administrative Policy #14: Internship Program Guidelines

POLICY/PROCEDURE #	14
SECTION:	ADMINISTRATIVE – GENERAL
SUBJECT:	Internship Program Guidelines
DATE:	<u>5/9/2023</u>/12/25 (Board approved)

PURPOSE

~~CMSA provides~~To provide internships for students and recent college graduates who are interested in learning about careers in the water or wastewater industry.

ELIGIBILITY

Student interns may be from a Marin County high school or college, or currently enrolled in a college undergraduate or graduate degree, Career Technical Education (CTE), Regional Occupational Program (ROP), or similar program.

EMPLOYMENT STATUS

Student interns will receive an hourly pay rate within a pay range established by the Board of Commissioners. Internships will generally be for one (1) school semester or 6 months. For special assignments and projects, ~~the internship may be extended~~an additional semester or up to six (6) months. Paid interns are not eligible for Agency benefits except Workers' Compensation and state disability insurance, California paid sick time, a contribution to the Public Agency Retirement System (PARS) instead of Social Security, and otherwise to the extent required by law.

In no event will an internship exceed 960 hours in a fiscal year.

PROCEDURE

I. Intern Request

- A. Department managers may request interns by submitting a request (Exhibit A) to the General Manager for approval.

Requests must include:

- 1) Anticipated starting and ending dates.
- 2) Anticipated working hours.
- 3) A description of the projects and/or tasks to be performed and how they will be integrated into other ongoing Agency programs and activities.
- 4) How the intern will benefit from the training and experience of such work assignments.

- B. An Agency employee, ~~currently in a lead or supervisory role~~, will be designated as the intern's mentor and is responsible for the intern's day-to-day training, supervision, and evaluation.

II. Intern Advertisement and Selection

- A. Intern requests may include advertising of internship opportunities through the Marin County Office of Education and high schools, junior college, college, and university placement and counseling offices, academic departments, student associations, career/job fairs, and recognized internship programs.
- B. Applicants interested in an internship are required ~~to meet with their academic advisor, as applicable, to determine internship eligibility, and~~ provide to the Agency:
 - 1) A completed CMSA job application form.
 - 2) Proof of current enrollment in high school, an authorized academic/educational program, or proof of recent high school or college graduation.
- C. The selection process shall be conducted jointly by the department manager and designated staff. Selection criteria shall include, but is not exclusive of, core academic course work, work experience, and job application and/or resume information.
- D. The department manager and the mentor shall meet with the intern in person, via phone, or virtual conference to review the following:
 - 1) Work experience desired.
 - 2) Work hours and schedule.
 - 3) Hourly compensation.

III. Introduction and Orientation

- A. During the first week of the internship, the intern will meet with their mentor to develop and review the internship work plan. The work plan will identify learning objectives and general work tasks and activities.
- B. Interns shall receive an Agency orientation during their first week of employment that will include the following:
 - 1) CMSA overview – mission, culture, and structure.
 - 2) Conduct expectations – work rules, communication, and harassment prevention.
 - 3) Safety training – employee safety training checklist completed by Safety Officer.
 - 4) Facility tour.
- C. Guidelines for the mentor:
 - 1) Interns are not authorized to perform as, occupy, or cover for vacant Agency positions.
 - 2) Avoid skipping or compressing the onboarding process.
 - 3) Do not leave interns unsupervised.

- 4) Integrate socialization and networking opportunities.
- 5) Provide feedback and recognition on a regular basis.
- 6) Explain the significance or contribution made to the Agency while assigning projects.

IV. Evaluation

- A. Mentors are expected to evaluate intern progress on a continuous, ongoing basis.
- B. Mentor will seek out staff feedback on their intern's work performance and conduct.
- C. Department managers wishing to extend an intern's assignment beyond the original ending date must obtain advance written approval from the General Manager.
- D. At the end of the internship, the mentor shall conduct an oral interview with the intern to get feedback ~~from the student~~ about the internship experience.
- E. There shall be no expectation of continued employment at conclusion of the internship.

V. Internship Program Reporting

- A. Annually in June, managers who had an intern(s) in their respective department over the past fiscal year will prepare the following information about each internship program participant:
 - 1) Intern name.
 - 2) School attending or recently graduated from, and major course of study.
 - 3) Duration of internship.
 - 4) Assigned projects, assignments, and work activities.
- B. The General Manager will provide the Board with an internship program oral report at the July meeting.



BOARD MEMORANDUM

February 6, 2025

To: CMSA Commissioners and Alternates

From: Jason Dow, General Manager

Subject: **Marin Airporter Site License Agreement Amendment #2**

Recommendation: Approve Amendment #2 to the Site License Agreement Between CMSA and Marin Airporter, and authorize the General Manager to sign it.

Discussion: CMSA and Marin Airporter (Airporter) entered into a Site License Agreement (Agreement) in July 2019, under which Airporter parks Marin Transit District buses in the CMSA Corporation Yard, and its bus drivers park their personal vehicles in the CMSA employee parking area. The Agreement's five-year term expired in July 2024, and allows for five separate one-year extensions if requested by Airporter and approved by the CMSA Board.

In February 2024, the Board approved Amendment #1 extending the term to July 2025 and also made a few revisions to the Agreement. Airporter has requested another one-year extension to July 2026. Staff prepared Amendment #2 for the license term extension.

Fiscal Impact: Airporter's current monthly license fee is \$6,125, and in July 2025, the fee will increase by the annual Bay Area CPI (June 2024 – June 2025). In fiscal year 2025, CMSA will receive \$73,503 in license fees.

Attachment:

- Amendment #2 to the Site License Agreement Between CMSA and Marin Airporter



AMENDMENT #2

SITE LICENSE BETWEEN CMSA AND MARIN AIRPORTER

This Amendment to the Agreement is dated this _____ day of February 2025, and is made by and between Central Marin Sanitation Agency (hereinafter CMSA), a joint powers agency in Marin County, California and Marin Airporter.

RECITALS

- A. CMSA entered into a Site License Agreement (Agreement) with Marin Airporter, dated July 17, 2019, to provide parking areas for Marin Transit District vehicles and Airporter employees; and
- B. The Agreement had an initial five-year term, and allows for five separate one-year extensions; and
- C. CMSA and Marin Airporter amended the Agreement in February 2024 to extend the term one year, and Airporter now desires to amend the Agreement again to extend its term an additional year.

NOW, THEREFORE, in consideration of the recitals and mutual promises contained herein, CMSA and Marin Airporter agree to amend the above referenced Agreement as follows:

- 1) Agreement term is extended to July 17, 2026.

All other terms and provisions of the Agreement remain unchanged.

IN WITNESS THEREOF, the parties have executed this Amendment and accept all terms and conditions on this day of February 11, 2025.

Marin Airporter

Central Marin Sanitation Agency

Matt Wexler, CEO

Jason Dow, General Manager



BOARD MEMORANDUM

February 6, 2025

To: CMSA Commissioners and Alternates

From: Joyce Cheung, Senior Engineer
Peter Kistenmacher, Technical Services Manager/Assistant General Manager

Approved: Jason Dow, General Manager

Subject: **Presentation on the 2024 CWEA Engineering Achievement Award –**
“Achieving Energy Positive Wastewater Treatment while Tackling SB1383
Climate Goals: A 15 Year Journey”

Recommendation: Receive the presentation highlighting the projects that formed the basis of the 2024 CWEA Engineering Achievement Award, and provide comments and/or direction to the General Manager, as appropriate.

Discussion: In January 2025, the California Water Environment Association’s Redwood Empire Section awarded the 2024 Engineering Achievement Award to CMSA, which recognized the Agency’s Renewable Power Delivery Program (Program). The Program reached its most significant milestone in 2024 when the Agency was able to be consistently energy positive using only biogas. The Agency is one of only a very small number of global wastewater treatment plants to do so, and only the second in California to our knowledge. Supporting this achievement in 2024 was the final commissioning of a larger cogeneration engine, installation of a new above-ground liquid organic waste receiving facility, and execution of several organic waste feedstock supply agreements along with important operational enhancements. CMSA’s 15-year journey showcases how a mid-size wastewater treatment plant can successfully and continuously harness renewable energy from wastewater and liquid organic wastes, as well as meet SB1383 climate goals of diverting food waste from the landfill, through careful long-term planning and strategic implementation of critical projects.

At the January Board meeting, the General Manager shared the news of the award, and staff are excited to follow-up with a presentation on the 15-year journey and projects that led to the energy positive wastewater treatment. A draft of the presentation is attached.

Alignment with Strategic Plan: The projects identified in the Engineering Achievement Award and the Agency’s next steps to optimize operations to maximize the use of our existing infrastructure are all aligned with a strategic action from the Agency’s FY25 Business Plan to support Goal 3 – Objective 3.1 as shown below.

Goal Three: CMSA will further develop resource recovery opportunities to achieve community, environmental, and economic benefits

Objective 3.1: Implement steps to enhance the Agency power delivery program

Action: Optimize operation of organic waste receiving facilities and cogeneration system to consistently be energy positive

Attachment:

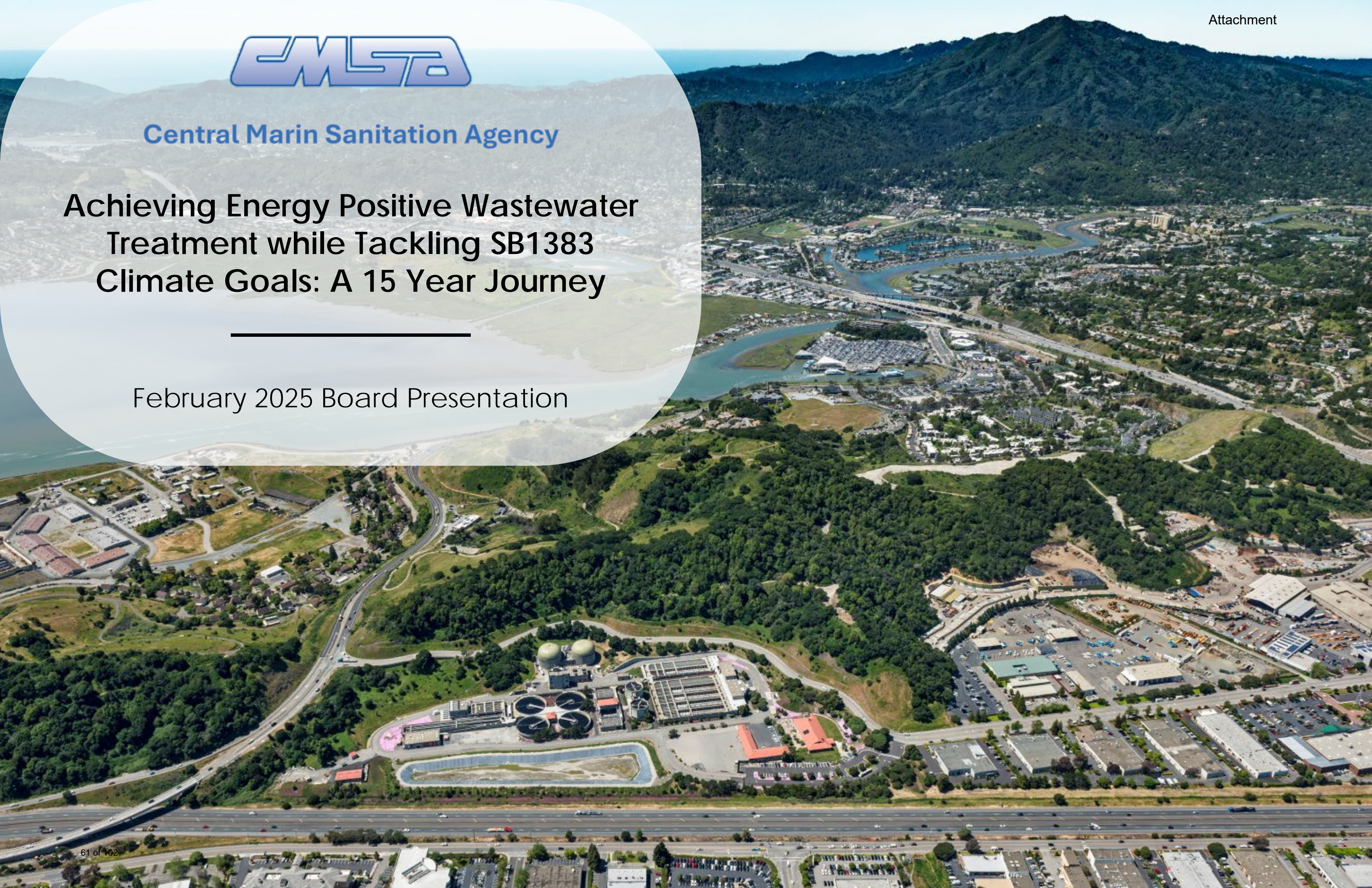
- Presentation (Draft): “Achieving Energy Positive Wastewater Treatment while Tackling SB1383 Climate Goals: A 15 Year Journey”



Central Marin Sanitation Agency

Achieving Energy Positive Wastewater Treatment while Tackling SB1383 Climate Goals: A 15 Year Journey

February 2025 Board Presentation





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Jan 2025

Power Made from Biogas
525,244 kWh

Power Used
454,753 kWh

Energy Neutrality

116%

2024

Power Made from Biogas
5,397,594 kWh

Power Used
5,251,653 kWh

Energy Neutrality

103%

Tons of Food Waste

16,000+

Diverted from Landfills since program inception

Gallons of FOG

25 million+

Delivered since program inception

Program Benefits

Annual electricity and natural gas savings
>\$1.5 million

Tipping fees and MCE revenues 2024
\$268,911

CalRecycle Grant Funding
\$2.5 million

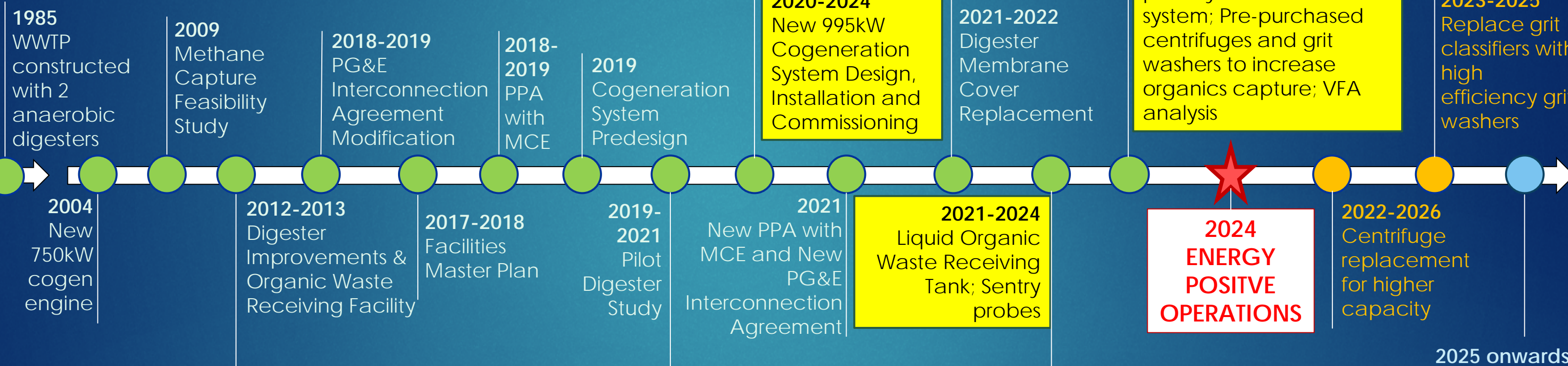
Renewable electricity production 2024
5,397,594 kWh/hr

Cogeneration system uptime 2024
98%



Timeline of Becoming Energy Positive

● Completed
● In Progress
● Planned
2024 Completed Projects



Cogeneration System Installation Project (2019-2024)

Unique Project Elements

- **First project in Bay Area** to comply with new and stringent **Air Quality** emissions limits including full Selective Catalytic Reducer operation
- **First wastewater cogeneration project in PG&E territory** permitted for full ride-through, islanding, black start and closed-transitioning functionality
- **Increased resiliency & cost savings** during power outages since cogeneration system can supply backup power using biogas
- **\$1.7 million IRS Tax Credit** application pending

New 995kW
cogeneration
engine

Liquid Organic Waste Receiving & Biogas Treatment Upgrades Project (2021-2024)

New 15,000-gallon tank

New pressure washer

New mixing pump

New organics screening system

Total Project Cost: \$3 million
Project funding: CalRecycle
\$2.5 million



Biogas Treatment Upgrades

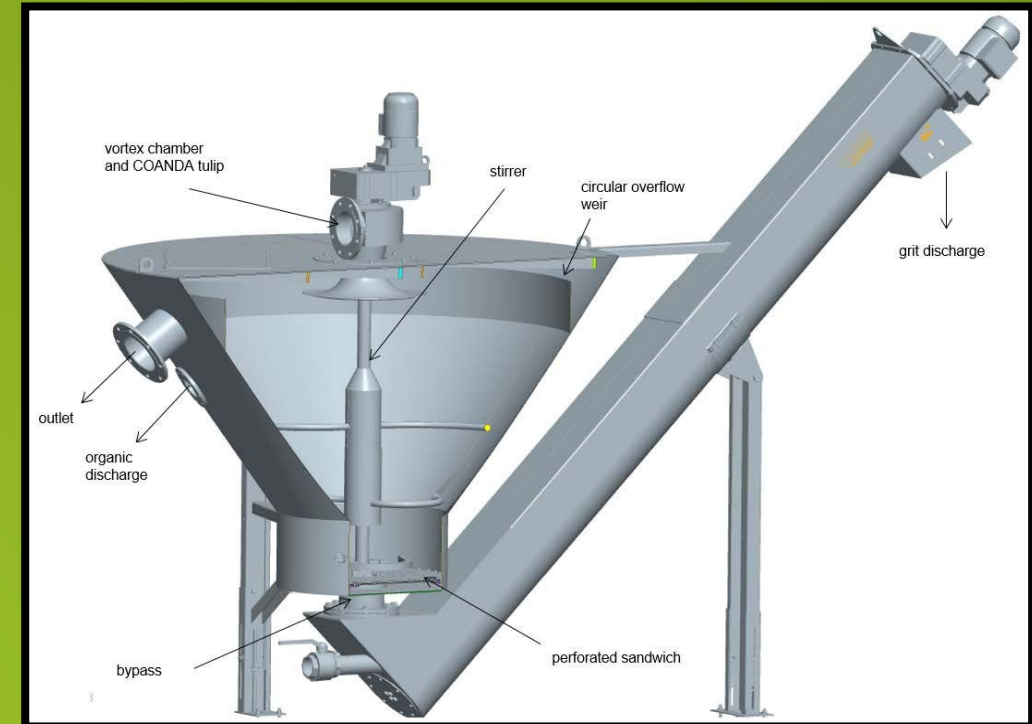
New Heat Exchanger

Increased system redundancy and reliability

New Chillers

Higher Organics Capture → More Biogas

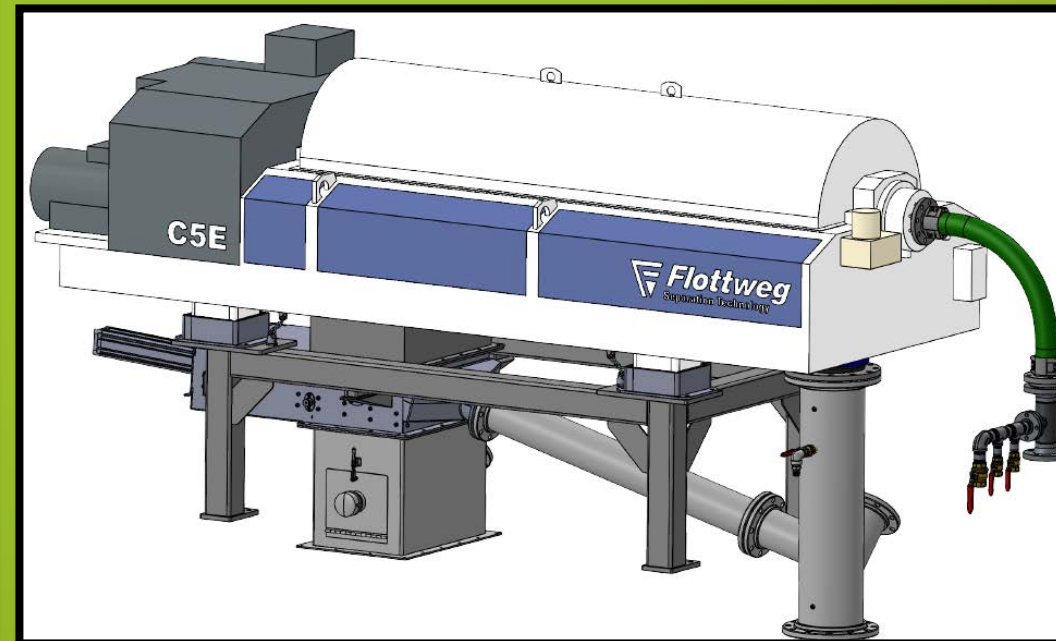
- New high efficiency centrifuges
- New high efficiency grit washers
- New flow optimization baffles in primary clarifier
- Innovative real-time biological sensors to monitor digester health and support increased organic loading



Grit Washers Recover Organics



Flow Optimization Baffles Increase Organics Capture



High Efficiency Centrifuges Save Power and Allow CMSA to accept more Food Waste



Sentry probes installed at digester recirculation pumps

Food Waste Agreements

- Augmented public-private partnerships
- CMSA continued partnership with Marin Sanitary Service with updated agreement (2022 – present) and increased food de-packaging waste quantities
- Developed new food waste agreements with:
 - Republic Services (2022 – present)
 - Sustainable Organic Solutions LLC (2024)



Food waste delivery from Marin Sanitary Service



Tested food waste delivery from Republic Services, 20 tons, using widened floor hatch in May 2024



FOG delivery from SRC, 6300 gallons (left), and tested City of Sunnyvale food slurry delivery (5000 gallons, right) in September 2024

Challenges Overcome



Overheated Emissions Treatment System



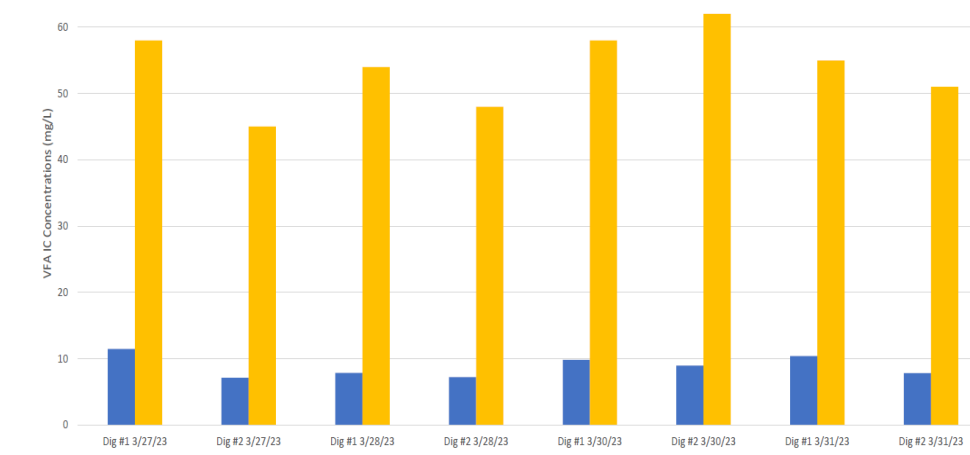
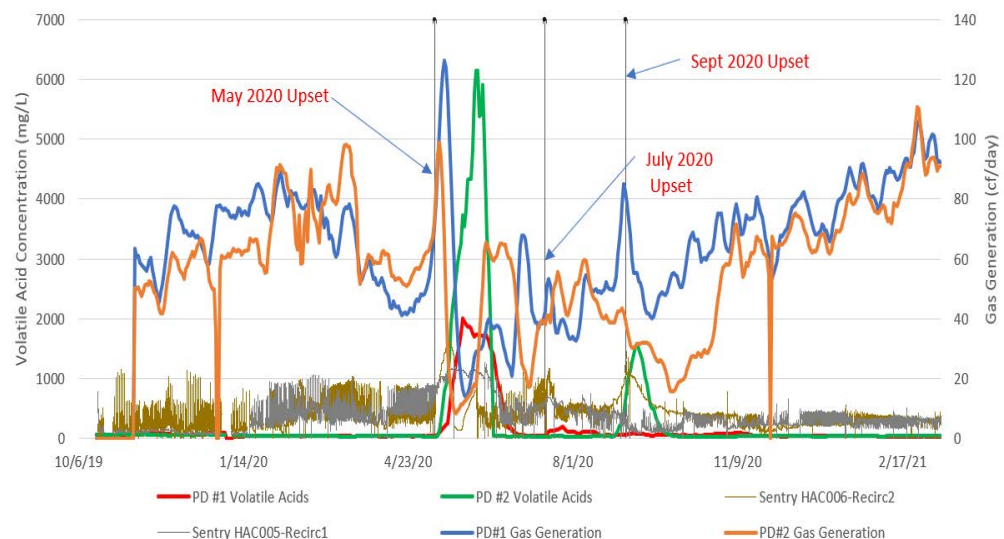
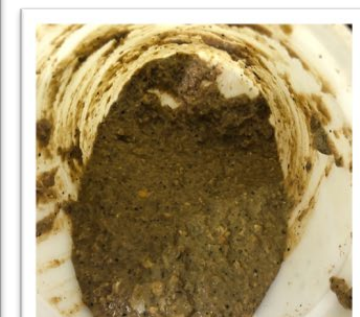
Increased Engine Emissions Testing Complexity



Digester Membrane Replacement

Industry Innovations

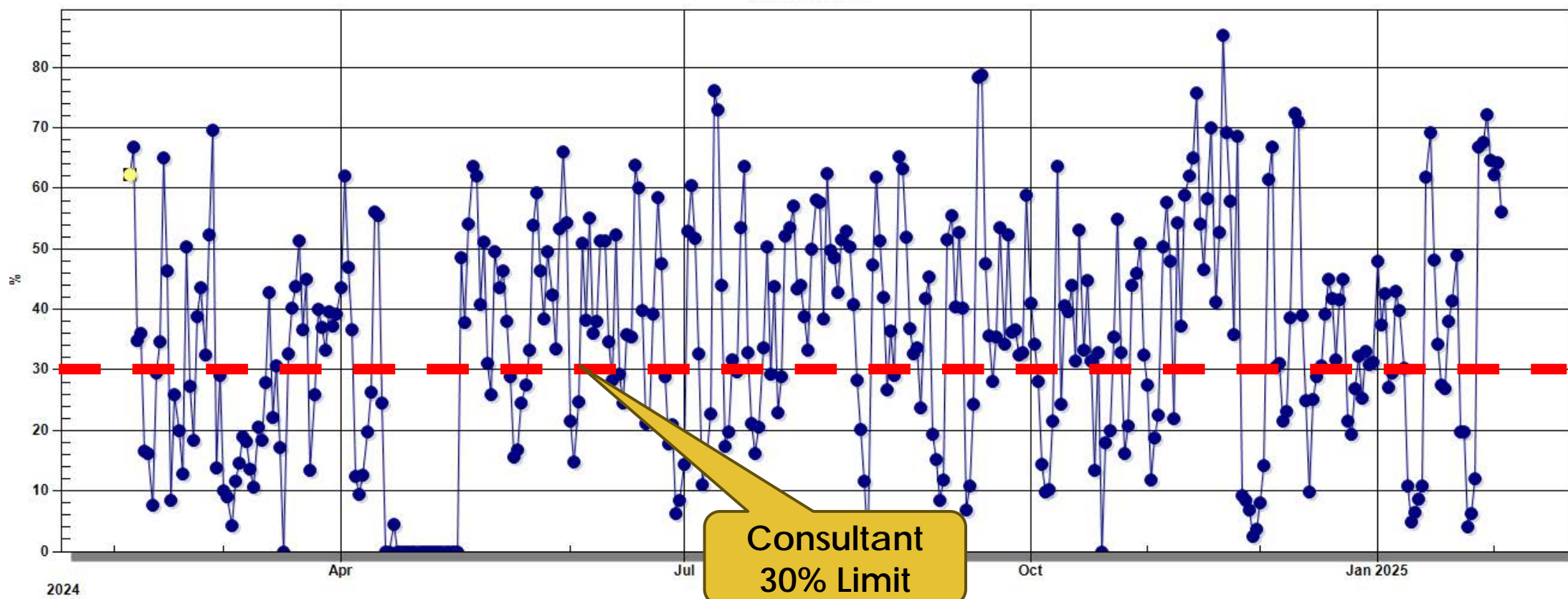
- Digester Pilot Study
- SENTRY™ real-time probe
- VFA methods study
- Organic loading rates



Differences in Acetic Acid concentrations between IC method (blue) and the traditional distilled method (yellow) of 102

Refresh 02/05/2024 12:00 02/04/2025 11:59
1/29/2025 6:48, 8.145

Full Scale Organic Loading Rate



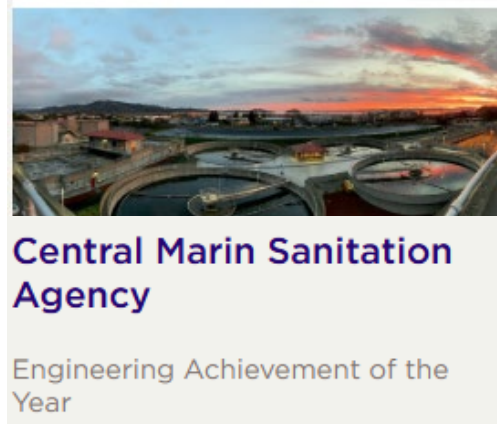
Awards and Knowledge Sharing



Publications



Awards



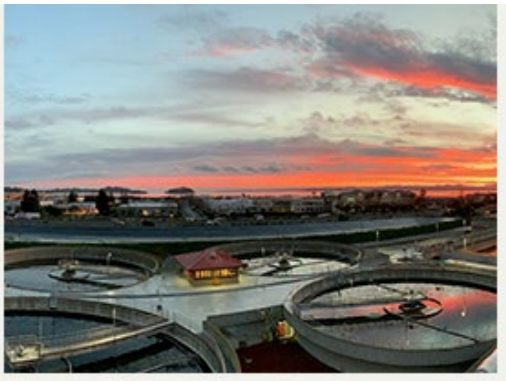
Presentations



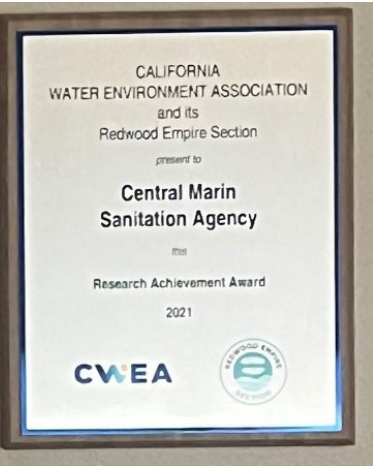
CWEA, CASA, WEFTEC, HWEA, CA Bioenergy



Tours



Central Marin Sanitation Agency
Research Achievement of the Year



Next Steps





C
M
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A

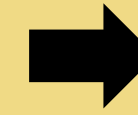
Phase 1 – Maximize Existing Infrastructure

Increase organics receiving
Optimize receiving and operations

Current

Energy Neutrality

<120%



Potential*

Energy Neutrality

~150%

Phase 2 – Build Additional Infrastructure

Parallel cogeneration?
Renewable natural gas (RNG) production?
Additional receiving facilities?
Digester and dewatering capacity are okay

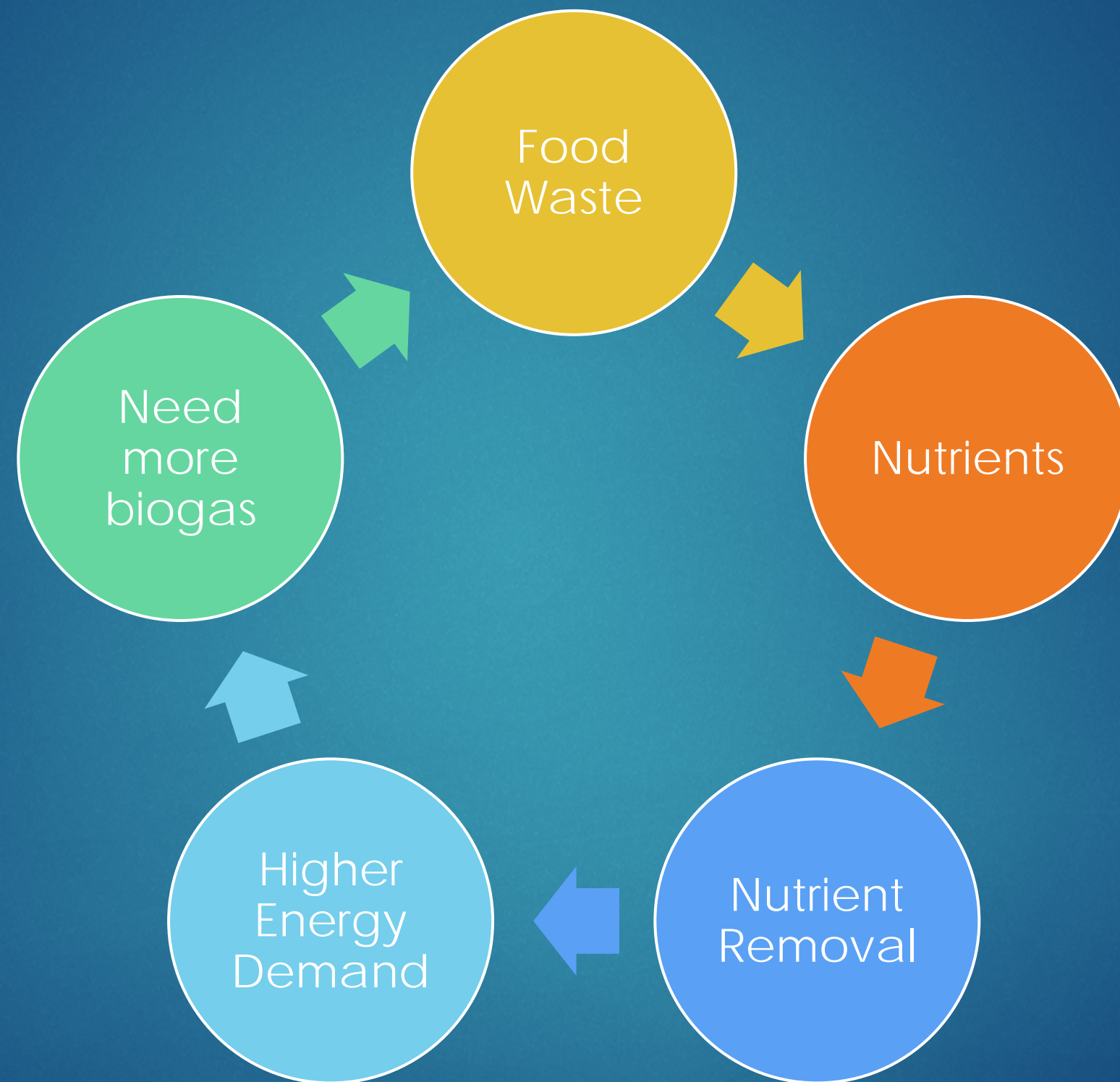
Potential*

Energy Neutrality

~250%

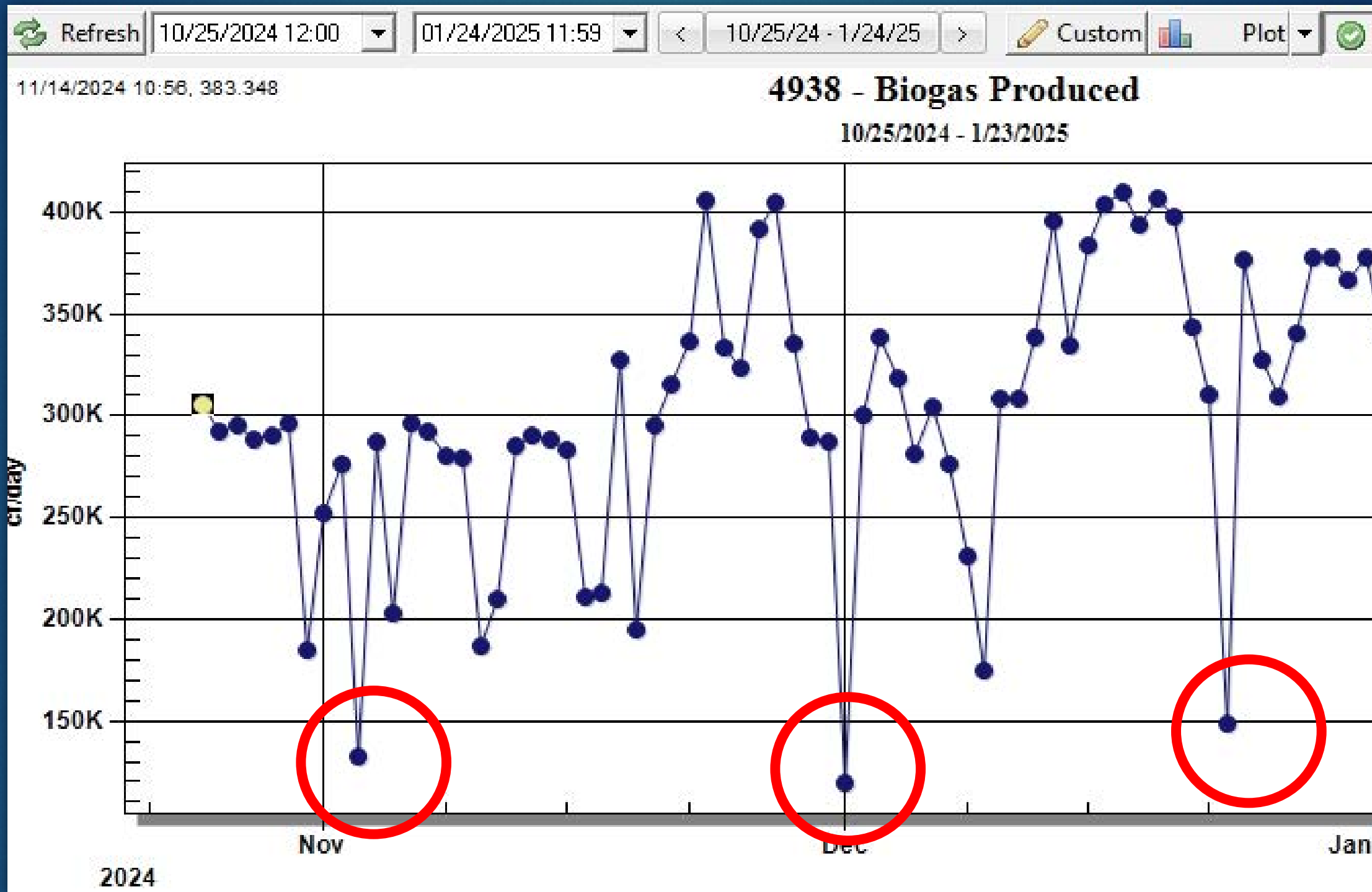
* Based on current facility power demand, which would increase under nutrient removal.

Evaluate Nutrient-Energy Nexus



Before moving onto Phase 2

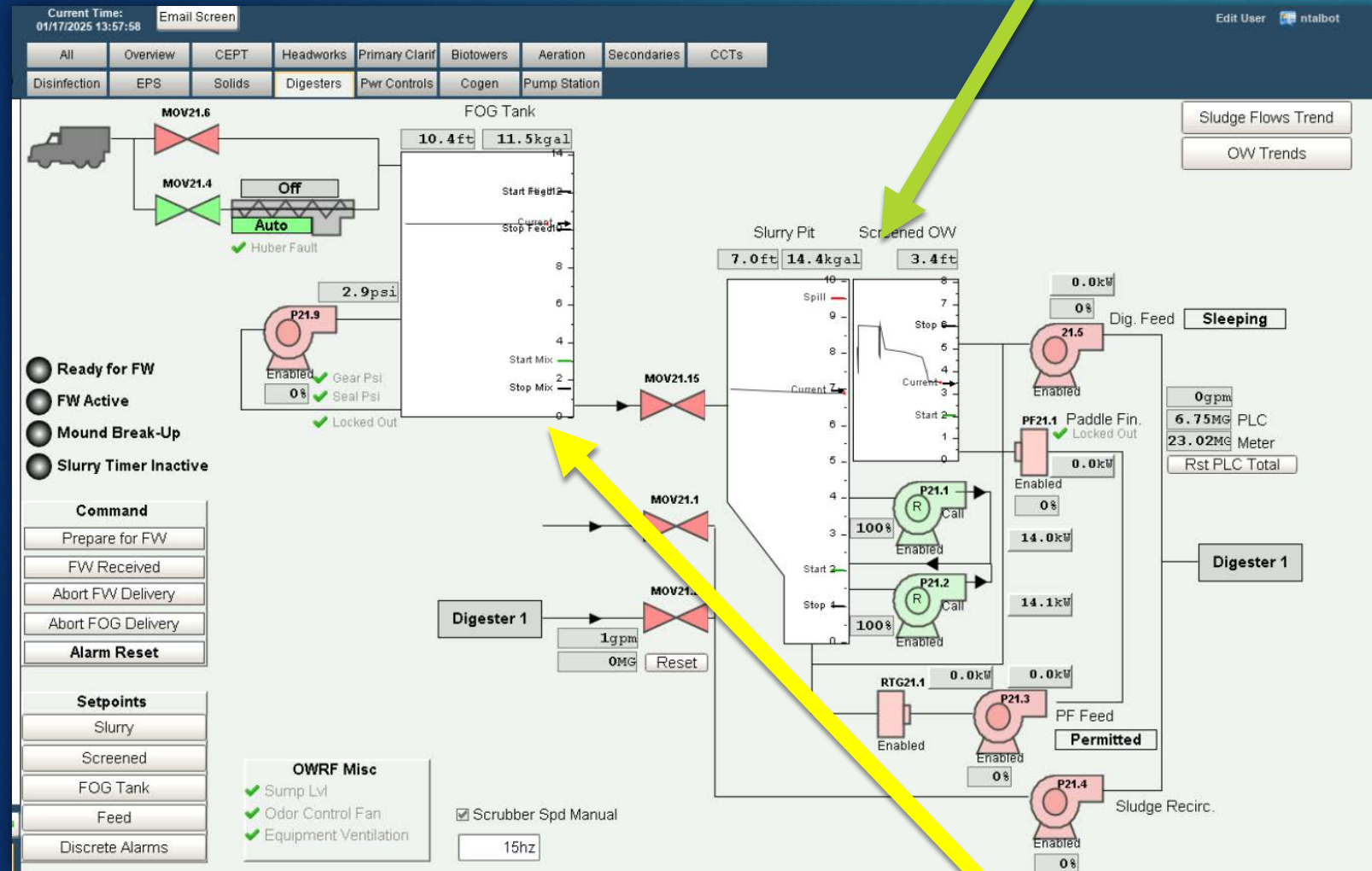
Increase Biogas Production Consistency



Phase 1 – Maximize Existing Infrastructure

Optimize Organics Receiving

Below Ground Tank



Above Ground Tank

Phase 1 – Maximize Existing Infrastructure



CENTRAL MARIN SANITATION AGENCY



Business Plan

Fiscal Year 2024 – 2025

Board Approved 7/9/2024

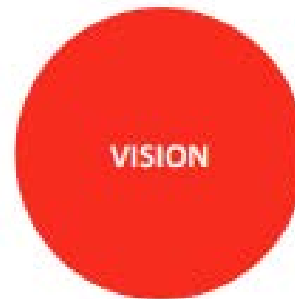
Alignment with Agency Goals



MISSION

WHAT THE AGENCY DOES

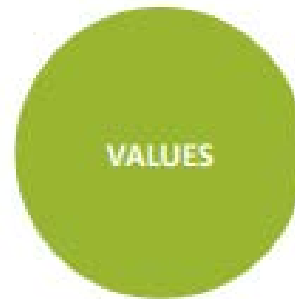
Central Marin Sanitation Agency protects the environment and public health and is integral to the community by providing wastewater, environmental, and resource recovery services.



VISION

WHERE THE AGENCY WANTS TO BE IN THE FUTURE

Central Marin Sanitation Agency will be a forward-thinking organization by providing innovative and effective wastewater services, capturing and utilizing renewable resources, and implementing sustainable solutions for an enhanced quality of life.



VALUES

KEY STATEMENTS THAT DESCRIBE THE IDEALS OF THE AGENCY

CMSA values...

- Continuous regulatory compliance to protect the environment.
- Sound financial practices.
- Effective asset management.
- A safe and healthy workplace.
- Creating job satisfaction within a diverse workforce.
- Engaging public outreach and educational programs.
- Leadership, partnerships, teamwork, and collaboration.

Questions?





BOARD MEMORANDUM

February 6, 2025

To: CMSA Commissioners and Alternates

From: Jacky Wong, Associate Engineer
Peter Kistenmacher, Technical Services Manager/Assistant General Manager

Approved: Jason Dow, General Manager

Subject: **FY25 Parking Lot Rehabilitation Project – Construction Contract Award**

Recommendation: Award the construction contract for the FY25 Parking Lot Rehabilitation Project to E.E. Gilbert Construction for \$303,555, and authorize the General Manager to execute the contract agreement.

Summary: Bids for constructing the FY25 Parking Lot Rehabilitation Project (Project) were publicly opened on January 22, 2025. EE Gilbert Construction submitted the lowest, responsive, responsible bid, with a total bid amount of \$303,555. If the Board awards the contract, construction is anticipated to be substantially completed by June 2025.

Fiscal Impact: The Agency’s FY25 Capital Improvement Program (CIP) allocates \$193,600 for paving and site work. Following a detailed inspection of the parking lot condition, staff identified additional asphalt deterioration, leading to an enhanced scope of work. The engineer’s revised estimate for the Project was \$380,000 and was presented to the Board at the December 2024 meeting. EE Gilbert’s total bid is approximately \$77,000 less than the engineer’s estimate. Staff will utilize budget savings from other FY25 capital accounts to provide the additional \$109,400 to fund the Project.

Discussion: The Project involves removing and replacing approximately 25,000 square feet of asphalt in the visitor and employee parking lots. The parking lot pavement was originally built in the 1980s and had a 2-inch asphalt overlay added in the late 1990s to extend its lifespan. Recent assessments indicated that most of the pavement area has significantly deteriorated requiring a complete replacement. Additionally, drainage slope deficiencies were noted during recent storms, which need to be addressed.

The Board adopted the Project’s contract documents and authorized the General Manager to advertise the Project for public bidding at the December 2024 meeting. The Notice Inviting Sealed Bids was issued on December 16, 2024, and was published in the Marin Independent Journal, on the Agency’s website, and in several Builders’ Exchanges. Thirteen contractors

attended the optional pre-bid meeting on January 8, 2025, and eleven sealed bids were received by the deadline on January 22, 2025. An additional late bid was delivered by a UPS carrier on January 23, 2025 and was returned unopened to the contractor. Table 1 below shows the bid opening results.

Table 1. Bid Opening Results

Contractor	Total Bid Amount	% Above/Below Estimate
<i>Engineer's Estimate</i>	\$380,000	
EE Gilbert Construction	\$303,555	-20.1%
Ghilotti Bros	\$309,679	-18.5%
Always Paving	\$311,898	-17.9%
Apena Engineering	\$317,100	-16.6%
Tri-Valley Excavating	\$317,965	-16.3%
Michael Paul Co.	\$327,450	-13.8%
Maggiora & Ghilotti	\$335,830	-11.6%
Team Ghilotti	\$367,141	-3.4%
Dryco	\$369,425	-2.8%
S&H Construction	\$468,600	+23.3%
D's General Engineering	No Bid	-

Staff completed a detailed review of the submitted bid documents, including but not limited to bid prices, financial qualifications, and safety performance data. EE Gilbert met all the bid requirements and is recommended for contract award.

Alignment with Strategic Plan: This Project aligns with the Agency's FY25 Business Plan to support Goal 1 – Objective 1.2 as shown below.

Goal One: CMSA will effectively operate and maintain its treatment facilities in compliance with changing regulations.

Objective 1.2: Manage the Agency's equipment and assets consistent with CIP and maintenance programs.



BOARD MEMORANDUM

February 6, 2025

To: CMSA Commissioners and Alternates

From: Jason Dow, General Manager

Subject: **Hydrogen Peroxide Facility Relocation Feasibility Study**

Recommendation: Approve hiring Carollo Engineers to perform a feasibility study to relocate the San Quentin hydrogen peroxide facility to CMSA, and provide direction to the General Manager, as appropriate.

Summary: Site remediation work at the Oak Hill Apartment site began in January 2025 with site clearing, grading, and soil removal. Since the Agency has not received a response from the State on continued access to our two easements, staff believe it is worthwhile to perform the feasibility study (Study) to relocate the San Quentin hydrogen peroxide facility to the CMSA property. The Study will evaluate options to feed hydrogen peroxide from CMSA to the Ross Valey interceptor, determine improvements needed at an unused chemical feed facility at CMSA to utilize relocated peroxide pumps, controls, and a tank, and prepare conceptual cost estimates for feasible options.

Fiscal Impact: Carollo has updated their August 2024 Study proposal with 2025 labor rates, and the fee is \$49,666. The Oak Hill Apartments project developer, Thomas Dorfman, has again offered to pay half of the Study fee, with CMSA paying the balance.

Background: At the August 2024 meeting, the Board considered a Hydrogen Peroxide Use Action Plan, which included a proposal from Carollo Engineers to prepare the Study. After discussing the elements of the action plan, the Board decided to not pursue the Study. The August 2024, Board meeting staff report detailing the action plan is attached.

In an October 2024 email, Mr. Dorfman said the Oak Hill development team offered to fund half the Study. The Board considered the offer at the October meeting, and agreed to hire Carollo to perform the Study if the developer paid the full fee. Mr. Dorfman informed State representatives of the Board action, and the Agency has not received a response.

Attachments:

- 1) Carollo Study proposal, dated February 5, 2025
- 2) H2O2 Action Plan



February 5, 2025

Mr. Jason Dow
Central Marin Sanitation Agency
1301 Andersen Drive
San Rafael, CA 94901

Subject: Proposal – Feasibility Study to Relocate the San Quentin Hydrogen Peroxide System to the CMSA WWTP – Revision 1

Dear Mr. Dow:

We are pleased to submit this proposal to develop a feasibility study to relocate the existing San Quentin hydrogen peroxide system from its current location on Sir Francis Drake Boulevard in San Rafael to the Central Marin Sanitation Agency (CMSA) Wastewater Treatment Plant (WWTP).

The existing hydrogen peroxide system is used for odor control for the San Quentin raw wastewater influent flows. The system includes a 5,400-gallon chemical storage tank, two chemical pumps, various 1W / 2W / 3W lines for dilution water, eye wash stations, and pond resupply, sump pump, chemical lines, drainage lines, chain link fence enclosure, two eye wash stations, discharge piping into the San Quentin junction box, and electrical panels, instrumentation and conduits.

The hydrogen peroxide system is located within an easement on California State property and future access for chemical trucks to unload the hydrogen peroxide into the existing tank will be limited due to a new housing development being constructed on the property. CMSA has requested a feasibility study to evaluate relocating the existing hydrogen peroxide system to the WWTP at the abandoned polymer feed system location and routing a new hydrogen peroxide line and carrier pipe back to the San Quentin junction box through an existing recycled water pipe.

Scope of Work

Task 1 – Project Management and Meetings

Task 1.1 - Project Management

Consultant shall provide project administration and management to perform planning, execution, and reporting of this project. Consultant shall prepare a progress letter report for attachment to each invoice submitted to track and report status of budget expenditures, schedule, and key work products completed for the billing period.

Task 1.2 – Meetings

Consultant shall prepare for and conduct the following meetings with CMSA engineering and plant staff. Meeting agendas, presentation materials, and minutes will be provided for each meeting.

- Kick-Off Meeting and Site Visit – Consultant shall prepare for and conduct a two-hour in-person meeting with CMSA engineering and plant staff to review the project work approach, project scope and deliverables, project schedule, key milestones, information requests by Consultant, and conduct a site visit of the abandoned polymer feed system and the San Quentin hydrogen peroxide facility.

Page 2

- Progress Meeting – Consultant shall prepare for and conduct a two-hour virtual meeting with CMSA engineering and plant staff to review key findings of the hydrogen peroxide feasibility study alternatives analysis and address applicable questions or comments.

Deliverables:

- Monthly invoices with progress letter reports (electronic PDF).
- Meeting agenda and minutes (electronic PDF).

Task 2 – Feasibility Study

Task 2.1 – Develop Feasibility Study

Based on your email dated 7/11/24 and our site visit on 7/23/24, we understand the feasibility study elements will include the following:

- Evaluate 2 options for installing a new hydrogen peroxide feed tube to the junction box:
 - » Alternative 1: Pull a hydrogen peroxide feed tube within a containment line about 0.25 to 0.5 mile within a 6" PVC recycled water pipeline. The recycled water pipeline is used between 0 to 4 weeks a year to supply water to a nearby pond for environmental purposes. The condition of the pipeline is unknown.
 - » Alternative 2: Install a new feed line and containment pipe via open cut trench that is located within the existing easement for the recycled water pipe and hydrogen peroxide facilities.
 - » Alternative 3: Install a new feed line along an alternative alignment from the hydrogen peroxide facility to the wastewater treatment plant. This alternative would likely require obtaining new easements.
- Prepare a preliminary sketch showing a general plan for each alternative.
- Identify components of the hydrogen peroxide system to be relocated from the existing facility on State property to the WWTP. The major items anticipated include a storage tank, feed pumps, and control panel.
- Evaluate whether the existing abandoned polymer system at the WWTP has sufficient space and containment volume for the relocated hydrogen peroxide system components and new piping and appurtenances necessary for a fully functioning hydrogen peroxide system.
- Identify potential routing of a hydrogen peroxide feed line from the new dosing facility at the WWTP to a connection at the new feed tube in the recycled water line adjacent to the WWTP headworks.
- Identify routing for feed tube from the recycled water line into the existing San Quentin below grade junction box, for connection to an existing chemical injector at the 54" wastewater force main.
- Identify source of power and signals for the relocated hydrogen peroxide feed system.
- Prepare a technical memorandum (TM) to summarize the applicable analysis and key findings of the hydrogen peroxide relocation feasibility study. The TM will be initially submitted in draft format for CMSA's review. The Final TM will incorporate applicable review comments provided by CMSA. Consultant shall conduct a virtual meeting after issuing the Draft TM to review the content and facilitate staff review as noted in Task 1.2.

- Prepare a Class 5 construction cost estimate for the alternatives as defined by the AACE, with an anticipated accuracy range of -30% to +50%.

Deliverables:

- Draft and Final TMs (electronic PDF).

Assumptions:

- Permitting requirements with regulatory agencies are excluded from the scope.
- CMSA will provide available design or record drawings of the existing hydrogen peroxide facility, polymer facility, interceptor pipeline, and recycled water pipeline from the existing hydrogen peroxide feed to the wastewater treatment plant.
- The Consultant will prepare basic sketches of the project alternatives by marking up existing drawings. CAD drawings will not be prepared.

Project Schedule

Consultant shall complete this project based on the following schedule:

- Conduct the kickoff meeting within two (2) weeks after receiving a written Notice to Proceed from the CMSA.
- Conduct Progress Meeting within eight (8) weeks after receiving all requested drawings and data.
- Prepare and submit the Draft TM within six (6) weeks after Progress Meeting.
- Prepare and submit the Final TM within four (4) weeks after receiving written comments from CMSA on the Draft TM.

Labor and Budget Estimate

Our proposed labor and budget estimate is shown in Attachment A.

We look forward to working with CMSA on this Project. Please do not hesitate to contact us if you have any questions or require additional information.

Sincerely,
CAROLLO ENGINEERS, INC.



Michelle Trinh, P.E.
Project Engineer

Mr. Jason Dow
Central Marin Sanitation Agency
February 5, 2025

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AuthorInitials:mt

Enclosures: Attachment A – Labor Estimate dated 2/5/25

cc: Rick Chan (Carollo), Darren Baune (Carollo)

ATTACHMENT A

LABOR AND BUDGET ESTIMATE

CENTRAL MARIN SANITATION AGENCY
SAN QUENTIN HYDROGEN PEROXIDE RELOCATION FEASIBILITY STUDY

Revision 1 2/5/2025

Task Description	SP	PP	P	DP	Total	Labor	Other Direct Costs (ODC)			Total	
							PECE	Mileage ¹	ODC		
	\$331	\$288	\$268	\$152	Hours	Cost	\$16.00	Trips	Amount	Total	Cost
1.0 Project Management and Meetings											
1.1 Project Administration and Management	4	0	0	4	8	\$1,932	\$128	0	\$0	\$128	\$2,060
1.2 Meetings	<u>4</u>	<u>8</u>	<u>4</u>	<u>0</u>	<u>16</u>	<u>\$4,700</u>	<u>\$256</u>	<u>1</u>	<u>\$60</u>	<u>\$316</u>	<u>\$5,016</u>
Task 1.0 Subtotal	8	8	4	4	24	\$6,632	\$384	1	\$60	\$444	\$7,076
2.0 Feasibility Study											
2.1 Review Background Information	2	16	8	0	26	\$7,414	\$416	0	\$0	\$416	\$7,830
2.2 Develop Feasibility Study Draft and Final	<u>8</u>	<u>72</u>	<u>32</u>	<u>6</u>	<u>118</u>	<u>\$32,872</u>	<u>\$1,888</u>	<u>0</u>	<u>\$0</u>	<u>\$1,888</u>	<u>\$34,760</u>
Task 2.0 Subtotal	10	88	40	6	144	\$40,286	\$2,304	0	\$0	\$2,304	\$42,590
PROJECT TOTAL	18	96	44	10	168	\$46,918	\$2,688	1	\$60	2,748	\$49,666

Legend:

- SP Senior Professional
- LPP Lead Project Professional
- PP Project Professional
- P Professional
- DP Document Processor
- PECE Project Equipment and Communication Expense

Note:

1. Mileage based on 90 miles.



BOARD MEMORANDUM

August 8, 2024

To: CMSA Commissioners and Alternates

From: Jason Dow, General Manager

Subject: Oak Hill Apartments Site – Continued Hydrogen Peroxide Use

Recommendation: Review the Hydrogen Peroxide Use action plan, consider hiring Carollo Engineers to perform a feasibility study, and provide direction to the General Manager as appropriate.

Summary: At the July 9 Board meeting, I summarized the Agency’s two-phase odor control strategy, briefed the Board on the Oak Hill Apartment Projects (Project) impact on hydrogen peroxide delivery access to the San Quentin odor control facility, and presented an action plan to assist the Agency with determining options to continue using hydrogen peroxide (H₂O₂) for odor control in the Ross Valley interceptor.

The Project developer, Thomas Dorfman, then gave a presentation that summarized the Project, timeline, and the several alternatives evaluated for delivery truck access to the odor control facility. Mr. Dorfman stated that CMSA does not have any formal or legal access to use lands outside its easements, and requested CMSA hire a consultant to perform a H₂O₂ facility relocation feasibility study.

The Board agreed with the action plan scope and directed staff to obtain an opinion on the Agency’s legal rights to access its easements and to obtain a proposal for a H₂O₂ relocation feasibility study.

Discussion: The H₂O₂ use action plan included obtaining an easement access legal opinion, performing a H₂O₂ use evaluation, requesting a facility relocation proposal, discuss a potential access route with the Drakes Cove Homeowners Association (HOA), and determine what level of access the State will provide to the facility. A summary of each action item is presented below.

Easement Access Legal Opinion: Attachment 1 shows the Project area with the two CMSA easements outlined in yellow, and the paved delivery truck access area outlined in red. The apartment buildings access road is planned to be built over a portion of the paved area, limiting H₂O₂ delivery vehicle access.

The law firm Downey Brand was engaged for a legal opinion on the Agency's access to its two easements on State property. Staff provided the easement documents and the Project developer's 7/9 Board meeting presentation, explained the H2O2 delivery process, and discussed the H2O2 use action plan items. There is a closed session before the August 13 Board meeting to receive and discuss the legal opinion.

Hydrogen Peroxide Use Evaluation: CMSA has used H2O2 as the second phase of our odor control program since 1997. It is injected into the Ross Valley and San Rafael interceptors. After the July Board meeting, staff prepared a study plan to determine the level of hydrogen sulfide (H2S) generation in the Ross Valley interceptor when the San Quentin odor control facility is shut down. The study report, Attachment 2, shows that discontinuing H2O2 dosing results in a significant H2S concentration increase in the wastewater entering the Headworks that then creates a hazardous H2S atmosphere in the Headworks building. In Figures 1-3, starting at the left side moving right, shows how the H2S concentration in the interceptor (blue bar) is reduced after H2O2 dosing (orange bar). When the H2O2 is turned off (red arrow), the H2S concentration increases by at least a factor of five. Figures 4-6 show the H2S atmospheric concentration in the Headworks building (blue line); when the H2O2 is turned off, after the red arrow, the concentration increases well beyond the 5ppm hazardous level.

The study was conducted for three days to determine if the results were repeated. The results were similar each day, and show that shutting down the RV interceptor H2O2 dosing will have negative odor control and Headworks atmosphere impacts.

Facility Relocation Proposal: Carollo Engineers has prepared a proposal, Attachment 3, to perform a feasibility study to relocate the San Quentin H2O2 system to CMSA. The study scope includes evaluating modifications needed to convert an unused on-site chemical handling facility to a Ross Valley interceptor H2O2 facility, relocating equipment from the San Quentin facility to the unused on-site facility, evaluating three H2O2 feed line options from CMSA to the RV interceptor on State property, and preparing a conceptual cost estimate for the project.

The feasibility study fee is \$47,056, and could be completed within 20 weeks after receiving the Notice to Proceed from CMSA.

Drakes Cove HOA Discussion: I contacted the president of the Drakes Cove HOA, Dave Herr, to discuss the possibility of construction an H2O2 facility access road from the Drakes Cove road to the facility. Mr. Herr was aware of the H2O2 access issue as he had read the recent Marin IJ article on the topic. We discussed the Project and H2O2 vehicle access options. Mr. Herr believes the vehicle access issue should have been considered by the developer before the Project EIR was prepared, and it is a CMSA – developer issue. He believes that the HOA members would not want a chemical delivery truck using their road, and mentioned that if it were acceptable, the H2O2 facility access road would have to cross a conservation easement which would have another set of potential legal issues.

Potential State Access to Easement: A representative in the State Department of General Services, Real Estate Division, and I discussed the easement access options for H2O2 delivery trucks. I learned that the State would provide vehicle access to the CMSA easements, but not for a 5,000 gallon delivery truck. The representative explained that access can be either from Sir Francis Drake or from the Project access road, but it cannot impact the planned development. If CMSA decides to pursue access for a smaller delivery truck, the access must be agreeable to the Project developer, and then the State will either prepare a new access easement or amend one of the existing easements.

Attachments:

- 1) Oak Hill Apartments layout plan showing CMSA's easements and the paved area
- 2) Hydrogen Sulfide Study Report, 8/7/24
- 3) Carollo Engineers Proposal – Feasibility Study to Relocate the San Quentin Hydrogen Peroxide System to the CMSA WWTP, 8/8/24



BOARD MEMORANDUM

February 6, 2025

To: CMSA Commissioners and Alternates
From: Tiffany Elam, Administrative Specialist
Approved: Jason Dow, General Manager
Subject: January 2025 Informational Items

Recommendation: Informational, provide comments or direction to the General Manager, as appropriate.

1. Letter dated January 23, 2025, to Ms. Kerry O’Conner, California Regional Water Quality Control Board
Re: Monthly Self-Monitoring Report (SMR) – December 2024
2. Total Inorganic Nitrogen Levels – Monthly Update
Re: February 2025
3. CMSA Renewable Power Summary
Re: January 2025



January 23, 2025

California Regional Water Quality Control Board
San Francisco Bay Region
Ms. Kerry O' Conner, Water Resource Control Engineer
1515 Clay Street, Suite 1400
Oakland, CA 94612

Subject: Monthly Self-Monitoring Report (SMR) – December 2024

Dear Ms. O' Conner,

The SMR for the Central Marin Sanitation Agency (CMSA) treatment plant has been submitted using the eSMR /California Integrated Water Quality System (CIWQS). This SMR conforms to CMSA's NPDES Permit Order #R2-2023-006, the Nutrient Watershed Permit Order #R2-2024-0013, the Mercury and PCBs Permit Order #R2-2022-0038, the Amendment of Monitoring and Reporting Requirements and Amendment of Alternate Monitoring and Reporting Program Permit Order #R2-2021-0028, and the Amendment Update to Total Residual Chlorine and Oil and Grease Requirement Permit Order R2-2023-0023.

Violations

There are no reportable NPDES Permit violation(s) for this reporting period.

Blending Events

The CMSA treatment facility did exceed the maximum secondary capacity of 30 MGD during this reporting period. CMSA blended four (4) calendar days. Prior to blending initiation, all CMSA process equipment (primary, secondary system, and the effluent storage pond) were in service and remained in service throughout the blending periods. Table 1 below provides a summary of the blending activities.

Table 1: Blending Activities Summary (EFF-002b)

Monitoring Period	Flow (Total)	Blending Volume	Blending Duration Period	Blending Start Time	Blending End Time	TSS	Blending pH Min	Blending pH Max	Enterococcus	Rainfall	Total Residual Chlorine
	MG	MG	Hrs			mg/L	SU	SU	MPN/100mL	Inches	mg/L
12/14/24	41.87	12.17	17.1	0542	2124	34	6.4	7.2	6.3	1.95	ND
12/16/24	26.91	2.3	8.52	1436	2155	9	6.8	7.0	4.1	0.5	ND
12/27/24	29.27	1.36	14.25	0235	1540	7	6.6	7.1	7.4	0.19	ND
12/29/24	27.84	2.09	9.03	1038	1824	9	6.7	7.0	22.8	0.85	ND

Data Validation

All regulatory daily, weekly, and monthly quality control calibrations/checks conducted during the month of December met established quality assurance acceptance criteria, except those data results indicated within the attached analytical reports.

Summary

If there are any questions, please contact me at (415) 459-1455, extension 101. Quality assurance data are available for all test results cited in this report. Values reported are measured values and each are subject to analytical variability. CMSA reserves the right to question data in an enforcement proceeding.

I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations (40 CFR 122.22(d)).

Sincerely,



Nick Talbot
Treatment Plant Manager



Nutrient Removal Alternatives Evaluation & Facilities Plan Project

The Project consists of evaluating alternatives for interim (2024 -2034) and permanent (post 2034) nutrient removal from CMSA's effluent. The work includes wastewater sampling, process modeling, developing screenings criteria, evaluating interim and permanent nutrient removal options, evaluating funding options, evaluating the nutrient/energy/solids nexus, and completing a Facilities Plan and Final Report for the selected nutrient removal alternative.

FEBRUARY 2025 UPDATE

FY25 Budget

\$1.0 M

Spent (18%)

\$0.177 M

Remaining

\$0.823 M



Spending Summary



- Ammonia/Nitrate Probes and VFDs: \$36k
- Sampling (Supplies): \$10k
- Sampling (Outsource Cost): \$29k
- 2-week Sampling (Staff Overtime): \$1k
- Carollo/Hazen Consulting Fees: \$101k

Completed Tasks

- Kickoff Meeting
- 2-Week Wastewater Sampling
- Interim Optimizations Workshop 1
- Procured & Installed Ammonia and Nitrate Probes
- Staff Training at Nutrient Technology Events
- Interim Optimizations Workshop 2
- Screening Criteria Workshop
- Tech Memo 1 & 2 on Sampling and Interim Optimizations
- Alternatives Evaluation Workshop #1

Completion Date

- September 10, 2024
- October 2024
- October 2, 2024
- November 28, 2024
- November 2024
- November 18, 2024
- December 18, 2024
- January 2025
- January 15, 2025

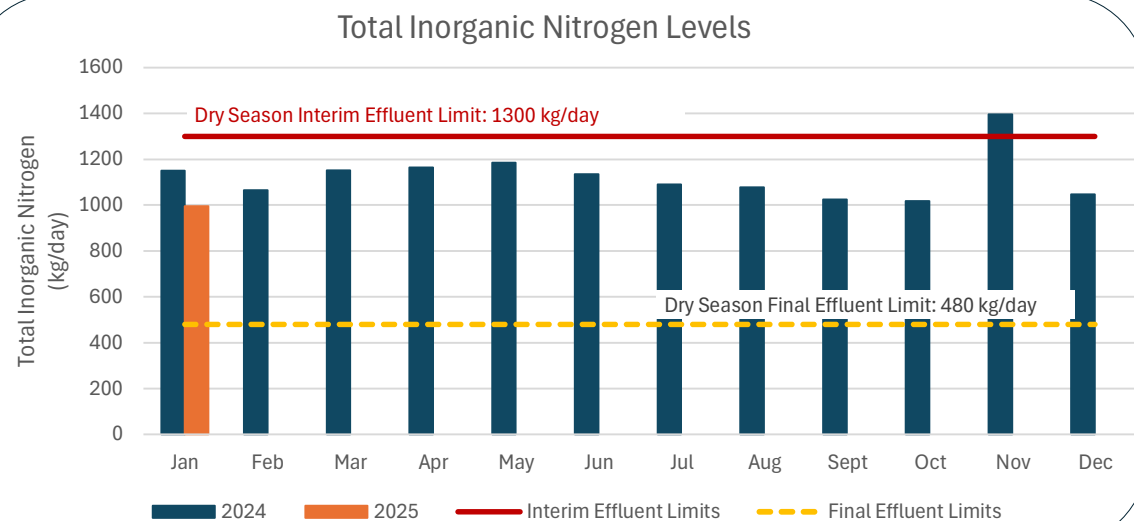
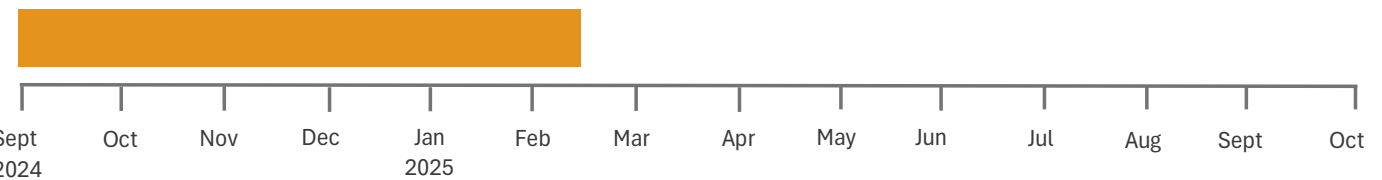
Remaining Tasks

- Process Modeling
- Screenings & Evaluation Criteria Development
- Diffuser/ Blower/ Biotower Evaluation
- Solids Loading/Energy/Nutrient Nexus
- Secondary Clarifier stress test and CFD Modeling
- Alternatives Evaluation
- Funding Opportunity Evaluation
- Facilities Plan and Report
- Final Report and Board Presentation

Target Completion Date

- March 2025
- March 2025
- March 2025
- April 2025
- May/June 2025
- August 2025
- August 2025
- September 2025
- October 2025

Project Schedule (42% Complete)



* High TIN load in November 2024 due to large winter storm events (outside of dry season)

Special Notes

- Carollo/ Hazen provided a proposal to perform stress testing and develop a computational fluid dynamics (CFD) model of the secondary clarifiers. The work is scheduled for the dry season and would determine the capacity of the tanks under a future nutrient removal scenario and the modifications that can help improve performance. The project schedule was extended to allow for the stress testing.
- Carollo/ Hazen is preparing a proposal for additional aeration system diffuser/blower evaluations.
- A detailed biotower condition assessment including the media will be considered in 2025.
- Kennedy/ Jenks is performing a seismic study on the primary clarifiers, biotowers and aeration tanks, and will provide structural considerations for new nutrient removal facilities. Preliminary findings were shared in January, and the technical memorandum will be provided in February.
- Carollo provided a funding matrix to summarize available loans and grants for this project, and will review it in further detail after the Alternatives Evaluation is completed.

JANUARY 2025 CMSA RENEWABLE POWER SUMMARY

118% ENERGY NEUTRAL

