



Central Marin Sanitation Agency

COMMISSION REGULAR MEETING AGENDA

Tuesday, October 8, 2019

at the Agency Office

7:00 p.m.

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. Audio and video recordings will be made of this meeting and will be posted to the Agency website.

1. **7:00 p.m.: Call Meeting to Order/Pledge of Allegiance**

2. **Roll Call**

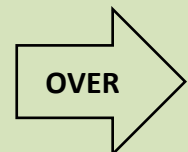
3. **Open Period for Public Participation**

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.

4. **Consent Calendar**

Matters listed under this item are considered routine and will be enacted by one motion. The consent calendar may include resolutions; therefore, the motion, second, and vote will also be applicable to the resolution and recorded accordingly. There will be no separate discussion of these items unless requested by a member of the Board or the public prior to the time the Board votes on the motion to adopt.

- a) Minutes—Regular Board Meeting—September 10, 2019
- b) Treasurer's Report—Operating Account—September 2019
- c) Schedule of Investments and its Capital Reserve Summary—September 2019
- d) NPDES, Process, and Maintenance Report—September 2019
- e) Performance Metric Report—September 2019
- f) 2019 General Manager Employment Agreement
- g) FY20 Asset Management Program – 1st Quarter Report
- h) Accept the Andersen Drive Landslide Repairs Project as Substantially Complete (CMSA Contract No. 19-13)
- i) Revised Associate Engineer Job Description



5. **Public Hearing for Proposed Fee Ordinance 2019-1 Entitled An Ordinance Relating to Fee Schedules for Capacity Charges, Waste Haulers, and Industrial Monitoring**
Recommendation: Conduct the public hearing for the proposed Fee Ordinance 2019-1, pass the Ordinance, and authorize publication of a summary of the passed Ordinance in the Marin Independent Journal newspaper.
6. **Alternate Retirement Plan for Temporary and Part Time Employees**
Recommendation: Adopt Resolution No. 339 to authorize adoption of the PARS Trust Alternative Retirement Plan, and select the PARS contribution amount and allocation between Agency and employee.
7. **New Cogeneration System Selection and Prepurchase Agreement**
Recommendation: Approve selection of a cogeneration system supplier based on the proposal analysis, and authorize the General Manager to enter into a cogeneration system prepurchase contract with the selected supplier.
8. **Accept Completion of the Primary Clarifiers Gates Rehabilitation Project (CMSA Contract No. 19-09)**
Recommendation: Accept the Primary Clarifiers Gates Rehabilitation Project as complete, and authorize the General Manager to file the Notice of Completion with Marin County.
9. **Organic Waste and Power Delivery Programs Presentation**
Recommendation: Receive the presentation on the Agency's Organic Waste and Power Delivery Programs.
10. **October 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/General Manager***
13. **Next Scheduled Meeting**
Tuesday, November 12, 2019 at 7:00 p.m. at the Agency office.
14. **Adjourn to Closed Session**
PUBLIC EMPLOYEE PERFORMANCE EVALUATION
California Government Code Section 54957
Title: General Manager
15. **Reconvene in Open Session**
Report on any action taken in Closed Session.

*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
Tuesday, September 10, 2019
at the Agency Office

1. Call Meeting to Order/Pledge of Allegiance

Chair DiGiovanni called the meeting to order at 7:02 p.m. A quorum was present.

2. Roll Call

00:00:45

Present: Chair Dean DiGiovanni; Vice-Chair Michael Boorstein; Commissioners Eli Beckman, Maribeth Bushey and Doug Kelly; and Alternate Commissioner Dan Hillmer

Absent: None

Staff present: Jason Dow, General Manager; Ken Spray, Administrative Services Manager; Kate Brouillet, Recording Secretary; and Jack Govi, Agency Counsel (arrived at 7:25 p.m.)

Public present: Mitch Barker, Public Agency Retirement System (PARS); Cody Gunstenson, Tyler Technologies

3. Open Period for Public Participation

00:01:12

There were no comments from the public.

4. Consent Calendar

00:01:27

- a) Minutes—Regular Board Meeting—July 9, 2019
- b) Treasurer’s Report—Operating Account—July 2019
- c) Treasurer’s Report—Operating Account—August 2019
- d) Schedule of Investments and its Capital Reserve Summary—July 2019
- e) Schedule of Investments and its Capital Reserve Summary—August 2019
- f) NPDES, Process, and Maintenance Report—July 2019
- g) NPDES, Process, and Maintenance Report—August 2019
- h) Performance Metric Report—July and August 2019
- i) FY19 Green Business Report
- j) Biosolids Hauling Contract - Modification of Cost Adjustment Index
- k) Cogeneration System Installation Project – Sole Source Specification for Motorized Actuators and Electrical Pilot Devices

There was no discussion by the Board.

Comments from the Public:

There were no comments from members of the public.

ACTION: Alternate Commissioner Hillmer moved to approve Consent Calendar items #4a through #4k; second, Commissioner Bushey.

VOTE: The vote was passed unanimously.

ABSTAIN: None

5. Alternate Retirement Plan for Temporary and Part Time Employees 00:01:46

GM Dow said that after CMSA was formed and began to hire employees, the Board decided that the Agency would participate in the California Public Employee Retirement System (PERS) and not in Social Security. He said that temporary employees and part-time employees, such as interns and retired annuitants, who work less than 20 hours per week, are not eligible for PERS and are subject to Social Security. He said that Agency staff became aware of an alternate retirement program through the Public Agency Retirement System (PARS) for temporary and part time employees. He said that Ken Spray, Administrative Services Manager, has had experience with this program during his employment with the City of Vallejo. GM Dow said that the program encourages eligible employees to actively invest and save for retirement, and is more advantageous to retired annuitants, who would not be eligible to receive Social Security credit.

GM Dow introduced Mitch Barker, Executive Vice President of PARS, to present the program. Mr. Barker referred to his handout and reviewed the program assets, contribution options, fees, and the benefits of the program. He said that there were several local agency participants in the program, such as the City of San Rafael, and was available for any questions.

Commissioner Bushey said that she was not cognizant of how the program was being used by the City of San Rafael, and would like to have time to review the City's participation.

The Board asked various questions about the PARS program, including program assets, cost of plan administration, employees eligible for the program, investment options, and other agencies that participate.

GM Dow and Mr. Barker responded to the Board's questions.

Alternate Commissioner Hillmer said that he thinks whether the Agency should encourage support of Social Security or an alternative retirement program is a philosophical and policy decision.

Chair DiGiovanni agreed that it was somewhat such a decision, but the decision to contribute to CalPERS in lieu of Social Security was made by the Agency many years ago, and Agency's financial obligation with participation in this plan is minimal.

The Board agreed to postpone action on this item until the next meeting to allow time for them to review the program.

Comments from the Public:

There were no comments from members of the public.

ACTION: Alternate Commissioner Hillmer moved postpone this item to the next meeting; second, Commissioner Kelly.

VOTE: The vote was passed unanimously.

ABSTAIN: None

The Board thanked Mr. Barker for attending the meeting and giving his presentation, and he left the meeting.

Chair DiGiovanni and Commissioner Hillmer said they appreciated staff coming to the Board with new cost-saving ideas for the Agency.

6. Tyler Technologies Financial System Software Procurement 00:41:46

GM Dow said that the Tyler contract was presented to the Board in July and was not approved due to compatibility-related questions between Tyler and the Nexgen software currently used for asset management. He said that the Nexgen and Tyler systems do not interface directly, but staff has confirmed that simple procedures will enable both systems to operate efficiently. GM Dow said that the cost of the Tyler system is \$135K for licensing and installation support services, funding for the system procurement is provided in the FY20 CIP's IT Hardware and Software account, and he recommends approval of the Tyler Technologies License and Services Agreement and authorize him to sign the agreement.

GM Dow said that Cody Gunstenson, Account Executive at Tyler Technologies, and Ken Spray, Administrative Services Manager were available to answer any questions.

The Board had a brief discussion and asked a few questions, including Tyler's experience and type of clients, software features, recommendations from other agencies, support service hours, data backup procedures, and contract and payment terms.

GM Dow, Mr. Spray, and Mr. Gunstenson responded to the Board's questions.

The Board concurred that the questions they had asked during the July meeting were answered to their satisfaction.

Comments from the Public:

There were no comments from members of the public.

ACTION: Alternate Commissioner Beckman moved to approve the Tyler Technologies contract for new financial system software; second, Commissioner Boorstein.

VOTE: The vote was passed unanimously.

ABSTAIN: None

The Board thanked Mr. Gunstenson for his attendance, and he left the meeting.

7. Accept the Andersen Drive Landslide Repairs Project as Substantially Complete (CMSA Contract No. 19-13) 00:52:27

GM Dow said that staff anticipated recommending that the Board accept this project as substantially complete, however, after recently inspecting the work, staff found that the project is not substantially complete and rework needs to be done on the tiebacks and walers. He said that staff and the Agency's construction contract attorney are preparing a letter to the general contractor to perform the rework, and if not completed by specific dates, the Agency will pursue damages. GM Dow said he recommends this item be postponed to a future meeting.

The Board had a brief discussion and asked few questions regarding the status of the project and the progress billing.

GM Dow responded to the Board's questions.

Commissioner Bushey said it should be communicated to the contractor the Board's disappointment with the project's delay, and that they expect them to bring the project into compliance with the contract documents.

Comments from the Public:

There were no comments from members of the public.

ACTION: Commissioner Kelly moved to continue this item to a future meeting; second, Commissioner Bushey.

VOTE: The vote was passed unanimously.

ABSTAIN: None

8. CMSA Fee Ordinance Revisions 00:58:12

GM Dow said that staff has reviewed the Agency's 2016 Fee Ordinance and proposes several revisions, including adjusting specific fees to recover actual staff costs, adding capacity charges for the expansion of current sewer user fixture units, and adding the industrial permit fee categories from the Agency's Sewer Use Ordinance. He referred to the staff memo and the Master Fee Schedule handout and reviewed the proposed revisions. He said that Agency Counsel Jack Govi has approved the draft Ordinance 2019-1 as to form, and recommends setting the public hearing for the October 8 Board meeting. He said staff will publish a Notice of Hearing in the Marin Independent Journal newspaper prior to and after the hearing.

The Board had a brief discussion and asked questions regarding the original and revised fees, cost of services, and potential new fee studies.

GM Dow responded to the Board's questions, and described the ordinance noticing procedure.

Comments from the Public:

There were no comments from members of the public.

ACTION: Commissioner Beckman moved to approve the proposed revisions to the Agency's Fee Ordinance, and schedule a public hearing for the Ordinance at the October 8 Board meeting; second, Commissioner Boorstein.

VOTE: The vote was passed unanimously.

ABSTAIN: None

Mr. Spray left the meeting.

9. San Quentin Pump Station Motor Control Center and Control Panel Upgrade Project (CMSA Contract No. 20-01) 01:12:01

GM Dow said that staff has worked with GHD to finalize the design and prepare the bid documents for the San Quentin Pump Station Motor Control Center and Control Panel Upgrade Project, and staff has also acquired approval from the California Department of Corrections and Rehabilitation (CDCR) to advertise the project for public bidding. He said that if approved by the Board, staff will issue the public bid advertisement in the near future and bring a construction contract award recommendation to the November meeting for Board consideration of approval.

The Board had a brief discussion, and asked several questions regarding the pump station condition, capacity, and flow; operating permit requirements; and the costs included in the contract.

GM Dow responded to the Board's questions, and said that the contract has funds to cover the project expenses, and if overages were anticipated, these would be reviewed with CDCR and reported to the Board.

Comments from the Public:

There were no comments from members of the public.

ACTION: Commissioner Boorstein moved to adopt the construction contract documents for the San Quentin Pump Station Motor Control Center and Control Panel Upgrade Project, and authorize the General Manager to advertise the contract for public bidding; second, Alternate Commissioner Hillmer.

VOTE: The vote was passed unanimously.

ABSTAIN: None

10. August/September Informational Items **01:19:45**

- GM Dow referred to item “A” and said that funds in the amount of \$500K have been received from the Clean Water State Revolving Fund, and the project is complete.
- Commissioner Kelly asked regarding item “F,” who will assume the responsibilities of the BACC Coordinator now that Dublin San Ramon Services District is relinquishing these duties.

GM Dow responded that BACWA will serve as the BACC administrator and will include their fees in their annual member invoices.

Comments from the Public:

There were no comments from members of the public.

This item was informational and no action was taken by the Board.

11. North Bay Watershed Association (NBWA) Report **01:22:17**

Vice Chair Boorstein reported that he attended the North Bay Watershed Association Board meetings held on July 12 and September 6, 2019. He said he forwarded a link to the NBWA quarterly newsletter to Board members, and that this communication effort is part of their new strategic plan. He said the Napa Sanitation Agency was the location for the September meeting and reported about the agency’s history and development, and current operations. He said that the October meeting will be to visit a re-oaking project in Sonoma county, in support of one of NBWA’s initiatives.

12. Oral Reports by Commissioners/General Manager **01:26:42**

Commissioner Boorstein asked about the status of the Marin Airporter bus parking.

GM Dow said that site improvements have been made, the cost for the property appraisal has been reimbursed by Marin Airporter, and an invoice is being prepared for the site improvements. He said that Marin Airporter staff will be on site on Sunday, 9/22 for training, and will start using the parking area on Monday, 9/23.

GM Dow referred to his handout and reported:

- Agency recruitments have been completed for the Operator-in-Training and Environmental Services Analyst positions, and new hires Claire Ernst and Kyle Carbajal have begun work.
- The recruitment for Institutional Utility Laborers has resulted in only 14 applications received; 99 resumes were posted on Indeed.com but only two applications were received; recruitment deadline will be moved out to 9/13.
- Amy Hwang has resigned and accepted a position at EBMUD. Recruitment has been initiated with Koff & Associates.
- Agency Counsel Jack Govi is retiring in March 2020.

- RVSD is using CMSA recycled water for dust control at the Larkspur Landing site remediation project.
- The refurbished cogeneration engine started on 9/9 with no issues, ran on natural gas on 9/10, and will begin regular operation on biogas on 9/11.

DIRECTION: Staff to prepare a Resolution of Appreciation for Jack Govi.

13. Next Scheduled Meeting

01:32:10

Tuesday, October 8, 2019 at 7:00 p.m. at the Agency office.

14. Closed Session was convened at 8:35 p.m.

01:32:18

PUBLIC EMPLOYEE PERFORMANCE EVALUATION
California Government Code Section 54957
Title: General Manager

15. Open Session was reconvened at 9:11 p.m.

No action was taken by the Board, and direction was given to staff.

Respectfully submitted,

Kate Brouillet, Recording Secretary

Eli Beckman, Secretary

Central Marin Sanitation Agency
Treasurer's Report - Operating Account
For the Month of September 2019

I. Accounts Summary: Bank & Investment Accounts

Summary of Bank & Money Market Accounts

Westamerica Bank - Account Activity shown below	\$ 230,641.41
Local Agency Investment Fund (LAIF) - Refer to Schedule of Investments	16,000,238.38
California Asset Management Program (CAMP) - Refer to Schedule of Investments	376,507.22
Total Bank & Investment Accounts: Ending Balance on September 30, 2019	<u>\$ 16,607,387.01</u>

II. Account Activity for Westamerica Bank

Beginning Balance on September 1, 2019 375,178.06


Cash Receipts (Deposits into Westamerica):

Transfers from LAIF	800,000.00
Permit and Inspection Fees	640.00
LGVSD - Pollution Prevention & FOG (FY19 4Q: April-June)	3,130.87
Revenue from Haulers & RVs	10,401.18
Revenue from Organic Waste Programs	14,198.93
Health & Safety Program Revenue (NSD: FY19 2Q Salary/Benefits)	8,513.36
County-wide Public Education Program Reimbursement (FY20 Annual Prepayment: SASM, SD#5)	4,555.05
SQSP Wastewater Services Contract (FY19: June)	114,204.89
SQSP: Reimburse GHD Engineering additional design work June - July 2019	18,685.00
SQ Village Operations & Maintenance Contract (FY20: July)	786.64
Interest Income: CalCARD Incentive Payment	489.59
Expense Reimbursement from NSD for Traffic Control Training	811.36
Total Cash Receipts	<u>\$ 976,416.87</u>

Cash Disbursements (Withdrawals from WestAmerica):

September 2019 Operating account disbursements register (see attached)	\$743,150.59
Regular Payroll paid 09/13/19	155,434.37
Regular Payroll paid 09/27/19	145,992.00
Transfers to EFTPS Federal Payroll Taxes (09/03, 09/18, 09/30)	70,481.29
Total Cash Disbursements	<u>\$1,120,953.52</u>
Ending Balance on September 30, 2019	<u>\$ 230,641.41</u>

Prepared by: 
Kenneth Spray, Administrative Services Manager

Reviewed by: 
Jason Dow, General Manager

Central Marin Sanitation Agency
Operating Account Disbursements Register
For the Month of September 2019

Check Number	Date	Vendor/Payee	Amount	Description
18876				Last check # from prior month's register
18877	9/3/2019	Phillip Frye	224.41	Reimbursement for retiree health benefits by check
18878	9/3/2019	James L. Johnson	187.74	Reimbursement for retiree health benefits by check
18879	9/3/2019	Byron Jones	221.44	Reimbursement for retiree health benefits by check
18880-18905		Void due to OSAS error		
18906	9/12/2019	Amazing Solutions, Inc.	3,839.20	OSAS financial software maintenance renewal; software support (2 invoices)
18907	9/12/2019	ChemStation of Northern Cal.	3,116.20	Odor control materials, September 2019
18908	9/12/2019	CWEA TCP	585.00	CWEA Redwood Empire dinner meeting (14 employees)
18909	9/12/2019	Evoqua Water Tech LLC	9,866.12	Calcium nitrate (1 delivery)
18910	9/12/2019	Fastenal Company	1,246.00	Maintenance vending machine supply replenishment (2 invoices)
18911	9/12/2019	Chris Finton	250.00	Commuter Reimbursement Program, July-August 2019
18912	9/12/2019	Flyers Energy LLC	6,682.52	Gasoline and diesel fuel
18913	9/12/2019	Frontier Analytical Lab.	900.00	NPDES Permit sampling and testing
18914	9/12/2019	Hazen and Sawyer	4,493.65	Prof Svcs: Process control microscopic sample, July 2019
18915	9/12/2019	IEDA, Inc.	837.00	Labor relations consulting, September 2019
18916	9/12/2019	Instrumart	252.75	Level sensor parts
18917	9/12/2019	Lamotte Co.	102.52	Sulfide test solution
18918	9/12/2019	Lee & Ro, Inc	1,864.00	Prof Svcs: Main Switchgear Condition Assessment Project, August 2019
18919	9/12/2019	Kevin Lewis	244.96	Employee travel expense reimb: Refurbished cogeneration engine witness testing
18920	9/12/2019	Lystek International LTD	11,248.82	Biosolids beneficial reuse fee, August 2019
18921	9/12/2019	Marin Office Supply	1,033.98	Office supplies & equipment, August 2019 (12 invoices)
18922	9/12/2019	P.G.& E.	77,735.27	Electricity service, 07/17-08/15/2019 (3 invoices)
18923	9/12/2019	Pipette.com	682.01	Channel pipette tips for laboratory
18924	9/12/2019	Ryan Herco Flow Solutions	350.63	Bioassay testing supplies
18925	9/12/2019	Ricoh USA Inc	259.35	Lab printer/copier lease, 08/09-09/09/2019
18926	9/12/2019	State Water Resources Ctrl Brd	95.00	OIT I Certificate (one employee)
18927	9/12/2019	USA BlueBook	455.77	Volatile acid testing supplies
18928	9/12/2019	Valley Power Systems-North	31.25	Seals for equipment
18929	9/12/2019	Van Bebber Bros., Inc.	728.45	Plates for aeration tank gates (2 invoices)
18930	9/12/2019	VWR International	230.08	Chemicals and consumables, June-July 2019 (4 invoices)
18931	9/12/2019	Waters, Jeff	230.00	Employee expense reimb: safety shoes
18932	9/12/2019	Wells Fargo Vendor	374.14	Maintenance printer/copier lease, 08/13-09/12/2019
18933	9/17/2019	CAL-CARD	15,894.16	State of California Purchase Card, July-August 2019
18934	9/17/2019	California Public Employee	3,584.00	Contribution to Retiree Health Benefits Trust Fund, September 2019 (Note C)
18935	9/17/2019	California State Disbursement	250.50	EE Garnishment, PPE 09/07/2019 (Note A)
18936	9/17/2019	ICMA Retirement Trust-457	2,400.00	Deferred compensation contributions, PPE 09/07/2019 (Note A)
18937	9/17/2019	Navia Benefit Solutions	1,020.11	Flexible spending account, PPE 09/07/2019; Participant fee (2 invoices)
18938	9/17/2019	SEIU Local 1021	1,058.63	Union dues, PPE 09/07/2019
18939	9/18/2019	Amazon	600.18	Hydrogen sulfide, and electrical and office supplies
18940	9/18/2019	Aramark Uniform Services	958.92	Uniform service, August 2019
18941	9/18/2019	AT&T Dataplan	387.30	Fax and emergency phone service, 09/02-10/01/2019
18942	9/18/2019	Bob Bally	217.99	Employee expense reimb: Safety shoes
18943	9/18/2019	Bartley Pump Inc	166,250.00	Primary Clarifiers Gates Rehabilitation Project, payment #2, August 2019
18944	9/18/2019	Brandon Tire	121.20	Agency vehicle tire repairs
18945	9/18/2019	Katherine Brouillet	351.50	Employee Award Program: FY18 GFOA Awards; Employee per diem advance: CSDA Board Secretary Conference
18946	9/18/2019	Comcast	193.38	Internet service, 09/04-10/03/2019
18947	9/18/2019	Environmental Dynamics, Inc.	5,878.50	Aeration process tank membranes, channel diffusers, clamps
18948	9/18/2019	Evoqua Water Tech LLC	30,147.26	Calcium nitrate (2 deliveries), hydrogen peroxide (1 delivery) (3 invoices)

Central Marin Sanitation Agency
Operating Account Disbursements Register
For the Month of September 2019

Check Number	Date	Vendor/Payee	Amount	Description
18949	9/18/2019	Fisher Scientific	2,373.00	Sulfuric acid, sodium hydroxide, filters, mitts, buffers, tubing, vials, August 2019 (15 invoices)
18950	9/18/2019	Five Thousand Forms Inc	9,814.50	Pub Ed Program: Promotional items (Note B)
18951	9/18/2019	Foster Flow Control	415.92	Rotork LCD replacements
18952	9/18/2019	Hagel Supply Co.	935.28	Utility and cleaning supplies, July-August 2019 (2 invoices)
18953	9/18/2019	Harrington Industrial Plastics	266.88	PVC valve
18954	9/18/2019	Home Depot Credit Services	472.54	Laboratory and maintenance supplies, August 2019
18955	9/18/2019	Instrumart	2,690.07	Ferric chloride flow meter
18956	9/18/2019	Kaman Industrial Technologies	2,992.10	Grit pump installation parts and supplies (4 invoices)
18957	9/18/2019	Kone Inc	147.64	Elevator maintenance, September 2019
18958	9/18/2019	The Lab Depot	524.63	Process control chemicals
18959	9/18/2019	Heidi Lang	200.00	Employee Award Program: FY18 GFOA Awards
18960	9/18/2019	Marin Independent Journal	873.50	IUL recruitment: public notice
18961	9/18/2019	Marin Sanitary Service	3,266.33	Shredding service, and recycling and rag bins disposal, August-September, 2019 (3 invoices)
18962	9/18/2019	Marin Recycling HHWF	110.00	Yard waste disposal, August 2019
18963	9/18/2019	NACWA	11,250.00	Annual membership fee, 10/01/2019-09/30/2020
18964	9/18/2019	Ongaro & Sons	623.00	Annual backflow device testing (2 invoices)
18965	9/18/2019	Ricoh USA Inc	317.99	Admin printer/copier lease, 08/23-09/22/2019
18966	9/18/2019	Rubenstein Supply Co.	6.46	Pipe fittings
18967	9/18/2019	Calmat Co./Shamrock Materials	191.74	Propane
18968	9/18/2019	Kenneth R Spray	200.00	Employee Award Program: FY18 GFOA Awards
18969	9/18/2019	Super Bright Leds, Inc	12.42	Lighting supplies
18970	9/18/2019	Ahn Ta	200.00	Employee Award Program: FY18 GFOA Awards
18971	9/18/2019	Thomas Fish Company	145.75	Rainbow trout for monthly bioassay test, August 2019
18972	9/18/2019	The Cary Company	182.68	Bottles for laboratory
18973	9/18/2019	Univar USA Inc	9,693.74	Sodium hypochlorite (1 delivery); Sodium bisulfite (1 delivery) (2 invoices)
18974	9/18/2019	VWR International	901.04	Beakers, DI water, laboratory cart, August 2019 (4 invoices)
18975	9/18/2019	Waste Management	2,530.01	Redwood Landfill biosolids reuse fee, August 2019
18976	9/18/2019	Water Components & Bldg. Supp.	240.42	Valves and paint
18977	9/18/2019	Western Exterminator Co.,Inc.	188.50	Pest control service
18978	9/18/2019	Dee Consultants LLC	5,375.00	Prof Svcs: Construction management support, 08/12-09/14/2019
18979	9/18/2019	Jason Dow	276.00	Employee per diem advance: WEFTEC Workshops
18980	9/18/2019	McInerney & Dillon, P.C.	38.50	Legal services, construction/contract law, August 2019
18981	9/18/2019	S&S Trucking	9,953.88	Biosolids hauling fee, August 2019
18982	9/9/2019	Fastenal Company	717.95	Maintenance vending machine supply replenishment, August 2019
18983	9/20/2019	Caltest Analytical Laboratory	1,934.41	NPDES permit lab analyses, August 2019
18984	9/20/2019	Void	-	
18985	9/20/2019	CWEA TCP	384.00	Membership renewals (2 employees)
18986	9/20/2019	Evoqua Water Tech LLC	40,396.02	Calcium nitrate (3 deliveries), hydrogen peroxide (1 delivery) (4 invoices)
18987	9/20/2019	Hach Company	5,168.04	Laboratory consumable supplies for COD and volatile acid analysis (5 invoices)
18988	9/20/2019	Justifacts Credential	85.75	ESA Recruitment: Background check
18989	9/20/2019	Mark Koekemoer	193.30	Employee travel expense reimb: Grease interceptor training; ELTAC meeting
18990	9/20/2019	Koff & Associates, Inc.	2,250.00	Prof Svcs: ESA recruitment, final payment
18991	9/20/2019	Medical Center of Marin	68.00	ESA Recruitment: Pre-employment testing
18992	9/20/2019	Univar USA Inc	7,328.21	Sodium hypochlorite (2 deliveries) (2 invoices)
18993	9/27/2019	Kyle B Carbajal	125.64	Employee travel expense reimb: Mileage to pre-employment physical; DMV report
18994	9/27/2019	California State Disbursement	250.50	EE Garnishment, PPE 09/21/2019 (Note A)
18995	9/27/2019	ICMA Retirement Trust-457	2,400.00	Deferred compensation contributions, PPE 09/21/2019 (Note A)

Central Marin Sanitation Agency
 Operating Account Disbursements Register
 For the Month of September 2019

Check Number	Date	Vendor/Payee	Amount	Description
18996	9/27/2019	Navia Benefit Solutions	969.01	Flexible spending account, PPE 09/21/2019
18997	9/27/2019	SEIU Local 1021	1,058.63	Union dues, PPE 09/21/2019
18998	9/27/2019	Automation Direct Co., Inc.	596.26	Switches, sensors, steel enclosures, August 2019 (3 invoices)
18999	9/27/2019	CWEA TCP	94.00	Membership renewal (1 employee)
19000	9/27/2019	Jon Farr	155.85	Employee travel expense reimb: Autocad training
19001	9/27/2019	GHD Inc	1,849.75	Prof Svcs: Asset Management Program Evaluation, September 2019, final payment
19002	9/27/2019	Grainger	6,450.99	Heater motor, drum mixer, spill containment berm, & misc. parts and supplies (22 invoices); SD2 PS Maint: Spare submersible pump (1 invoice) (Note B)
19003	9/27/2019	Home Depot Credit Services	1,537.04	Maintenance and electrical tools and supplies; SD2 PS Maint: Control supplies (Note B)
19004	9/27/2019	Jackson's Hardware	969.05	Safety shoes, paint, fuel and misc. laboratory and maintenance supplies (8 invoices); SD2 PS Maint: Weed control (1 invoice) (Note B)
19005	9/27/2019	Miller Pacific	13,259.90	Prof Svcs: Andersen Drive Hillside Project-Geotechnical Support Services, 07/14-09/08/2019
19006	9/27/2019	Peterson	924.10	Coolant for cogeneration engine
19007	9/27/2019	Platt	569.14	Maintenance and laboratory supplies, August 2019
19008	9/27/2019	RMC	215.12	Maintenance printer/copier lease, 06/17-09/16/2019
19009	9/27/2019	Roy's Sewer Service, Inc.	2,500.00	Quarterly Organic Waste Receiving Facility cleaning
19010	9/27/2019	Sparling Instruments, LLC	1,446.36	SQPS Maint: Analog to Digital Converter (Note B)
19011	9/27/2019	Stripe N Seal Inc	3,477.00	Facility Road Striping project
19012	9/27/2019	Super Bright Leds, Inc	74.24	Lighting supplies
19013	9/27/2019	Thatcher Company of	7,174.78	Ferric chloride (1 delivery)
19014	9/27/2019	Wells Fargo Vendor	374.14	Maintenance printer/copier lease, 09/13-10/12/2019
19015	9/27/2019	Woodland Center Auto Supply	278.33	Agency vehicle maintenance (10 invoices)

Payments by Automatic Clearing House:

	9/3/2019	Lincoln Life Ins	2,184.78	Life insurance, September 2019
	9/3/2019	Vision Service Plan -(CA)	913.35	Vision insurance, September 2019
	9/3/2019	Payments to 26 retirees	7,535.32	Reimbursement for retiree health benefits
	9/3/2019	CalPERS Medical ins	64,010.34	Medical insurance, September 2019
	9/3/2019	CalPERS	39,233.60	Retirement pension contribution: Agency and employees, PPE 08/24/2019 (Note C)
	9/18/2019	CalPERS	39,014.79	Retirement pension contribution: Agency and employees, PPE 09/07/2019 (Note C)
	9/3/2019	EDD	25,863.88	State & SDI Taxes, PPE 08/24/2019
	9/18/2019	EDD	971.90	State & SDI Taxes, PPE 09/07/2019
	9/27/2019	EDD	905.13	State & SDI Taxes, PPE 09/21/2019
	9/3/2019	NRS/PEHP-3 and Z	8,657.40	Deferred compensation and MARA contribution, PPE 08/24/2019
	9/18/2019	NRS/PEHP-3 and Z	8,696.67	Deferred compensation and MARA contribution, PPE 09/07/2019
	9/30/2019	NRS/PEHP-3 and Z	8,724.06	Deferred compensation and MARA contribution, PPE 09/21/2019
	9/12/2019	Eli Beckman	225.00	Stipend for 09/10/2019 Board Meeting
	9/12/2019	Michael Owen Boorstein	675.00	Stipend for 09/10/2019 Board meeting and July and September NBWA Board meetings
	9/12/2019	Maribeth Bushey	225.00	Stipend for 09/10/2019 Board Meeting
	9/12/2019	Dean DiGiovanni	225.00	Stipend for 09/10/2019 Board Meeting
	9/12/2019	Dan Hillmer	225.00	Stipend for 09/10/2019 Board Meeting
	9/12/2019	Douglas T Kelly	225.00	Stipend for 09/10/2019 Board Meeting
	9/12/2019	Synagro	4,272.45	Biosolids land application fee, July 2019
		Grand Total	743,150.59	

Central Marin Sanitation Agency
Operating Account Disbursements Register
For the Month of September 2019

Check Number	Date	Vendor/Payee	Amount	Description
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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 OF INVESTMENTS
As of the Month Ended September 30, 2019

4c

Description	Book Value	Market Value (1)	% Portfolio	Projected Year End
I. Pooled Investments with California Asset Management Program (CAMP)				
Money Market Funds (< 1 year in maturity)				
CAMP Cash Reserve Pool: 2.22% at 9/30/19				
b1. Operating Reserve (Unrestricted) (2)	\$ 26,507.22	\$ 26,507.22		Sum b1. Below
b2. Emergency Reserve (Unrestricted)	250,000.00	250,000.00		\$ 250,000
b3. Insurance Reserve (Unrestricted)	100,000.00	100,000.00		\$ 100,000
Total with CAMP	\$ 376,507.22	\$ 376,507.22	2.3%	
II. Pooled Investments with Local Agency Investment Fund (LAIF)				
Money Market Funds (< 1 year in maturity)				
Local Agency Investment Fund (LAIF): 2.341% at 8/31/19				
a1. Current Operating Fund	\$ 2,029,351.60	\$ 2,029,351.60		
b1. Operating Reserve (Unrestricted) (2)	\$ 3,115,967.78	\$ 3,115,967.78		\$ 3,142,475
c1. Capital Reserves (Restricted) (3)	\$ 1,233,791.00	\$ 1,233,791.00		\$ 991,834
c2. Capital Reserves (Unrestricted) (4)	\$ 9,621,128.00	\$ 9,621,128.00		\$ 7,778,603
Total with LAIF	\$ 16,000,238.38	\$ 16,000,238.38	97.7%	
TOTAL INVESTMENTS	\$ 16,376,745.60	\$ 16,376,745.60	100.0%	


NOTES:

- (1) Market values are per the fiscal agent's respective monthly statements
- (2) Operating reserves calculated at 25% operating budget

- (3) Includes capacity charges and debt service coverage
- (4) Includes capital fee charges

Statement of Compliance

The above portfolio of investments is in compliance with the Agency's investments policy, adopted annually, and California Government 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.


Kenneth Spray, CPA
Administrative Services Manager

CENTRAL MARIN SANITATION AGENCY
CAPITAL RESERVES SUMMARY FOR THE SCHEDULE OF INVESTMENTS

Year-to-Date as of the Month Ended September 30, 2019

	Monthly Amounts Received (Used)	YTD Amounts Received (Used)
Restricted Capital Reserves Sources and Uses		
Capacity charges revenue	\$ -	\$ 20,568
Debt coverage collection revenue	-	799,782
	<hr/>	<hr/>
Total restricted capital reserve funding sources	-	820,350
Capacity charges usage for capital (1st)	-	(20,568)
Debt coverage usage for capital (2nd)	(227,314)	(559,293)
	<hr/>	<hr/>
Total restricted capital reserve uses	(227,314)	(579,861)
Net change		240,489
Balance - beg of year		993,302
Balance - end of year		<u>\$ 1,233,791</u>
 Unrestricted Capital Reserves Sources and Uses		
Capital fee revenue	\$ -	\$ 255,250
Unrestricted operating-reserve-transfer-in	-	-
SRF/FEMA cost reimb proceeds received	-	106,758
	<hr/>	<hr/>
Total unrestricted capital reserve funding sources	-	362,008
Capital fee usage to fund CIP (3rd)	-	-
Unrestricted capital reserve draw (4th)	-	-
	<hr/>	<hr/>
Total unrestricted capital reserve uses	-	-
Net change		362,008
Balance - beg of year		9,259,120
Balance - end of year		<u>\$ 9,621,128</u>
 Total capital reserve balances		 <u>\$ 10,854,919</u>
 Total approved CIP budget		 \$ 3,900,626
Total CIP funded from capital reserve sources		<u>(579,861)</u>
Total approved capital budget remaining		<u>\$ 3,320,765</u>



BOARD MEMORANDUM

October 3, 2019

To: CMSA Commissioners and Alternates

From: Alan Burleigh, Assistant Operations Supervisor

Approved: Jason Dow, General Manager

Subject: September 2019 NPDES Permit Compliance, Treatment Process, and Maintenance Activities Report

Recommendation: Accept the September 2019 NPDES Permit Compliance, Treatment Process, and Maintenance Activities Report.

I. NPDES Permit Compliance

Our NPDES permit testing for September showed that the CMSA 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. We successfully passed the September 96-hour flow through bioassay test. CMSA’s NPDES permit specifies quarterly monitoring for enterococcus bacteria and for each wet-weather blend event to verify compliance with established effluent limits. The enterococcus geometric mean this past quarter was 3.1 MPN, well below our monthly limit of 35 MPN.

II. Influent Flow

September in central Marin County was marked by periods of fog, high winds, and for a few days this past month, periods of high heat. It remained very dry with no precipitation recorded by the Agency’s rain gauge. The treatment plant’s average daily influent flow was 8.6 MGD.

The CMSA treatment plant and each satellite collection agency’s daily average and total monthly influent flows are shown in the table below:

August Monthly Influent Flows	San Rafael (SRSD)	Ross Valley (RVSD)	San Quentin (SQSP)	Corte Madera (SD#2)	CMSA Plant Total
Average Daily (MGD)	3.6 MGD	4.0 MGD	0.46 MGD	0.98 MGD	8.6 MGD
Total for Month (MG)	95.5MG	119.5 MG	13.69 MG	29.26 MG	257.9 MG
Percent of Flow	37.2 %	46.2 %	5.3 %	11.3 %	100 %

III. Treatment Process

Primary clarifiers Nos. 4 & 5 were placed in service and Nos. 6 & 7 were drained. The tanks were swapped to allow the draining of the influent channel of primary clarifier No. 1. Access to this channel was required as part of the Primary Influent Gate Rehabilitation Project, to replace the original hydraulic gate operators with electric powered operators. Headworks grit tanks and barscreens were rotated to provide access for repairs to a grit valve and for Electrical/Instrumentation staff to complete installation of an emergency bypass to the variable frequency drive (VFD) of barscreen No. 1. Chlorine contact tanks Nos. 5 & 6 were isolated and locked out for coating contractors to perform work in the tanks. The secondary effluent total suspended solids (TSS) meter was not providing usable data in its original location and was moved to the aeration influent splitter box. It is now providing instantaneous accurate data on the system. The Operations department will use this information to more accurately monitor conditions in the secondary system.

The Mixed Liquor Suspended Solids (MLSS) inventory averaged 893 mg/l in September, a decrease in inventory from last month. This reduction in biomass is in alignment with our target Mean Cell Residence Time (MCRT) of 3.1 days.

Graph No. 3 shows the coliform most probable number (MPN), which represents the effectiveness of the disinfection process. All twelve coliform samples collected in September were below our monthly KPI of 30 MPN, and well below our daily permit limit of 10,000 MPN. The total coliform monthly geometric mean for September was 2.2 MPN, well below our permit's monthly limit of 240 MPN.

Graph No. 4 shows the Total Suspended Solids (TSS), which is a good indicator of the effluent quality. The TSS monthly average in September was 4.5 mg/l, which is 30.0% of our Key Performance Indicator (KPI) of 15 mg/l, and is 15.0% of our permit's monthly average limit of 30 mg/l.

IV. Maintenance Activities

The cogeneration system was returned to service on September 11, and began exporting power almost immediately. The engine is being closely monitored during its 500 hour 'break-in' period. Upon conclusion of the break-in, the engine will be shut down, a technician from a local cogen repair facility will perform an inspection and make any required adjustments. Staff will then complete an oil change, and the engine will be returned to normal service. Operations staff is currently developing a strategy to incorporate our ability to export power to the electrical grid.

The majority of September's work activities were spent performing annual process equipment preventative maintenance. In addition, technicians replaced grit pump No. 5, installed filters on the air supply to the aeration blower room, replaced a broken valve on a 4" grit line, and began installation of a new high volume sodium bisulfite pump. A new heat loop to provide a heating system for the pilot digesters has been constructed and is undergoing testing.

Attachment:

- September 2019 NPDES Permit Compliance, Treatment Process, and Maintenance Activities Report

NPDES Permit Compliance, Treatment Process, and Maintenance Activities Report

September 2019



Old primary influent hydraulic gate.



New primary influent motor operated gate.

Monthly Compliance Summary Table

Central Marin Sanitation Agency

September, 2019

Final Effluent Monitoring

Parameter	Frequency	Units	Results	Limit
Carbonaceous BOD Highest Weekly Average	Weekly	mg/L	5.3 ^(a)	Maximum 40
Carbonaceous BOD Monthly Average	Monthly	mg/L	4.8 ^(a)	Maximum 25
Carbonaceous BOD Monthly Removal Rate	Monthly	%	98.5 ^(a)	Minimum 85
Total Suspended Solids Highest Weekly Average	Weekly	mg/L	5.3	Maximum 45
Total Suspended Solids Monthly Average	Monthly	mg/L	4.5	Maximum 30
Total Suspended Solids Monthly Removal Rate	Monthly	%	98.9	Minimum 85
Chlorine Residual Instant Limit	Instant	mg/L	ND	Maximum 0.0
Ammonia Monthly Average	Monthly	mg/L	35.3 ^(a)	Maximum 60
Ammonia Maximum Daily	Daily	mg/L	35.3 ^(a)	Maximum 120
pH Lower Limit	Continuous	SU	6.6	Minimum 6
pH Upper Limit	Continuous	SU	7.4	Maximum 9
Bacteriological Analysis				
Total Coliform Monthly Geometric Mean	3 X Week	MPN/100mL	2.2 ^(a)	Maximum 240
Total Coliform Daily Maximum	3 X Week	MPN/100mL	9.3 ^(a)	Maximum 10,000
Enterococcus Quarterly Geometric Mean	Quarterly	MPN/100mL	3.1	Maximum 35
Flow Through Bioassay				
Acute Toxicity 11 Sample 90th Percentile	Monthly	% survival	100	Minimum 70
Acute Toxicity 11 Sample Median	Monthly	% survival	100	Minimum 90
Metals Analysis				
Copper Daily Limit	Monthly	ug/L	5.6	Maximum 85
Copper Monthly Average	Monthly	ug/L	5.6	Maximum 49
Cyanide Daily Limit	Monthly	ug/L	J2.0	Maximum 41
Cyanide Monthly Average	Monthly	ug/L	J2.0	Maximum 21
Mercury Weekly Average	Weekly	ug/L	0.0028	Maximum 0.072
Mercury Monthly Average	Monthly	ug/L	0.0028	Maximum 0.066
Mercury Monthly Loading	Monthly	kg/mo	0.00215	
Mercury Annual Loading (watershed permit)	Jan-Dec	kg/yr	0.08116	Maximum 0.11
Permit Analysis				
Dioxin - Total Equivalents (TEQ) Daily Maximum	1/Permit Cycle	ug/L	*	Maximum 2.8E-08
Dioxin - Total Equivalents (TEQ) Monthly Average	1/Permit Cycle	ug/L	*	Maximum 1.4E-08
Polychlorinated Biphenyls (PCBs) Daily Limit	1/Permit Cycle	ug/L	*	Maximum 0.017
Polychlorinated Biphenyls (PCBs) Monthly Limit	1/Permit Cycle	ug/L	*	Maximum 0.012
Semiannual and Quarterly Analysis				
Oil and Grease Daily Limit	Semiannual	mg/L	ND	Maximum 20
Oil and Grease Monthly Average	Semiannual	mg/L	ND	Maximum 10
Chronic Bioassay Toxicity	Quarterly	Tuc	ND	Maximum 20
Chronic Bioassay Toxicity (3 sample median)	Quarterly	Tuc	ND	Maximum 10
Flow Analysis	Daily Max	Hourly Max	5 minute Max	Monthly Average
Effluent Flow	7.7	13.0	15.7	6.6
Influent Flow	9.1	14.5	18.8	8.6
# Days Blended				0

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

^(a): All data not available at the time of report publication.

Glossary of Terms

NPDES Permit Compliance Summary Table

- **Ammonia:** CMSA's NPDES permit requires that 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 120 mg/L and a monthly average limit of 60 mg/L. The maximum daily limit is the number that cannot be exceeded on any sample and the monthly average applies to all samples collected in any month (although typically we are required to take only one sample).
- **Biochemical Oxygen Demand (BOD):** The amount of dissolved oxygen needed by microorganisms (biomass) to stabilize organic material in the effluent. The permit limits for our effluent require that removal of 85% influent BOD, and meet a weekly average of less than 40 mg/L and a monthly average of less than 25 mg/L BOD.
- **Chlorine Residual:** The secondary effluent is disinfected with hypochlorite (chlorine "bleach"), and then the residual chlorine is neutralized with sodium bisulfite to protect the Bay environment. The final effluent chlorine residual limit is 0.0 mg/l, which is monitored continuously.
- **Bacteria:** Coliform and enterococcus bacteria are the indicator organisms for the determination of the effectiveness of the disinfection process.
- **Dioxin - Total Equivalents:** These are 17 dioxin-like compounds that we analyze for twice per year which have permit limits.
- **Oils and Grease:** We are required to monitor our effluent for Oils and Grease quarterly.
- **Flow Through Bioassay:** A 96-hour test in which we test the toxicity of our effluent to young rainbow trout (15-30 days old) in a flow-through tank to determine their survivability under continuous exposure to CMSA effluent. The permit requires that we maintain a 90th percentile survival of at least 70% and an 11-sample median survival of at least 90%. In layman's terms, this means that out of the last 11 samples, only one bioassay may fall below 70% survival, and the middle value—when all 11 samples are placed in numerical order—must be at least 90%.
- **Metals Analysis:** Our permit requires that we analyze our effluent for many different metals on a monthly basis. We have permit limits for three of the metals. The limits are stated as a maximum daily limit and a monthly average limit.
- **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 permit effluent pH must stay within the range of 6.0 to 9.0, which we monitor continuously.
- **Total Suspended Solids (TSS):** Measurement of suspended solids in the effluent. Our permit requires that we remove 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
September 2019

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

PRIMARY CLARIFIER PERFORMANCE

Average Total Suspended Solids (TSS) in:	480.3	mg/l	<i>Expected removal efficiencies as outlined in Metcalf & Eddy Wastewater Engineering Manual.</i>
Average TSS out:	147.8	mg/l	
Average Percent Removal Achieved:	61.7	%	Design 50-70% Removal
Average Total Carbonaceous Biochemical Oxygen Demand (CBOD) in:	343.6	mg/l	
Average CBOD out:	157.3	mg/l	
Average Percent Removal Achieved:	51.7	%	Design 25-40% Removal
Average Plant Influent Flows:	8.6	MGD	

BIOTOWER PERFORMANCE

Average TSS out:	111.1	mg/l	
Average CBOD out:	58.9	mg/l	
Average Percent CBOD Removal Achieved:	61.2	%	Design 25-30% Removal

AERATION TANKS/ACTIVATED SLUDGE

Dissolved Oxygen set point:	2.5	mg/l
Average MLSS:	892.6	mg/l
Average MCRT:	3.19	Days
Average SVI:	170	

SECONDARY CLARIFIERS

Average WAS concentration:	5,581	mg/l
Average TSS out:	5.7	mg/l

FINAL EFFLUENT

Average Effluent TSS for the month:	4.5	mg/l	(Maximum Limit: 30mg/l)
Week #1 weekly average	4.1	mg/l	(Maximum Limit: 45mg/l)
Week #2 weekly average	3.9	mg/l	"
Week #3 weekly average	5.3	mg/l	"
Week #4 weekly average	4.6	mg/l	"
Week #5 weekly average	N/A	mg/l	"
Monthly average TSS removal efficiency through the plant:	98.9	%	(Minimum Limit: 85%)

Average Effluent CBOD:	4.8	mg/l	(Maximum Limit: 25mg/l)
Week #1 weekly average	5.3	mg/l	(Maximum Limit: 40mg/l)
Week #2 weekly average	4.7	mg/l	"
Week #3 weekly average	5.0	mg/l	"
Week #4 weekly average	4.3	mg/l	"
Week #5 weekly average	N/A	mg/l	"
Monthly average CBOD removal efficiency through the plant:	98.5	%	(Minimum Limit: 85%)

Disinfection Dosing Rate:	3.4	mg/l	monthly average
Total Coliform Monthly Geometric Mean:	2.2	MPN	(Maximum 240)
The Daily Maximum Total Coliform Count for the month:	9.3	MPN	(Maximum 10,000)
Enterococcus Monthly Geometric Mean:	N/A	MPN	(Maximum 35 MPN)
Effluent pH for the month was:	Min	6.6	MPN (Min 6.0)
	Max	7.4	MPN (Max 9.0)

DIGESTER TREATMENT

Average Thickened Waste Concentration from the RDT:	6.1	%	
Average percent of Volatile Solids destroyed:	84.2	%	
Cubic feet of biogas produced:	7,244,670 (Total)		241,489 (Daily Average)
Average temperature of the digester:	102.0	degrees Fahrenheit	

EXECUTIVE SUMMARY PROCESS PERFORMANCE DATA

September 2019

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

DEWATERING

Average Centrifuge Feed concentration:	2.6	%
Average Biosolids concentration:	25.7	%
Average TSS of the Centrate:	230	mg/l
Solids capture of the Centrifuge:	99.2	%
Polymer use per Dry ton of biosolids:	13.26	#/dry ton
Average polymer feed rate per run:	3.77	gpm
Average concentration of the polymer batches:	0.328	%
Average sludge feed rate per run:	53.0	gpm

Comments:

The treatment plant has been running well with final effluent being of very good quality.

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 black graph line depicts the CMSA Headworks rain gauge recordings for the month.

Graph #2:

Depicts individual collection agency flows.

The Y-axis is in the dry weather flow range of 0-12 MGD.

Graph #3:

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

The monthly Total Coliform Geometric Mean was 2.2 MPN through September, which is less than our KPI median of 30 MPN and permit limit of 240 MPN.

Graph #4:

Depicts the total suspended solids in the effluent.

Our monthly average was 4.5 mg/l versus our KPI of 15 mg/l and permit monthly average limit of 30 mg/l.

Graph #5:

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

The September effluent CBOD average was 4.8 mg/l, well below our NPDES limits of 40 mg/l weekly and 25 mg/l for the month.

Graph #6:

Depicts the degree to which the biosolids have been dewatered.

Our biosolids % concentration exceeded our KPI of 25% for 26 days on September. The lower % biosolids concentrations associated while training new staff members to run the sludge dewatering system. No dewatering operation occurred on September 14.

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 in September averaged 241,489 cubic feet per day, which exceeded our monthly KPI of 200,000 cubic feet per day. The variances in biogas production depicted on Graph 7 are the result of operating the cogeneration engine in natural gas due to fewer organic waste deliveries.

Graph #8:

This graph depicts the amount of energy produced through cogeneration versus the energy purchased from MCE for Agency operations.

The cogeneration system returned to service on September 11, and it was closely monitored during its 500 hour "break-in" period. The cogeneration system exported 21,045 KWH to Marin Clean Energy, as depicted on graph 8.

Glossary of Terms Process Performance Data Sheet

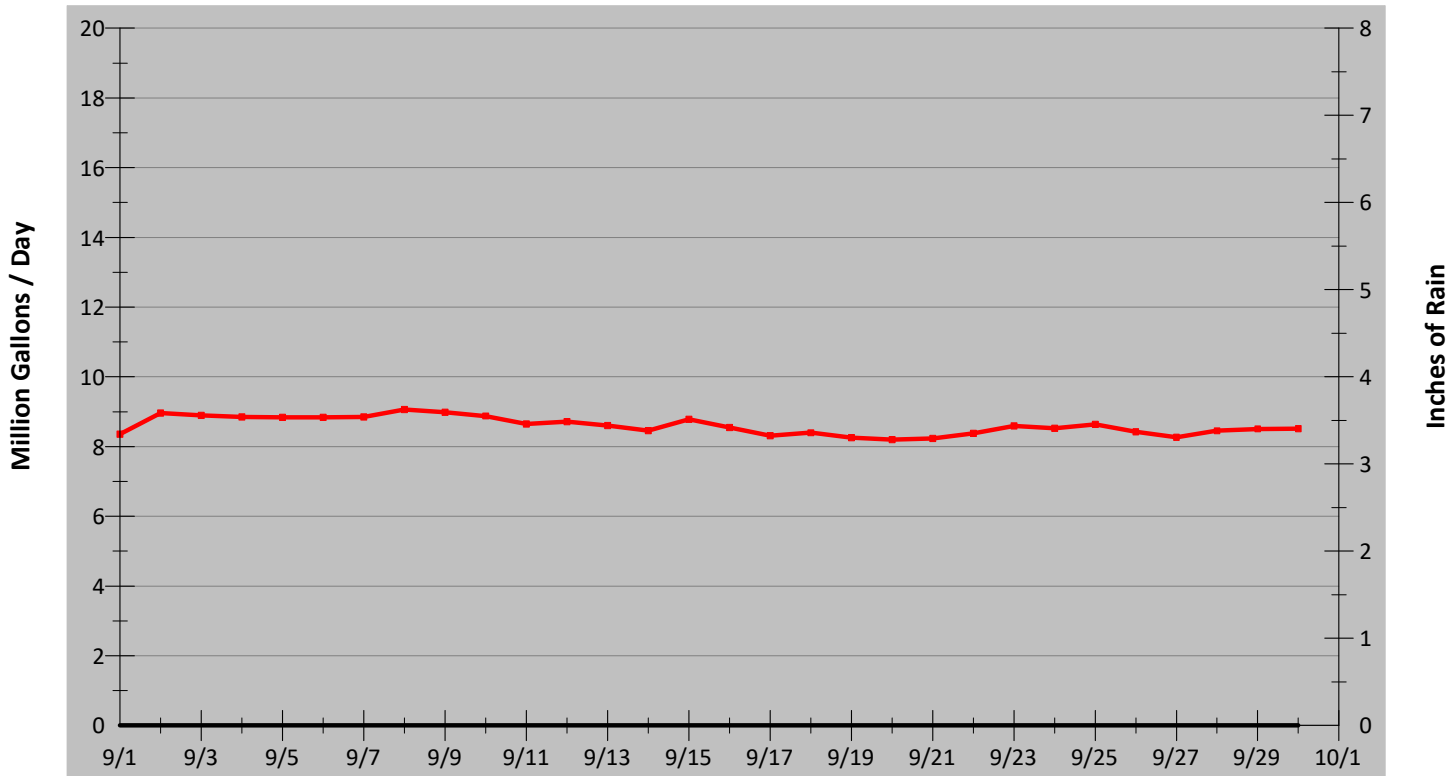
- **Aeration Tanks:** A biological process that takes place after the biotowers, where biomass (microorganisms) is mixed with the wastewater to feed on dissolved and suspended organic material. High speed blowers are used to provide compressed air to mix the tank contents.
- **Anaerobic Digesters:** 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

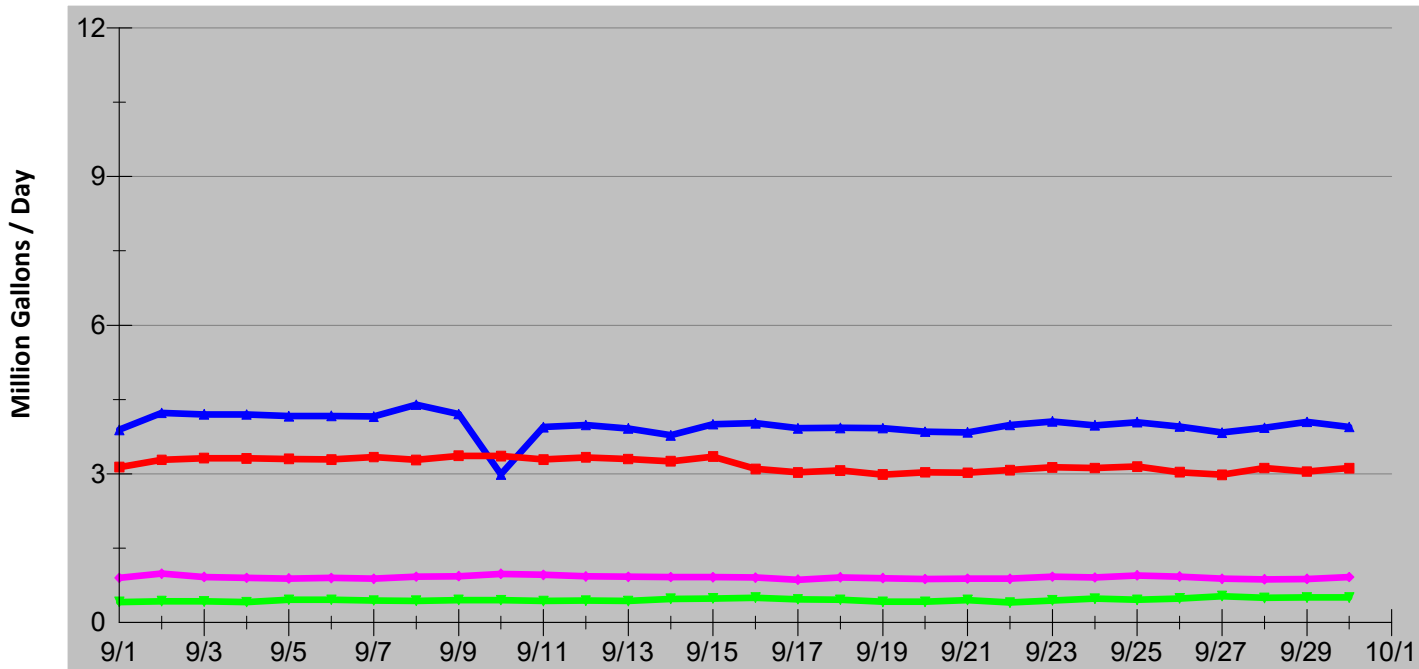


Date (9/1/2019 to 9/30/2019)

■ Flow (Daily Average) ◆ Rainfall

(#1) CMSA Influent Flow

Graph #2: Collection System Influent Flows

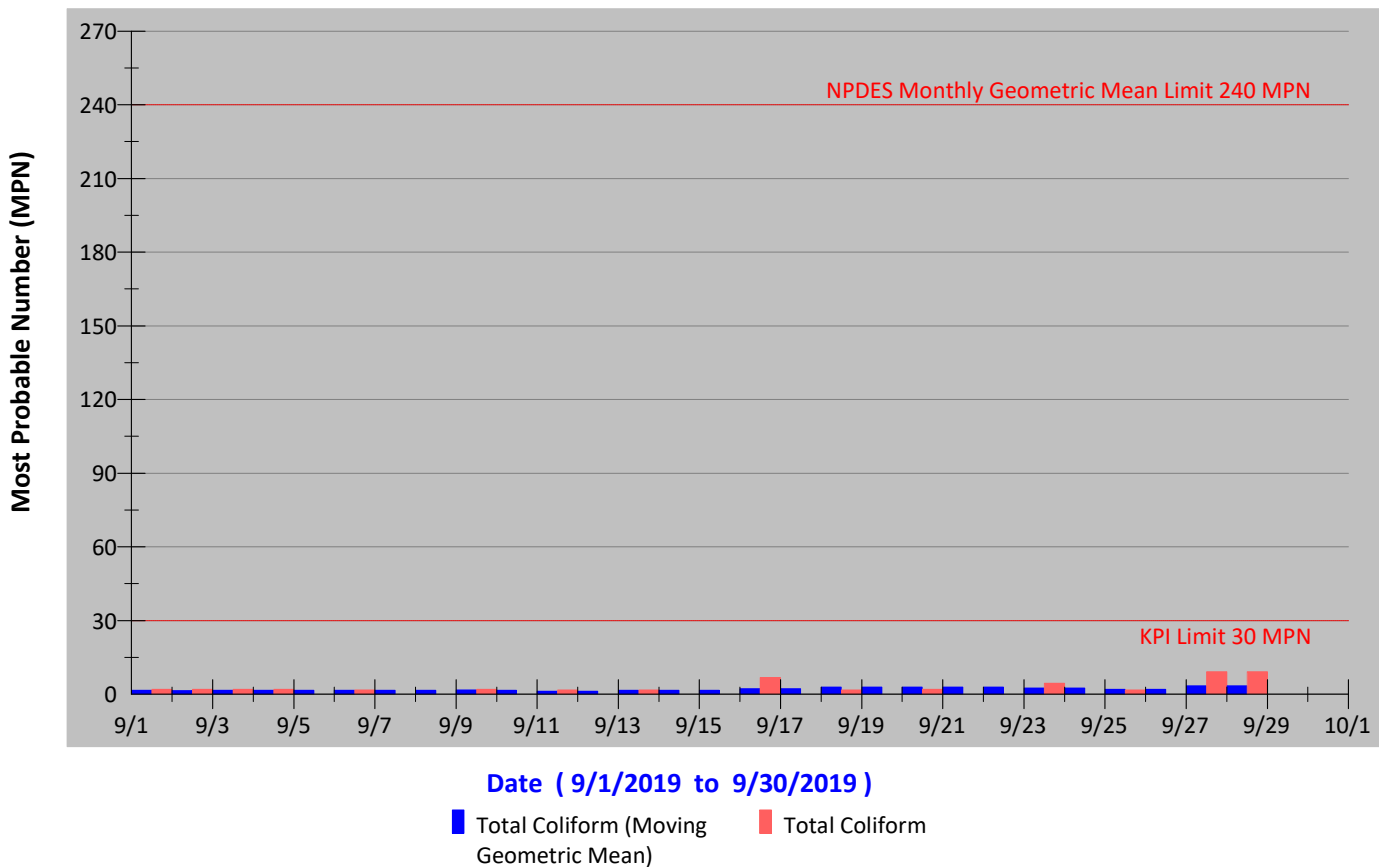


Date (9/1/2019 to 9/30/2019)

▲ RVSD Flow (Daily Average) ■ SRSD Flow (Daily Average) ▼ SQ Flow (Daily Average) ◆ SD#2 Flow (Daily Average -Par)

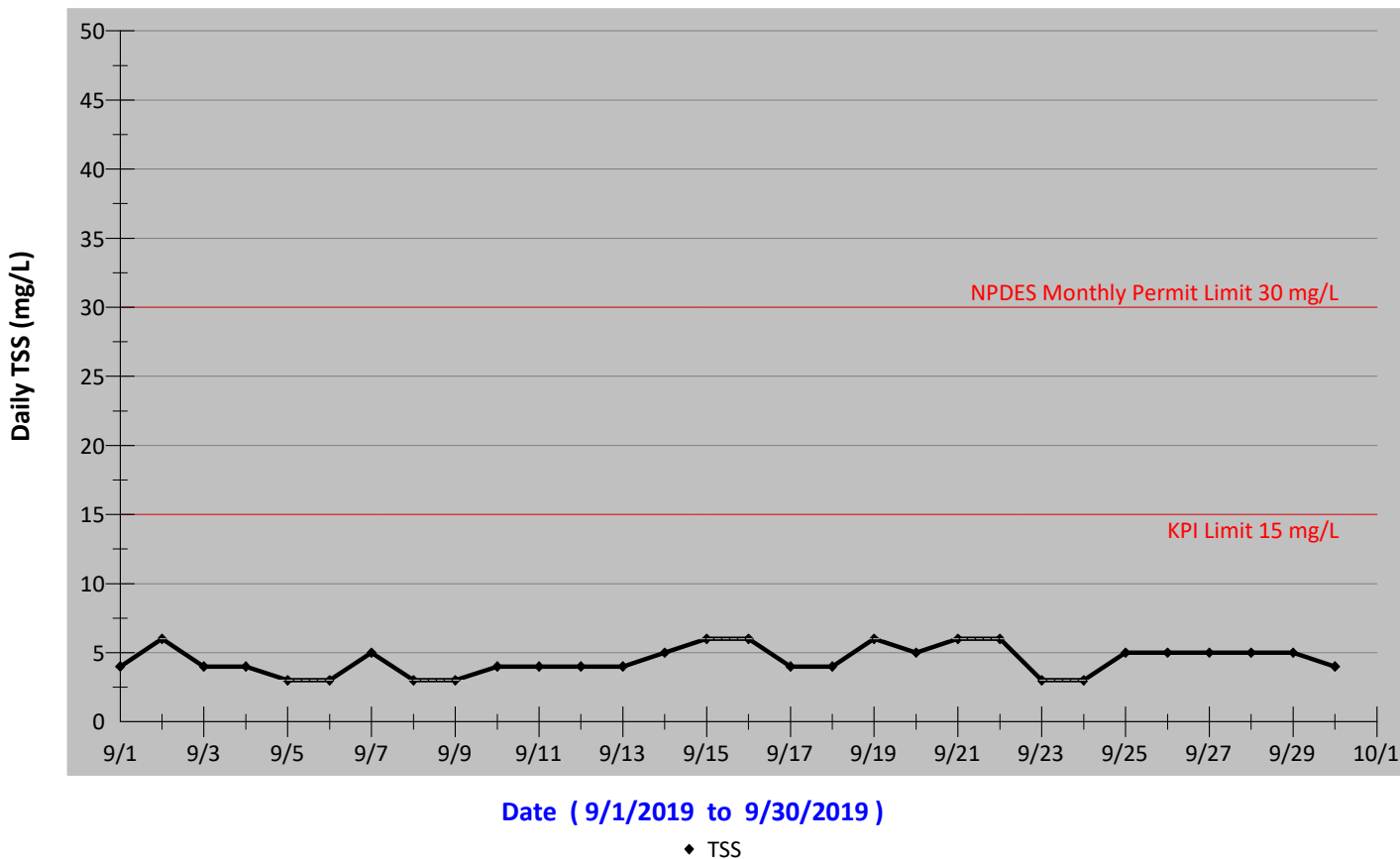
(#2) Collection System Influent Flows

Graph #3: Total Coliform & Monthly Geometric Mean



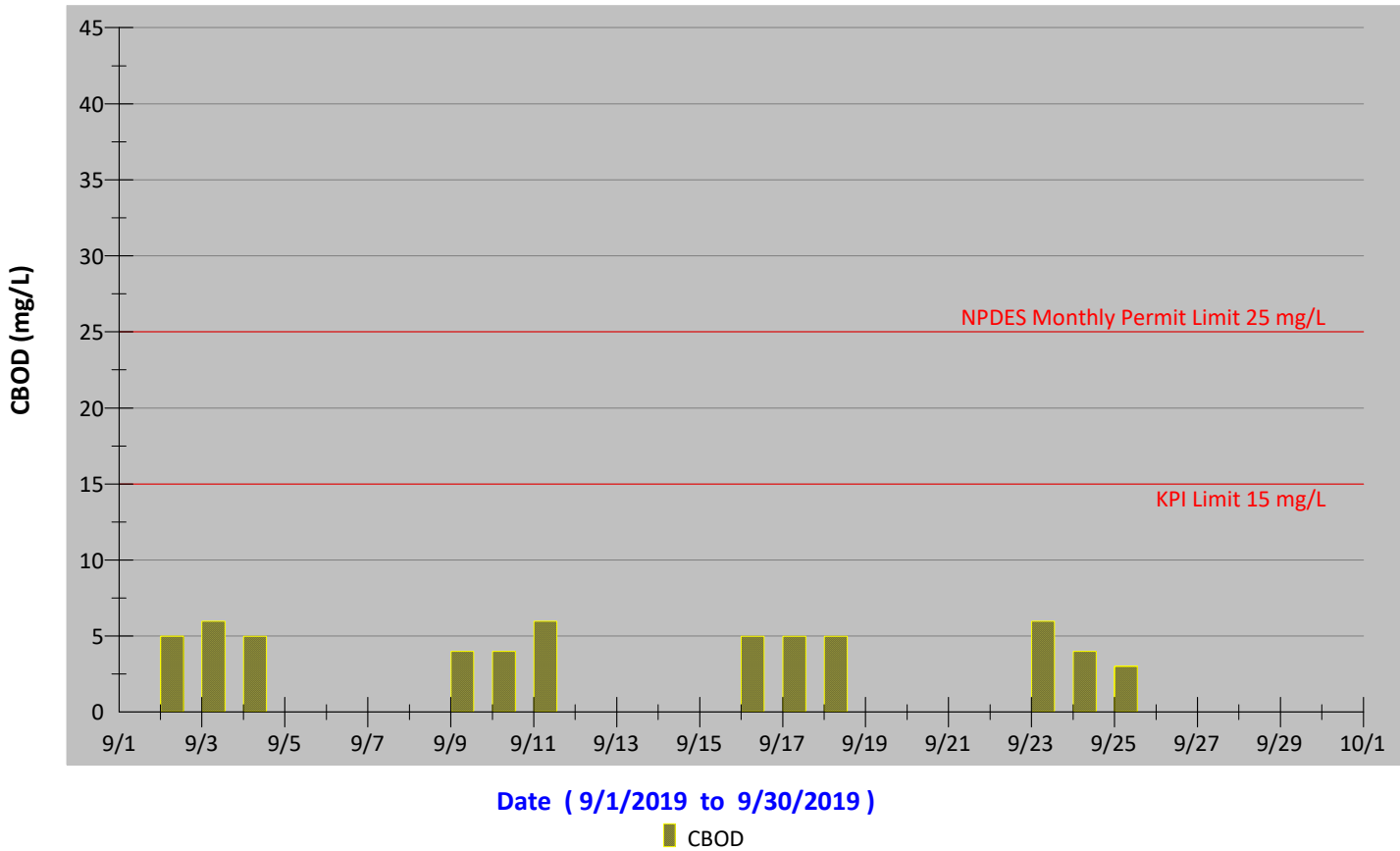
(#3) Total Coliform & Monthly Geometric Mean

Graph #4: Effluent Total Suspended Solids (TSS)



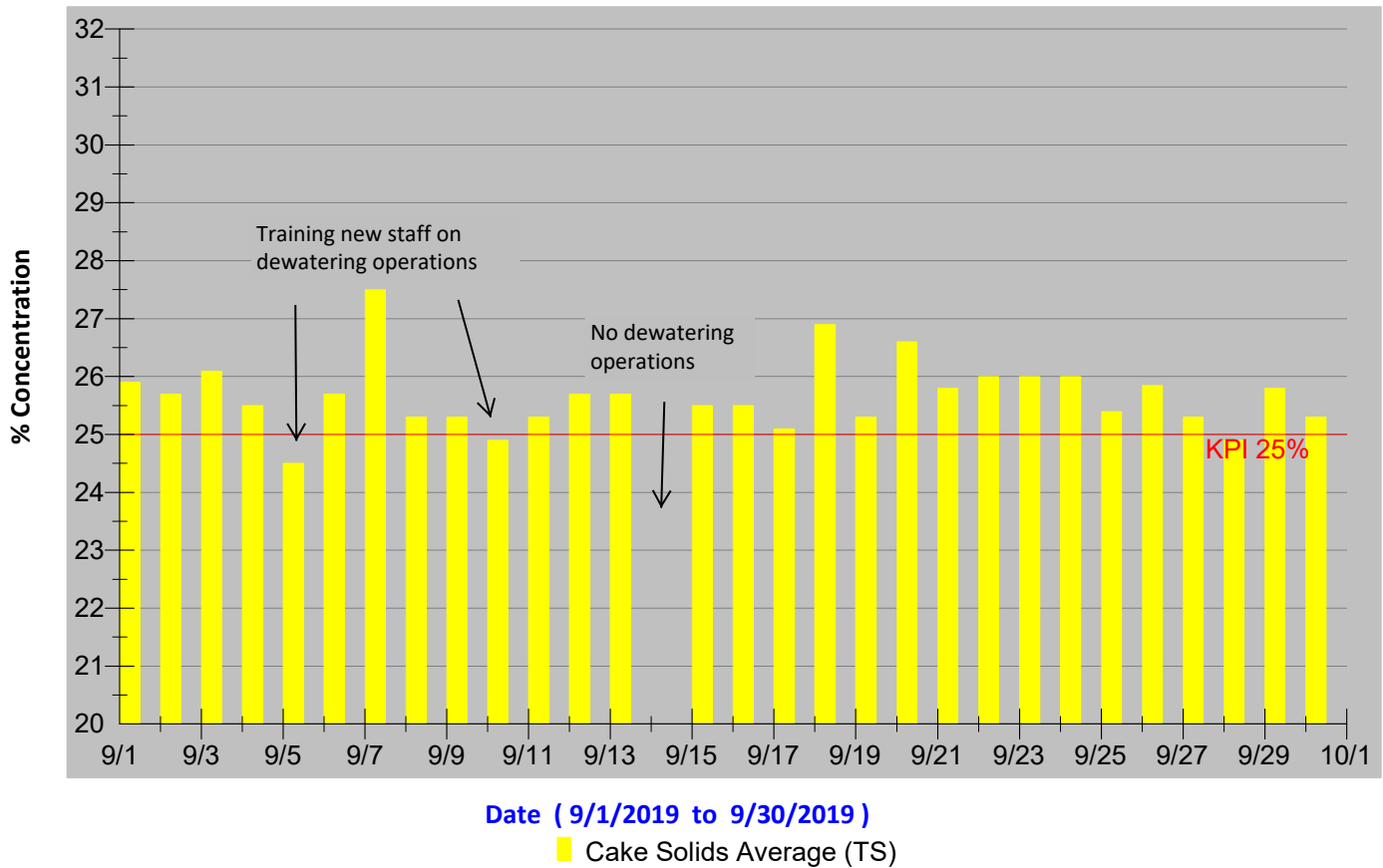
(#4) Effluent Total Suspended Solids (TSS)

Graph #5: Effluent Carbonaceous Biological Oxygen Demand (CBOD)



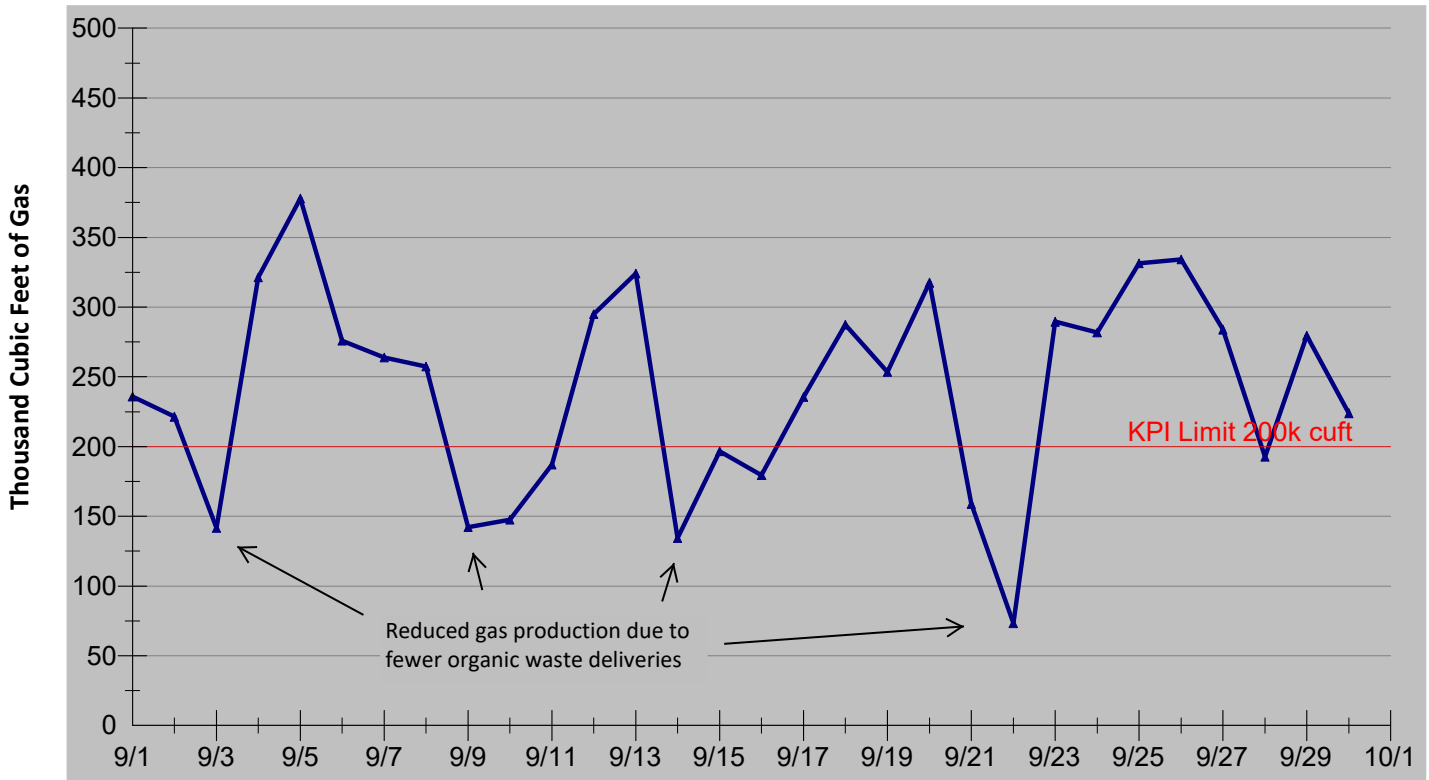
(#5) Effluent Carbonaceous Biological Oxygen Demand (C

Graph #6: Biosolids Concentration



(#6) Biosolids Concentration

Graph #7: Biogas Production (Measured Use)

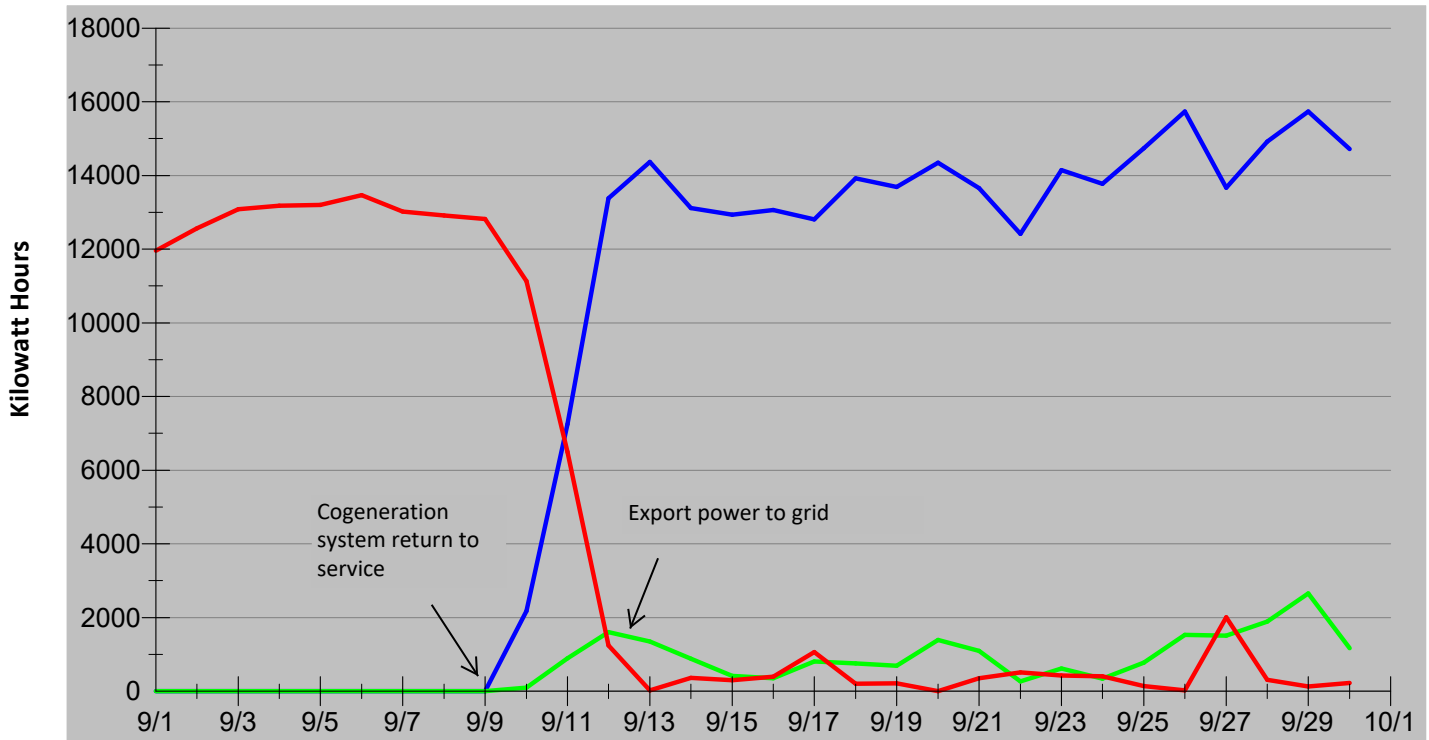


Date (9/1/2019 to 9/30/2019)

▲ Biogas Produced

(#7) Biogas Production

Graph #8: kW/hr Purchased vs. kW/hr Produced vs. kW/hr Exported



Date (9/1/2019 to 9/30/2019)

/ Kilowatts Produced
 / Utility Export
 / Utility Import

(#8) Kilowatt Hours Purchased vs. Kilowatts Produced



BOARD MEMORANDUM

October 3, 2019

To: CMSA Commissioners and Alternates

From: Jason Dow, General Manager

Subject: Performance Metric Report – September 2019

Recommendation: Accept the September 2019 Performance Metric Report.

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

Table I – Treatment/Process Metrics

Effluent flows were approximately the same as last month, and most of the dewatered biosolids was used as soil amendment and fertilizer by Synagro and Lystek in Solano county land application sites. Final effluent quality remained very good through the summer, and the cogeneration engine began operation on biogas in mid-September.

Table II – Employee Metrics

On-site training included hearing conservation and ergonomics training for all staff, a grease interceptor course for environmental services staff, total alkalinity analysis for laboratory staff, and various department level employee development training activities.

Several supervisory staff attended the employment relations consortium by Liebert Cassidy Whitmore, two staff members attended the CASA/CWEA Biosolids & Renewable Energy Innovation Seminar, and the General Manager attended the organic waste and energy neutrality workshops at WEFTEC and gave a presentation on the Agency’s organic waste and power delivery programs.

Table III - Environmental and Regulatory Compliance Metrics

There weren’t any NPDES final effluent permit exceedances September, and all regulatory reports were submitted on schedule.

Table IV - Public Outreach

There was one odor alert posted to the website over the past month, and the Agency did not receive any public odor complaints. The alert was posted for taking a primary clarifier out of service to allow contractor’s access to install motor operators on its two influent gates.

Monthly public education events may include staff attendance at public outreach events, school classroom and/or juggler show presentations, and Agency tours. Events over the past month are presented below with the event date and number of attendees.

Public Outreach Events

<u>Date</u>	<u>Event</u>	<u>Attendees</u>
9/24	Novato Farmer's Market	33

School Events – Juggler Show Presentations and Classroom Events

<u>Date</u>	<u>School</u>	<u>Attendees</u>
9/16	Laurel Dell Elementary in San Rafael	80
9/18	Wade Thomas Elementary in San Anselmo	360
9/25	Anselmo Children's Center in Fairfax	50

CMSA Tours

- No public tours were given in September

Attachment:

- September 2019 Performance Metric Report

CMSA CY19 PERFORMANCE METRICS – September 2019

TABLE I - TREATMENT/PROCESS METRICS

Metric	Definition	Measurement	Range/Target/Goal
1) Wastewater Treated	Volume of wastewater influent treated and disposed, in million gallons (Mg)	270.0 Mg	165 – 820 Mg
2) Biosolids Reuse	Alternate Daily Cover (ADC) 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)	52.5 wt 245.0 wt 157.5 wt	360 – 665 wt
3) Conventional Pollutant Removal	Removal of the conventional NPDES pollutants - Total Suspended Solids (TSS) and Carbonaceous Biological Oxygen Demand (cBOD) a. tons of TSS removed; % TSS removal b. tons of organics removed (cBOD); % cBOD removal	558.6 tons; 98.9% 365.7 tons; 98.4%	> 85% > 85%
4) Priority Pollutants Removal	Diversion of priority NPDES metals from discharge to the S.F. Bay: a. % Mercury b. % Copper	97.2% 92.0%	88 – 99% 84 – 98%
5) Biogas Production	Biogas generated in our anaerobic digesters, in million cubic feet (Mft ³) Natural gas (methane) equivalent of the biogas, in million cubic feet (Mft ³)	7.24 Mft ³ 4.64 Mft ³	6.0 to 9.5 Mft ³ 3.8 to 6.1 Mft ³
6) Energy Produced	Energy produced from cogeneration of generated biogas and purchased natural gas - in kilowatt hours Cogeneration system runtime on biogas, <i>in hours (hrs.)</i> ; % time during month Biogas value (natural gas cost equivalent)	274,546 kWh 357 hrs; 49.6% \$29,552	380 to 480,000 kWh 540 hrs.; 75% \$15,000 to \$30,000
7) Efficiency	The cost to operate and maintain the treatment plant per million gallons of wastewater treated, in dollars per million gallons Energy used, kilowatt hours, per million gallons treated	\$1,332 /Mg 1,465 kWh/Mg	\$451-\$1,830/Mg (wet - dry) 670 - 2,400 kWh/Mg

Table II – EMPLOYEE METRICS

Metric	Definition	Measurement	Target/Goal
1) Employee Training	Hours of internal training – safety, web-based, project, vendor, etc. Hours of external training – employment law, technical, regulatory, etc.	Internal = 137.5 External = 80	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);	340 hrs 555 hrs (88.9%) 70 hrs (17.0%) 0.54	300 – 500 hrs ≥ 70% total CM hrs ≤ 30% total hours ≥ 0.45
3) Overtime Worked	Monthly hours of OT worked; <i>Year to date hours of OT (YTD)</i> % of regular hours worked; % <i>Year to date (YTD)</i>	148.5 hrs; (1,227.5hrs) 2.1 %; (1.8%)	< 5%

CMSA CY19 PERFORMANCE METRICS – September 2019

Table III - ENVIRONMENTAL AND REGULATORY COMPLIANCE METRICS

Metric	Definition	Measurement	Range/Target/Goal
1) Permit Exceedances	# of NPDES permit exceedances	0	0
2) Regulatory Analyses	# of analyses by the CMSA laboratory for NPDES, Stormwater, and Biosolids regulatory compliance monitoring and reporting	427	150-750
3) Process Control Analyses	# of analyses by the CMSA laboratory for process control monitoring	794	400-1,250
4) Contract Laboratory Analyses	# of analyses by contract laboratories for regulatory compliance reporting	21	0-50
5) Quality Control Testing	# of CMSA performed laboratory analyses for QA/QC purposes	282	100-300
6) Water Quality Sample Analyses	# of ammonia, coliform (total and fecal), enterococcus, and/or sulfide analyses performed for the CMSA member agencies (SSOs, etc.)	182	as-needed
7) Pollution Prevention Inspections	Inspections of industrial and commercial businesses in the Agency's pretreatment and pollution prevention programs and Novato Sanitary District's Mercury Reduction Program – 255 businesses regulated	11	variable
8) FOG Program Inspections	Inspections of food service establishments (FSEs) in the Almonte, TCSD, SD2, RVSD, SRSD, and LGVSD service areas – approx. 316 FSEs are regulated and 63 FSEs have waivers.	26	20 – 50
9) Permits Issued/Renewed	Permits issued for the pretreatment, pollution prevention, and FOG source control programs, and for groundwater discharge	39	variable

Table IV- PUBLIC OUTREACH

Metric	Definition	Measurement	Target/Goal
1) Public Education Events	Attendance at public education outreach events; # of booth visitors; <i>(YTD)</i>	33; <i>(2,852)</i>	3,500/year
2) School Events	Participation or sponsorship in school outreach events; attendees; <i>(YTD)</i>	490; <i>(2,108)</i>	variable
3) Agency Tours	Tours given to students and the public; # of people, <i>(YTD)</i>	0; <i>(228)</i>	variable
4) Odor Notifications	Number of odor alerts posted to the Agency website	1	1-10
5) Odor Complaints	Number of odor complaints received from the public	0	0



BOARD MEMORANDUM

October 3, 2019

To: CMSA Commissioners and Alternates

From: Dean DiGiovanni, Commission Chair

Subject: 2019 General Manager Employment Agreement

Recommendation: Approve the 2019 General Manager Employment Agreement.

Summary: The Board of Commissioners discussed the performance of the General Manager during the authorized closed session for Performance Evaluation of General Manager on September 10 at the regularly scheduled Board meeting.

The Board directed Agency counsel Jack Govi to prepare a new contract for the General Manager for the Board's consideration at the October 8 regular meeting. Accordingly, the contract was prepared by counsel Govi and submitted to me for placement on the October 8 Agenda.

The essential terms of the new contract are identical to the previous contracts with a new provision authorizing the General Manager to take an additional 40 hours annually in Administrative Leave. A 5% bonus is authorized, the General Manager automatically receives a Cost-of-Living Adjustment identical to each Agency employee, and a new 5-year term is inserted into the Agreement. The latter three provisions have been a part of previous contracts with the General Manager.

Attachment:
- 2019 General Manager Employment Agreement



GENERAL MANAGER EMPLOYMENT AGREEMENT

This Agreement is made and entered into on October 8, 2019, by and between the Central Marin Sanitation Agency (hereinafter "CMSA" or "Commission") and Jason Dow (hereinafter "Dow" or "Manager").

CMSA desires to continue to employ the services of Dow as General Manager for CMSA on the terms pursuant to the express understandings more specifically set forth hereinafter.

SECTION I - Employment and Term of Office

CMSA agrees to employ Dow as General Manager to perform the functions and duties of said office. The Manager shall serve for a five-year term. This term commences on October 8, 2019. CMSA shall have the option of extending the five-year term at any time. Upon expiration of this Agreement or any Addendum hereto, the terms and conditions of this Agreement shall remain in effect until it is either terminated or renegotiated.

SECTION II - Compensation

Effective July 1, 2019, Manager shall receive a monthly salary of \$23,194.46 and for each successive year on July 1, shall receive a COLA. The COLA shall be the same percentage that is given to Agency staff. Commission may provide Manager with a bonus of up to 5% annually based upon Manager's performance. Manager shall receive a 5% bonus for his past year's performance, effective immediately.

SECTION III - Annual Performance and Goal/Objective Review

An annual evaluation of Manager's performance will occur in September of each year. During the evaluation, the Manager will present an updated performance plan and the status of the prior year's goals and objectives. At this time, the Commission and Manager shall develop written mutually acceptable goals and performance expectations for the Manager, which shall be used as objective criteria against which to assess Manager's performance.

SECTION IV - Management Benefits

Manager shall be entitled to receive identical benefits to those provided by CMSA to its management employees subject to those specific exceptions as to certain benefits detailed in this Agreement.

SECTION V - Life Insurance and Vacation - Buy Back

Manager will be provided with life insurance coverage equal to his annual salary minus any bonuses. Manager is authorized to sell up to two weeks of accrued vacation time annually.

SECTION VI - Vehicle Use and Professional Benefits

CMSA shall provide the Manager with a vehicle for his personal use, or upon Commission approval, a vehicle allowance of \$450.00 per month. CMSA agrees to budget and pay for professional dues, conferences, and subscriptions on behalf of the Manager, which are reasonably necessary for his continuation and full participation in professional associations.

SECTION VII - Administrative Leave

In addition to the eighty (80) hours of Administrative Leave that FLSA Exempt employees receive, the Manager shall receive forty (40) additional hours for a total of one-hundred and twenty (120) hours of Administrative Leave annually.

SECTION VIII - Deferred Compensation Contribution

CMSA shall contribute 4% of the Manager's annual salary, minus bonuses, to the Manager's 457 deferred compensation program. This contribution is in addition to the Manager's salary.

SECTION IX - Involuntary Termination and Severance

Nothing contained in this Agreement shall in any way prevent, limit, or otherwise interfere with the right of the Commission to terminate services of Manager. The Manager at all times serves at the pleasure of the Commission. Termination of the Manager's services, however, is subject to the following provisions:

- A. In the event that Manager is involuntarily terminated by the Commission, CMSA shall pay to Manager at the time of receipt of his last pay check from CMSA, either: (1) a lump sum cash payment equal to twelve (12) months aggregate salary based upon Manager's then earned monthly salary at the date of involuntary termination, including all accrued leave balances; or (2) a lump sum cash payment equal to all accrued leave balances and bi-weekly checks for 26 pay periods equal to twelve (12) months aggregate salary based upon Manager's then earned monthly salary at the date of involuntary termination commencing with the pay period following the involuntary termination. It shall be Manager's decision as to what option he chooses between (1) and (2) above. In addition, CMSA shall also continue to provide and pay for the benefits listed in *Section IV- Management Benefits* for a period of twelve months following involuntary termination. Continued payment of Section IV benefits will cease if Manager obtains employment within 12 months following the involuntary termination.
- B. In the event that Manager resigns his position following a formal suggestion by Commission that he do so, the Manager may, at his option, be deemed to have been involuntarily terminated and entitled to receive the above benefits.
- C. In the event that the Manager is terminated because of a conviction for any illegal act involving moral turpitude, or an event disqualifying Manager from public office pursuant

to state law, or causing a forfeiture of office under state law, the commission shall have no obligation to pay any of the above termination benefits.

- D. In the event Manager voluntarily resigns his position with CMSA, Manager agrees to provide 30 days written notice.

The Commission, in consultation with Manager, may fix or amend any such other reasonable terms and conditions of employment as they may determine from time to time. The Parties hereto acknowledge having discussed and agreed upon all terms and Provisions contained herein.

SECTION X – Indemnification

The Agency agrees to defend, hold harmless, and indemnify Dow against any claims, demands, or legal actions, whether specious, frivolous, or otherwise, arising out of an alleged action or omission, direct or indirect, occurring within the scope and during the course of Dow’s employment with the Agency. Dow will cooperate in good faith with the Agency with respect to the defense of such claims, demands or legal actions.

Dated: _____

Dean DiGiovanni, Commission Chair

Dated: _____

Michael Boorstein, Commission Vice-Chair

Dated: _____

Jason Dow, General Manager

Approved to as Form:

Dated: _____

Jack F. Govi, Assistant County Counsel



BOARD MEMORANDUM

October 3, 2019

To: CMSA Commissioners and Alternates

From: Kevin Lewis, Assistant Maintenance Supervisor

Approved: Jason Dow, General Manager

Subject: FY20 Asset Management Program – 1st Quarter Report

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

Summary: Since February 2011, staff has provided the Board with periodic presentations to highlight the progress made on implementing the Agency’s Asset Management Program (Program). Staff publishes quarterly Asset Management (AM) reports in October, January, April, and the annual report is presented in July.

First Quarter Highlights

1. Primary Clarifier Sludge Collector Drive Unit Replacement – CMSA has seven primary clarifiers, five of which were constructed when the plant was built in the early 1980s. Focusing on these five original clarifiers, staff has replaced all of the tank internal sludge collecting components over the last several years, including flights, chains, wear shoes and guide strips, upgrading them to modern materials. The drive mechanisms, which include an electric motor and a multistage speed reducer, were the last items requiring an upgrade to complete the system-wide rehabilitation. Maintenance staff worked with vendors to select modern units that require less maintenance, provide an energy savings by reducing internal friction, and have motors that are located above the National Electrical Code classified area. Staff designed and fabricated new drive mounting plates and drive shafts, and worked closely with Operations staff to install the drives on offline tanks. Once tested, the drives and motors were painted to protect them from the elements.
2. Aeration Tank Influent Gate Replacement – CMSA’s four aeration tanks are equipped with sluice gates that allow Operations staff to control the flow into the tanks based on process needs. During annual preventive maintenance (PM) and condition assessment activities in FY18, staff noted severe corrosion and failure of the gates’ sealing surfaces in process tank No. 1. Electrical and Instrumentation staff decoupled the electrical connections to the gate actuators and assisted with their removal. Staff then used the

Agency's Telehandler forklift to separate the gate from the frames and remove the frames from the tanks. New lighter-weight fabricated stainless steel gates were installed and tested for water-tightness, and the actuators were reinstalled.

3. Bio-tower Flow Meter and Expansion Joint Replacement – Reinforced rubber expansion joints, which allow for expansion and contraction of piping with changes in temperature and minor misalignments due to settling, are installed in the piping systems throughout the treatment plant. During recent condition assessments, it was noted that the expansion joints installed in the Biotower discharge piping had begun to dry out and cracks were forming in the outer layers of the joints. Staff ordered the appropriate replacement equipment and scheduled the installation to coincide with the replacement of a failed flowmeter in the same pipe during dry weather. Operations staff isolated the pipe and Maintenance staff replaced the flow meter and expansion joint, and system was tested for leaks. The flow meter is accurately measuring flow and transmitting that information the facility's process control system.

4. Lubrication Storage and Dispensing Improvement – The Maintenance department uses multiple varieties of oils for maintaining the facility's equipment. Historically, these various lubricants were stored in multiple drums, buckets, and containers of differing sizes and dispensing methods, all stored on multiple large spill containment platforms. Staff researched and selected a lubricant storage and dispensing system that uses stackable plastic totes with integrated spill containment and dispensing valves. A selection of color-coded portable pump and pour containers were also purchased to allow assignment of colors to the different lubricants. This new system freed up valuable floor space, prevents cross contamination, and improves safety by keeping spills to a minimum in the lubricant area.

Asset Inventory

The Asset Parts Inventory is comprised of critical spare parts for Agency equipment, and consumable items designated for CMSA's contract collection agencies – Sanitary District No. 2 (Corte Madera), San Quentin State Prison, and San Quentin Village Sewer Maintenance District. Spare parts for CMSA and San Quentin Village are kept at CMSA site-specific parts rooms, Sanitary District No. 2 parts and equipment are stored at Paradise pump station, and San Quentin State Prison parts and equipment are stored at the San Quentin pump station.

Staff conducted a review of Agency assets tracked within the computerized maintenance management systems (CMMS) asset tree. This quarterly exercise is performed to verify active assets within the system. As Agency-managed projects or regularly scheduled maintenance work is completed, both new and old assets must be accounted for in an asset inventory count. Along with entering new and removing obsolete assets from the asset tree, staff removed improperly grouped or classified assets, and removed additional non-critical assets. In all, 847 items were entered, reclassified, or removed from the CMMS asset tree this past Quarter.

Asset Locations	Total Assets
CMSA	3,275
Sanitary District #2	382
San Quentin Prison	41
San Quentin Village	16

Parts Inventory	Parts Quantity	Total Value
CMSA	27,250	\$1,539,987
Sanitary District #2	309	\$168,434
San Quentin Prison	34	\$49,747
San Quentin Village	2	\$1,231

Asset Improvements, Repairs, and Refurbishment Work

1) CMSA Capital Improvement Project Work

Projects in the table below are capital projects that were completed or were in progress over the past quarter. For some of the projects, CMSA staff performed work alongside contractors.

Project Name	CMSA Staff Cost	Total Cost	Status
Primary Clarifier Drive replacements	\$12,346	\$45,653	Complete
Aeration Tank Influent Gates	\$6,017	\$29,810	Complete
Bio-Tower Expansion Joint Replacements	\$5,173	\$20,099	Complete
Primary Influent Gate Operator Replacement	\$1,701	\$237,776	In Process

2) CMSA Asset Management Improvements

Projects in the table below are considered routine, recurring, and usual maintenance work for the preservation and protection of Agency assets. CMSA labor and materials costs are included to determine the overall cost to perform a specific task.

Area	Equipment	Improvement	Total Cost	Comments
Plant-wide	Permanently Installed Ladders	Installed new safety gates	\$1,584	Installed gates at headworks roof, Chemical storage building roof, and Ross Valley influent meter vault.
Primary Clarifiers	Tank #2	Annual preventative maintenance	\$4,360	Inspected and adjusted tanks, chains, flights, pumps, and drives. Refreshed lubricants and wear shoes.

Area	Equipment	Improvement	Total Cost	Comments
Aeration	Annual Tank PMs	Annual preventative maintenance	\$9,812	Inspected piping, clamps and supports. Replaced EPDM diffusers, clamps, and leaking saddle O-rings on tank No. 3.
Secondary Clarifiers	Scum Pump No. 2	Installed new pump	\$18,575	New progressive cavity pump and hardware was installed along with a new stainless pump base and supports.
Secondary Clarifiers	Process Tanks	Annual preventative maintenance	\$2,001	Replaced lubricants, wear parts, and inspected drive motors and gear boxes on all four tanks.
Chlorine Contact Tanks	Process Tanks	Annual preventative maintenance	\$1,851	Lubricated and exercised mud valves, skimmers, and sluice gates.
Solids Handling	TWAS Pump Nos. 1 and 2	Annual preventative maintenance	\$3,275	Replaced lobes, wear plates, cartridge seals, housings, and lubricants.
Outfall	Deep Water Diffuser	Fabricate risers and extensions	\$9,458	Purchase materials; cut, glue and assemble parts for annual outfall inspection and maintenance.
Organic Waste Receiving Facility	Slurry Mixing Pumps	6-month maintenance procedure	\$5,321	Wet end refurbishment consisting of new impellers, cutting bar plates, and new bearings.
Organic Waste Receiving Facility	Feed Pump	Installed new hose	\$3,950	Replaced EPDM hose and hose lubricant twice.

3) CMSA Maintained Assets (San Quentin Prison, Sanitary District #2, San Quentin Village)

Maintenance work performed over the year on collection agency assets by CMSA staff, an approved contractor, or service provider.

Asset Owner	Asset	Improvement	Total Cost	Comment
SD2	Meter Vault	New sump pump	\$1,517	Replaced failed sump pump.
SQ Village	Pump Station & Collection System	Annual preventative maintenance	\$6,459	Washed and cleaned out wet well. Cleaned and TV'd collection system to inspect and document.

Work Orders – First Quarter FY20

A work order is a written request that a preventive, corrective, or unplanned corrective maintenance task or project be performed. Work orders are typically generated and sent internally from one department to another. Shown in the table below are the types of work orders prepared by staff, the annual work orders completed, and the total labor hours, by type, to complete the work orders.

Work Order Type	# of WO's	% of Total WO's	Labor Hrs.	% of Total Hrs.
Preventative Maintenance (PM)	339	57.17%	1065.25	13.28%
Corrective-Planned	117	19.73%	1213.00	15.12%
Corrective-Unplanned	47	8.26%	292.75	3.65%
Improvement Project Work	3	0.51%	117.50	1.47%
Coating Projects	6	1.01%	46.25	0.58%
Safety	18	3.04%	138.00	1.72%
Professional Development/Staff Meetings	18	3.04%	298.50	3.72%
Facilities Administration/Housekeeping	29	4.89%	1482.85	18.49%
Process Control and Facility Operations	14	2.36%	3,366.25	41.97%
Total	593	100%	8020.35	100%



BOARD MEMORANDUM

October 3, 2019

To: CMSA Commissioners and Alternates

From: Peter Kistenmacher, Technical Services Manager

Approved: Jason Dow, General Manger

Subject: **Accept the Andersen Drive Landslide Repairs Project as Substantially Complete (CMSA Contract No. 19-13)**

Recommendation: Accept the Andersen Drive Landslide Repairs Project as substantially complete, and authorize the General Manager to file the Notice of Completion with the County of Marin.

Summary: The Andersen Drive Landslide Repairs Project (Project) scope of work included constructing soldier pile retaining walls to stabilize the upper portion of each landslide area and reducing the slopes to conform to adjacent grades, thereby stabilizing the hillside. The Project is substantially complete, with only minor earthwork, erosion control, and general clean-up work remaining as of the date of this staff report. If the Board approves the staff recommendation, staff will file the Notice of Completion after all Project work has been completed and accepted.

Background: During the February 2017 storms, five landslides occurred on the Andersen Drive hillside and staff hired a contractor to make emergency repairs to stabilize the hillside. Staff later applied to FEMA and Cal OES for funding assistance for the emergency repairs, and to design and construct permanent improvements to prevent future landslides.

In July 2017, CMSA received a letter from Cal OES stating the funding assistance request had been approved by FEMA. CMSA hired Miller Pacific Engineering Group (MPEG) in August 2017 to evaluate various permanent improvements for the hillside repairs. On October 5, 2018, FEMA and Cal OES authorized proceeding with the soldier pile retaining wall design and to formally bid the Project, and on November 13, 2018, staff received the Notice of Obligation to provide funding assistance for Project design and construction. The Project plans and technical specifications were prepared by MPEG and have been reviewed and accepted by FEMA.

At the December 2018 meeting, the Board adopted the Project's contract documents, and at the February 2019 meeting, the Board awarded the construction contract to CF Contracting. Construction began in April 2019 and after six months, the project is substantially complete. The current FEMA/Cal OES deadline to complete the project was October 1, 2019. In a letter dated September 12, 2019 to Cal OES, staff requested a time extension to November 30, 2019 for project completion. Pending Cal OES approval of a project time extension and Board

approval to accept substantial completion of the Project, staff will submit a reimbursement request to FEMA/Cal OES before the new project completion deadline.

To date, the Agency has received \$64,787 from FEMA and Cal OES for the emergency repair work (\$36K), geotechnical evaluation of permanent repair alternatives (\$19.7K), and a portion of the design and construction of permanent repairs (\$9K).

Fiscal Impact: The Project economic summary is detailed below.

Total FEMA/Cal OES Obligated Funds	\$510,850
Project Expenditures	\$619,306
Emergency landslide stabilization (Maggiore & Ghilotti)	\$32,042
Geotechnical repair assessment (MPEG)	\$20,500
Geotechnical design services (MPEG)	\$7,500
Project management support services (DEE Consultants)	\$16,920
Professional services for CEQA review (ESA)	\$3,594
Geotechnical inspection and testing services (MPEG)	\$36,000
Construction management services (DEE Consultants)	\$32,750
Original construction contract (CF Contracting)	\$412,450
Construction contract change orders – 14.0 % of original construction contract (CF Contracting)	\$57,550
Expected CMSA Cost	\$108,456

There are three Contract Change Orders (CCO) on the project. CCO 1 and 2 had been executed in a combined amount of \$9,026, for labor and materials to install concrete sacks at various project sites to cover gaps between the ground surface and bases of the retaining walls. CCO 3, was also negotiated, and is in the process of being executed, in an amount of \$48,524. It addresses the increased quantity of soils to be trimmed off slopes in front of several retaining walls, additional soil backfilling behind a retaining wall required for proper access road height and slope, an increased area for the hillside hydroseeding, and placement of concrete sacks on top of a covered storm drain pipe to increase slope stability.

CCO 3 also takes into account a credit for the extra costs incurred by CMSA staff and consultants due to CF Contracting not completing the project by the original contractual completion date, and CMSA providing CF contracting with a free location to dispose of excess soils at a Ross Valley Sanitary District construction site in Larkspur.

With CCO3 included, the total final project construction cost is \$470,000. The combined value of all Construction Change Orders represents approximately 14.0 percent of the original awarded construction contract amount and the final total project construction cost is 0.2 percent higher than the original engineer’s construction estimate of \$469,000.

Project Photos: Shown below are some pictures taken during the Project construction.



Biggest landslide near digesters (before)



Biggest landslide near digesters (after)



Landslides near front entrance (before)



Landslides near front entrance (after)



Contractor installing the I-beams



New swale and drop inlet behind the biggest landslide

Alignment with Strategic Plan: This activity is a strategic action to support Goal 1 – Objective 1.3 in the Agency’s FY20 Business Plan as shown below.

Goal One: *CMSA will continue to operate and maintain its wastewater facilities to produce high quality effluent and biosolids, within a changing regulatory environment.*

Objective 1.3: *Deliver Critical and High Priority Agency Projects.*

Action: *Construct the landslide repairs on the Andersen Drive hillside.*

BOARD MEMORANDUM

October 3, 2019

To: CMSA Commissioners and Alternates

From: Jason Dow, General Manager

Subject: Revised Associate Engineer Job Description

Recommendation: Approve the revised Associate Engineer Job Description.

Discussion: CMSA has assistant and associate engineer classifications, and the associate level requires a California Professional Engineering License. Staff recently reviewed and discussed this license requirement, and believes that it's fine to have in the job description to ensure a level of engineering competence when recruiting. However, staff also believes it can limit a pool of qualified job applicants that have valuable and worthwhile engineering and/or construction management work experience. To assist with attracting qualified candidates during recruitment and to provide internal promotion opportunities of non-licensed engineers, staff proposes to allow four years of relevant work experience to substitute for the license requirement. This change has been added to the attached revised job description as well as the following few additional revisions, all of which are shown in red text.

- Assists with updating the Agency's 10-year Capital Improvement Plan.
- May supervise engineering interns.
- Participates and/or leads internal Agency teams and committees.

Attachment:

- Revised Associate Engineer Job Description

**CENTRAL MARIN SANITATION AGENCY**

1301 Andersen Drive | San Rafael, CA 94901 | 415.459.1455 | FAX: 415.459.3971

JOB DESCRIPTION: ASSOCIATE ENGINEER**SUMMARY**

Under general supervision of the Technical Services Manager, performs engineering, project management, construction management, and other engineering or technical services for the Agency. Makes calculations, performs design work, administers contracts, maintains records, conducts studies regarding capital projects and treatment plant processes, and performs related work as required.

ESSENTIAL DUTIES AND RESPONSIBILITIES

Duties include, but are not limited to, the following:

- Serves as project engineer and/or project manager on assigned Agency planning and design projects: leads intra-Agency project teams, prepares consultant selection documents, reviews consultant submittals, and actively manages projects.
- Performs complex engineering duties and exercises significant independence in carrying out the duties of the position.
- Exercises discretion and independent judgment in prioritizing multiple projects.
- Serves as Agency representative and construction manager on assigned Agency construction projects: conducts and documents onsite inspections; coordinates design changes in the field; reviews and recommends approval of progress payments; and prepares or approves as-built record drawings.
- Evaluates, plans and designs modifications to wastewater facilities: identifies, analyzes, and evaluates alternatives, and makes recommendations.
- **Assists with updating the Agency's 10-year Capital Improvement Plan.**
- Researches new technologies, products, equipment, codes and regulations, and prepares reports with alternative analyses.
- Provides engineering support to other Agency teams and departments.
- Prepares contract documents for equipment procurement, consultant studies, and maintenance contracts, and manages consultant and contractor activities as assigned.
- Represents the Agency with industry organizations, multi-agency committees, professional groups, and the public.
- Establishes and maintains positive working relationships with Agency management and staff, local and regulatory agencies, contractors, consultants, and the public.
- Participates in special projects as assigned, **including participating in and/or leading inter-Agency teams and committees.**
- Maintains accurate records and files, including electronic and paper record drawings.
- Prepares and maintains records of correspondence, reports, procedures, and other engineering work products.
- Gives presentations to the Board of Commissioners on Agency projects, studies, and related activities

SUPERVISORY RESPONSIBILITIES

This position has no direct, ongoing supervisory responsibilities. May act as a supervisor to Technical Services staff, **including Engineering Interns**, for specifically assigned Agency projects and/or programs.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

Education

Equivalent to a bachelor's degree (B.S.) from four-year ABET-accredited college with major coursework in civil engineering or related field of study. Graduate engineering degree is desirable.

Experience

Minimum of four (4) years increasingly responsible professional engineering experience, preferably in a public agency setting, is required. Project management experience related to staff, consultants, and construction in a water- or wastewater-related field is highly desirable.

Interpersonal Skills

Ability to work cohesively in a team setting. Ability to interact with others (co-workers, supervisors, subordinates, vendors, and members of the public) in a professional manner; to accept constructive criticism from supervisors, and peers; to recognize the need for, and to seek, assistance or clarification as needed; to work independently; to handle work-related stress in a professional manner; to prioritize assignments and meet deadlines; successfully balance life demands with work demands; to arrive at work as scheduled and to work the hours as agreed upon and scheduled.

Language Skills

Ability to read, analyze, and interpret general business periodicals, professional journals, technical procedures, or governmental regulations. Ability to write reports, business correspondence, and procedure manuals. Ability to effectively present information in a variety of settings and respond to questions.

Mathematical Skills

Ability to carry out routine engineering calculations related to wastewater treatment process control parameters and engineering design including surveying, open channel and pressure pipe hydraulics, mass balance, and engineering economics.

Reasoning Ability

Ability to define problems, collect data, establish facts, and draw valid conclusions; to interpret an extensive variety of technical information in mathematical or diagram form and deal with a variety of abstract and concrete variables; to apply principles of logical or scientific thinking to a wide range of intellectual and practical problems; ability to deal with verbal and nonverbal symbolism such as formulas, scientific equations, graphs, etc.

CERTIFICATES, LICENSES, REGISTRATIONS

Registration as a Professional Engineer in the State of California is required, and failure to maintain a license in good standing may result in loss of employment. **Four years of additional professional engineering experience - for a total of eight years of experience – can be substituted for the Professional Engineer registration.**

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. The job duties require sitting, standing, walking on level and unlevel surfaces, reaching, twisting, turning, kneeling, bending/stooping, crouching, _

grasping and making repetitive hand movements in the performance of daily duties. The employee must be able to lift and/or move up to 20 pounds above the head, and up to 50 pounds to waist height.

Specific vision ability required by this job includes the ability to see clearly at 20 inches or less, at 20 feet or more, to judge distances and spatial relationships to see objects where and as they actually are, and to adjust the eye to bring an object into sharp focus.

Examples of the physical demands for this position, including their activity and duration, are available from Administration.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those that an employee encounters while performing the essential functions of this job.

The employee typically works in an office environment with moderate noise levels, temperature controlled conditions, and no direct exposure to hazardous physical substances. While performing field duties of this job, the employee is occasionally exposed to wet and/or humid conditions, outdoor weather conditions, moving mechanical parts, fumes or airborne particles, toxic or caustic chemicals, the risk of electrical shock, or to vibration. The noise level in the field work environment is usually moderate, with occasional exposure to loud equipment.

SPECIAL REQUIREMENTS

There are no special requirements for this job.

RIGHT TO WORK DOCUMENTATION

Before being hired, all new employees will be required to show documentation as proof of authorization to work in the United States.

Job Title: Associate Engineer
Department: Technical Services
Reports To: Technical Services Manager
FLSA Status: Non-Exempt
Revision Date: October 2019



BOARD MEMORANDUM

October 3, 2019

To: CMSA Commissioners and Alternates

From: Jason Dow, General Manager

Subject: Public Hearing for Proposed Fee Ordinance 2019-1 Entitled “ An Ordinance Relating to Fee Schedules for Capacity Charges, Waste Haulers, and Industrial Monitoring”

Recommendation: Conduct the public hearing for the proposed Fee Ordinance 2019-1, pass the Ordinance, and authorize publication of a summary of the passed Ordinance in the Marin Independent Journal newspaper.

Summary: CMSA’s current Fee Ordinance 2016-1 establishes the capacity charge for new connections to the sanitary sewer system, tipping fees for septage and other hauled liquid waste disposal and processing at the Agency’s wastewater treatment plant, and industrial waste monitoring fees. At the September 2019 Board meeting, staff outlined the proposed Fee Ordinance changes, and the Board set the public hearing for the proposed Ordinance for the October 8 Board meeting. A Notice for the public hearing on the proposed Ordinance was published in the Marin IJ Newspaper on October 1-3.

Discussion: The Fee Ordinance 2019-1 is attached and has been posted on the Agency’s website. If the Board passes the proposed Ordinance, staff will publish the attached summary of the passed Ordinance in the Marin IJ. Noteworthy revisions are:

- 1) Simplified definition of Member Agency by removing each Member’s name. (Section 1)
- 2) Capacity charge payment added when an existing sewer user installs additional fixture units. For example, if a home remodel adds a new bathroom or a restaurant kitchen expansion with more sinks and floor drains. (Section 3)
- 3) Capacity charges updated with July 1, 2019 fees. (Section 3)
- 4) Annual capacity charge base index removed. (Section 4)
- 5) Accessory Dwelling Unit replaces Second Units in Section 5 title.
- 6) EDU rate definition revised with current method CMSA uses to determine the average service area EDU rate. (Section 6)

- 7) Monitoring Fee increased from \$15 per load to \$75 per load, to reflect current laboratory analyst cost to grab and analyze a wastewater sample, and language added stating sampling is at discretion of CMSA. (Section 6 and 7)
- 8) Language added to provide staff and the Board with flexibility to adjust the FOG tipping fee to attract additional FOG haulers. (Section 7)
- 9) Permit Fee adjustments made each fiscal year based on the SF Bay Area CPI. (Section 9)
- 10) Permit Fee table added with fees for new and renewal permits based on actual cost of staff performing the work. (Section 9)
- 11) Monitoring Fee provision revised to align with Sewer Use Ordinance language, and groundwater flow charge removed as it is now part of the Member Agency's regional charge calculation. (Section 9)
- 12) FOG and Organic Waste Hauler references removed from Section 10, because these fees are designed to attract private haulers to bring additional organic waste to CMSA to increase biogas production and expand the Agency's power delivery program. (Section 10)

Attachments:

- 1) Proposed Fee Ordinance, Ordinance No. 2019-1
- 2) Summary of Passed Ordinance 2019-1



CENTRAL MARIN SANITATION
AGENCY

**AN ORDINANCE RELATING TO FEE SCHEDULES
FOR CAPACITY CHARGES, WASTE HAULERS,
AND INDUSTRIAL MONITORING**

ORDINANCE No. 2019 - 1

September 2019

CENTRAL MARIN SANITATION AGENCY

Ordinance No. 2019-1

**AN ORDINANCE RELATING TO FEE SCHEDULES
FOR CAPACITY CHARGES, WASTE HAULERS,
AND INDUSTRIAL MONITORING**

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CENTRAL MARIN SANITATION AGENCY

Ordinance No. 2019-1

AN ORDINANCE RELATING TO FEE SCHEDULES FOR CAPACITY CHARGES, WASTE HAULERS, FATS, OILS AND GREASE (FOG) HAULERS, AND INDUSTRIAL MONITORING

The Commission of the Central Marin Sanitation Agency does ordain as follows:

SECTION 1 - DEFINITIONS

Agency: Agency means Central Marin Sanitation Agency, a joint exercise of powers agency formed on October 15, 1979.

Member Agency: A Member Agency means one of the ~~four~~ signatories of the Central Marin Sanitation Agency joint exercise of powers agreement, ~~namely: the City of Larkspur, San Rafael Sanitation District, Ross Valley Sanitary District, Sanitary District No. 1 of Marin County, or Sanitary District No. 2 of Marin County.~~

Plumbing Fixture Unit: A plumbing fixture unit, or fixture unit, evaluates the wastewater load resulting from average use of various kinds of plumbing fixtures. As used herein, a plumbing fixture unit means a plumbing fixture unit as defined by the most recent version of the Uniform Plumbing Code (UPC). There are 16 plumbing fixture units in a service unit.

Service Unit: A service unit, or equivalent dwelling unit (EDU), means a unit of a wastewater discharge with volume and strength estimated to equal that of an average single-family residential unit.

SECTION 2 - NO FREE SERVICE

No facilities or services of the Agency's wastewater system shall be furnished to any user free of charge.

SECTION 3 - CAPACITY CHARGE

A regional capacity charge shall be used by CMSA only for capital improvement purposes. It shall be paid for each new sewer user connecting to a public sewer within or being served by one of CMSA's Member Agencies, **or for an expansion by an existing sewer user already connected to the sewer system**. Such charge shall be collected by the Member Agency in the same manner in which the Member Agencies now collect their own local sewer connection fee. Member Agencies shall forward the regional capacity charges collected on behalf of CMSA within 45 days of receipt of such funds. Nothing contained herein is intended to reduce or interfere with a Member Agency's local sewer connection and other fees.

The amount of such regional capacity charge as of July 1, 2019 is as follows:

1	<p>New sewer connections for residential units, whether in single-family or multiple-family configuration.</p> <p style="text-align: right;"><i>Per service unit:</i> \$6,252.73</p>	
2	<p>Other new sewer user connections, including commercial, public agency, non-profit and all others users, except industrial and high strength users.</p> <p style="text-align: right;"><i>Per plumbing fixture unit, as defined in the UPC:</i> \$390.79*</p> <p style="text-align: center;">Residential fee [1] divided by standard number of plumbing fixtures per unit ($\\$6,252.73 \div 16$)</p>	
3	<p>Expansion of any existing sewer connection fixture unit count, except industrial and high strength users.</p> <p style="text-align: right;"><i>Per new or additional plumbing fixture unit, as defined in the UPC:</i> \$390.79*</p> <p style="text-align: center;">Residential fee (1) divided by standard number of plumbing fixtures per unit ($\\$6,252.73 / 16$)</p>	
4	<p>New High Strength User connection and/or expansion of existing High Strength User connection fixture units, including restaurants and bakeries. Commercial fee times high strength factor (2.34).</p> <p style="text-align: right;"><i>Per plumbing fixture unit, as defined in the UPC:</i> \$914.46*</p> <p style="text-align: center;">Commercial fee [2] multiplied by the high strength factor ($\\$380.89 \times 2.34$)</p>	
5	<p>New industrial structures and/or those new sewer users which, as determined by the Agency's general manager, discharge special volumes or strengths of wastewater shall be charged a regional capacity charge established by Board action in each individual case.</p>	

*But not less than **\$6,252.73** per **new** connection, the minimum fee if a **new** connection is added.

SECTION 4 - ANNUAL ADJUSTMENT OF CAPACITY CHARGE

Each year, commencing on July 1 and continuing thereafter on each July 1, the connection fee shall be adjusted by an increment based on the most recent annual change (April to April) in the Engineering News-Record Construction Cost Index (ENR Index) for San Francisco.

However, the CMSA Board of Commissioners may at its option determine, by resolution adopted prior thereto, that such adjustment shall not be effective for the next succeeding year, or may determine other amounts as appropriate.

SECTION 5 – ACCESSORY DWELLING UNITS, SENIOR CITIZEN, AND AFFORDABLE HOUSING

Those residential construction projects which a Member Agency designates and determines are qualified for reduced local sewer connection fees shall also automatically qualify for a reduced regional capacity charge. However, the Agency's regional capacity charge shall be reduced only by the same proportionate amount as the Member Agency's connection fee.

SECTION 6 - WASTE HAULER CHARGES

A wastewater facilities use charge shall be paid by septage haulers, other trucks hauling chemical toilet and/or domestic strength wastewater, and recreational vehicles discharging directly in the Agency's treatment and disposal facilities. Each type and volume of hauled waste is assigned a Service Unit (Equivalent Dwelling Unit, EDU)

TYPE OF VEHICLE	SERVICE UNITS (EDU)
Septage and Chemical Toilet Waste Haulers: Truck volume per 1,000 gallons or portion of	0.270
Recreational Vehicle and Other Domestic-Strength Waste Haulers: Minimum charge is \$10.00	0.025
Other Tank Truck Wastes: As determined by the Agency's General Manager, on a case-by-case basis.	

Each year, commencing on July 1 and continuing thereafter on each July 1, the annual service charge "EDU Rate" for each service unit "EDU" will be established in the CMSA Adopted Budget. The Agency's EDU Rate will be **based on the total of billed revenues to JPA members divided by the total number of reported Equivalent Dwelling Units in the JPA Members' service area for the current fiscal year.**

Each waste hauler shall pay a waste disposal fee based on the following formula:

Septage and Chemical Toilet Trucked Waste Disposal Fee = (Total volume / 1,000) x (0.27 x EDU Rate) + Per Load Monitoring Fee.

Recreational Vehicle Disposal Fee = 0.025 x EDU Rate

A **seventy five dollar (\$75.00)** Per Load Monitoring Fee is charged to recover the cost of sample collection and analysis, **if a sample is collected at the discretion of CMSA.**

The charges determined above shall be rounded to the nearest five cents (\$0.05).

SECTION 7 – FATS, OILS AND GREASE (FOG) HAULER CHARGES

A wastewater facilities use charge shall be paid by haulers of fats, oils and grease (FOG) discharging directly in the Agency's treatment and disposal facilities.

Tipping Fee Tiers (gallons per day)	Charge per Tier (\$/gallon)
0 – 1,500	0.06
1,501 – 3,000	0.05
3,001 - 5,000	0.03
5,001 – 10,000	0.02
10,001 – 15,000	0.01
15,001+	No charge

The Agency may also charge a **\$75.00** Per Load Monitoring Fee to waste haulers to recover the actual cost of any required sample collection and analysis, **if a sample is collected at the discretion of CMSA.**

The Agency may establish a per gallon FOG disposal fee that is lower than the fee described above to be competitive with the FOG disposal fees charged by other wastewater treatment or similar disposal facilities, **or to obtain desirable FOG delivery terms that would be financially advantageous for CMSA's power delivery program.** Under these circumstances, the General Manager may recommend a reduction in the FOG fee and request the Board of Commissioners to make the reduction through a Board action at a properly agendized Board meeting OR the fee may be reduced to an appropriate level at the discretion of the General Manager, who shall notify the Board of such fee reduction at its next regular meeting. Any new rate change under this section would become effective immediately either upon the date of the Board action or upon the date that the General Manager makes the decision for a reduction.

SECTION 8 – LIQUID ORGANIC WASTE HAULER CHARGES

Liquid wastes from food and beverage manufacturing and/or production facilities are accepted at the Agency's Organic Waste receiving facility. The Agency's fee to receive and process each type of liquid waste will be negotiated with the generator of the waste material, and will consider the expected delivery volume and frequency, and its contamination level and organic content. The General Manager has the authority to establish the initial tipping fee for each type of liquid waste material and adjust the fee to remain competitive in the marketplace.

SECTION 9 - INDUSTRIAL MONITORING AND PERMIT FEES

CMSA shall assess and collect fees for the recovery of costs associated with the discharge of industrial wastes to the sanitary sewers. These fees are permit fees, monitoring fees, and noncompliance fees, as described in CMSA's Sewer Use Ordinance. Permit and monitoring fees are shown below and are adjusted each Fiscal year based on the San Francisco Bay Area Consumer Price Index (CPI).

User/Permit Class	User/Permit Description	New Permit Fee	Renewal Permit Fee
I	Significant/Categorical Industrial User (SIU/CIU)	\$1,200	\$600
II	Manufacturing, mass transit, etc.	\$600	\$300
III	Business activity, radiator repair shops, auto service facilities, etc.	\$600	\$300
IV	Groundwater discharger, CIPP lining, construction runoff, etc.	\$400	\$200

Note: See CMSA Sewer Use Ordinance for detailed description of User/Permit Classes.

Monitoring Fee

All routine monitoring events, pursuant to verifying compliance with a Wastewater Discharge Permit or as follow-up to an instance of non-compliance detected during a previous monitoring event, shall be assessed one of the monitoring fees listed below.

Grab Sample(s)

The sum of: 1) One hour labor at the current weighted salary of a CMSA Environmental Services Analyst II (B Step); 2) 60% overhead assessed on the labor charge; and 3) The cost of any analytical work performed on the sample(s) by CMSA's in-house analytical laboratory and/or the currently contracted analytical laboratory, per their invoice to CMSA.

24-hour Composite Sample(s)

Identical to the Grab Sample fee, except that two hours of labor will be charged.

SECTION 10 – DETERMINATION THAT FEES DO NOT EXCEED COST OF SERVICE

CMSA has determined that the fees for Capacity Charges (Section 3), Waste Hauler Charges (Section 6), ~~Fats, Oils, and Grease (FOG) Hauler Charges (Section 7), Organic Liquid Waste Hauler Charges (Section 8)~~, and Industrial Monitoring Fees (Section 9) do not exceed the cost of providing the services that CMSA provides.

SECTION 11 - SEVERABILITY

If any provision of this ordinance or the application thereof to any person or circumstances is held invalid, no other provision of this ordinance shall be affected thereby.

SECTION 12 - REPEALS

All prior Ordinances of CMSA relating to fees are hereby repealed.

SECTION 13 - EFFECTIVE DATE

This ordinance shall be effective thirty (30) days after its passage. Before the expiration of fifteen (15) days after its passage, it shall be published once, with the names of the members voting for and against it, in the Marin Independent Journal, a newspaper of general circulation published within the Agency boundaries.

PASSED AND ADOPTED on **Date**, 2019 by the following vote:

AYES:

NOES:

ABSENT:

Attest:

Dean DiGiovanni – Commission Chair

Eli Beckman – Commission Secretary

SUMMARY OF PASSED ORDINANCE 2019-1**AN ORDINANCE OF THE BOARD OF COMMISSIONERS OF THE CENTRAL MARIN SANITATION AGENCY REVISING ITS FEE ORDINANCE**

The Central Marin Sanitation Agency (CMSA) previously adopted Ordinance 2016-1, an ordinance relating to fee schedules for capacity charges, waste haulers, Fats, Oils, and Grease (FOG) haulers, and industrial monitoring, on July 12, 2016. Ordinance 2019-1 revises provisions within Ordinance 2016-1 to update fee schedules and incorporate existing industrial monitoring permit fees from a separate ordinance.

This passed Ordinance revises Ordinance 2016-1 in the following ways:

- Regional Capacity Charge, per fixture unit, and high strength user amounts will be increased by approximately 2.6%, pursuant to the July 1 automatic increase based on the change in the Engineering News-Record Construction Cost Index.
- A Regional Capacity Charge will be assessed for the fixture unit expansion by an existing sewer user already connected to the sewer system.
- Load monitoring fees increase for CMSA to fully recover the cost of sample analyses.
- FOG tipping fees can be adjusted by the Board or General Manager to obtain desirable delivery terms.
- Industrial monitoring fees from the CMSA Sewer Use Ordinance have been incorporated, the fees allow CMSA fully recover the cost of issuing waste discharge permits, and the fees increase each July 1 based on the San Francisco Bay Area Consumer Price Index.

The Board of Commissioners of Central Marin Sanitation Agency, pursuant to Health and Safety Code Section 6490 and 6491.3, conducted a public hearing on the Ordinance at their October 8, 2019 regular meeting. The Ordinance was passed by the following vote and will be effective beginning on November 8, 2019:

AYES:

NOES:

ABSENT:

A copy of the passed Ordinance No. 2019-1, can be viewed or downloaded from the Agency's website (www.cmsa.us/documents), or is available at the following address:

Central Marin Sanitation Agency
1301 Andersen Drive
San Rafael, CA 94901
(415) 459-1455



MEMORANDUM

October 3, 2019

To: CMSA Commissioners and Alternates

From: Jason Dow, General Manager

Subject: Alternate Retirement Plan for Temporary and Part Time Employees

Recommendation: Adopt Resolution No. 339 to authorize adoption of the PARS Trust Alternative Retirement Plan, and select the PARS contribution amount and allocation between Agency and employee.

Summary: At last month's Board meeting, staff recommended the Agency participate in the Public Agency Retirement System (PARS) for temporary and part-time employees instead of Social Security. Mitch Barker, PARS Executive Vice President, attended the meeting and gave a PARS program presentation and answered Board member questions about the program benefits, investments, and disbursement options. The Board discussed participating in PARS, concluded that participation is an extension of the first Board's policy decision in the early 1980's to not participate in Social Security, and decided to continue the PARS program discussion to the October meeting.

After the meeting, staff contacted several local agencies that participate in PARS for employee classifications that are not eligible for CalPERS, including the Cities of San Rafael, Campbell, Morgan Hill, Cupertino, Pacifica, Millbrae, and Palo Alto, and the Ora Loma Sanitary District. Agency representatives unanimously said that PARS is a good program and has great customer service, and none of the agencies have experienced any problems or issues with the program.

Background: After CMSA was formed and began to hire employees, the Board decided that the Agency would participate in the California Public Employee Retirement System (PERS) and not in Social Security. At CMSA, all probationary and full-time employees are enrolled in PERS, as well as unrepresented part-time employees hired to work greater 20 hours/week for over a year. Temporary employees and part-time employees who work less than 20 hours per week are not eligible for PERS and are subject to Social Security.

The Internal Revenue Code, as amended by the Omnibus Budget Reconciliation Act of 1990, requires that all public employees be covered by Social Security or an alternate plan if not covered by their employer's existing retirement system. The Agency recently began hiring college and high school interns as temporary employees, and both the Agency and the employee contribute 6.2% of their gross pay to Social Security for a total contribution of 12.4%.

PARS offers an alternative to Social Security, called the PARS Trust Alternative Retirement Plan, that allows participating agencies and their eligible employees to contribute amounts in any combination such that total contributions meet or exceed 7.5% of gross earnings. According to PARS, the most common combinations are 6.2%/1.3% and 7.5%/0.0% for employer and employee contributions, respectively. Plan contributions are made to a trust that is qualified under Section 401(a) and tax exempt under Section 501(a) of the Internal Revenue Code. Plan contributions are pre-tax to the employee thereby allowing them to compound at a faster rate over time. At separation, the employee can withdraw the total contributions made, subject to tax, or can rollover the account into another retirement vehicle such as a 401(k).

Costs of the plan are minimal to the Agency at 2% of total assets under management that may be offset partially or fully by savings from not paying the otherwise required employer share of Social Security. When an employer participates in Social Security, its contribution is fixed at 6.2% of subject wages, whereas when participating in PARS employer contributions are variable in any percentage determined by the Agency. Staff believes that the Plan is more advantageous to non-PERS eligible part-time employees, and can save the Agency and the employee retirement contribution funds.

PARS Funding Selection: If the Board chooses to participate in PARS, it needs to select the total funding amount and the allocation between the employee and Agency. As mentioned above, the minimum PARS funding amount is 7.5%. Staff recommends funding at the minimum level, which is common according to PARS, and either sharing the retirement funding amounts, 3.75% each, or using a 6.2% employee, 1.3% Agency contribution formula. However, the Board can fund PARS at any amount greater than 7.5%, and discuss and select another contribution allocation formula. Attachment 3 shows several additional formulas for Board consideration.

The City of San Rafael funds PARS at the 7.5% level, and equally share the contribution with the employee.

Fiscal Impact: A savings to the Agency, if the employer PARS contribution with administrative fee is less than 6.2% of the employee's gross pay.

Attachments:

- 1) City of San Rafael PARS Information Handout
- 2) Resolution No. 339 Authorizing the Adoption of the PARS Trust Alternative Retirement Plan
- 3) Draft PARS Agreement for Administrative Services
- 4) PARS Funding Alternatives

City of San Rafael

Alternate Retirement System Plan

Plan Information Sheet for

Part-Time, Seasonal, and Temporary Employees

Introduction

A federal law, the Omnibus Budget Reconciliation Act of 1990 (OBRA 90), requires that governmental employees **who are not members of their employer's existing retirement system** be covered by Social Security or an alternate plan.

You are enrolled in an alternate plan called the Public Agency Retirement Services Alternate Retirement System Plan (PARS ARS). PARS ARS satisfies federal requirements and provides cost savings to you and your employer when compared to Social Security. The PARS ARS plan only requires a minimum contribution of 7.5% to your retirement account.

This information is a general description of what you can expect as a participant in PARS ARS. The Plan Document provides a detailed description and contains all of the specific legal requirements of the plan. A copy of the plan document is available for review with your employer.

Enrollment in the PARS ARS Plan is automatic for eligible employees.

Effective July 1, 1991 and thereafter:

1. Each pay period, **3.75%** of your wages will be deducted from your pay and deposited into your PARS ARS account. Your contributions are made on a pre-tax basis.
2. Each pay period, your employer will also contribute the equivalent of **3.75%** of your wages to your PARS ARS account. Employer contributions are also made on a pre-tax basis.
3. Investment activity minus plan administrative expenses will be credited to your PARS ARS account based on your monthly account activity and will accumulate **tax-free** until your termination from the plan and the distribution of your account balance.

Designating a Beneficiary

- 1) In the event that you pass away while contributing to the PARS ARS Plan, your account balance will be distributed to your beneficiary.
- 2) If you are married at the time of your death, your spouse/registered domestic partner is automatically your beneficiary. If you wish to designate someone other than your spouse/registered domestic partner, you may do so by submitting a Designation of Beneficiary Form.

- 3) If you are unmarried at the time of your death, your account balance will be paid to your estate unless you have designated another beneficiary.
- 4) You may obtain a Designation of Beneficiary Form from your employer or from PARS.

Becoming Eligible for a Benefit

- 1) You (or your beneficiary in the event of your death) will be eligible to receive your PARS ARS account balance when one of the following events occurs:
 - a. Termination of Employment
 - b. Retirement
 - c. Permanent and Total Disability
 - d. Death
 - e. Changed employment status to a position covered by another retirement system*

*If there have been no contributions into your PARS ARS account for two (2) years, you may be eligible for a distribution of your account.

Receiving Your Account Balance

- 1) When your employer notifies PARS that you are eligible for a distribution of your account, appropriate forms will be sent to **you by mail**. **Within 90 days of PARS' receipt** of all correctly completed forms, the account will be distributed.
- 2) Your distribution options are:
 - a. You may elect to receive a **one-time lump-sum cash payment**. If your account balance is greater than \$200, your distribution may be subject to federal and/or state income tax withholding. If you are under age 59½, your distribution may also be subject to an excise tax withholding.
 - b. If your account balance is greater than \$200, you can defer tax withholding from your distribution by electing a **direct rollover** to a traditional IRA or to an eligible employer plan that accepts rollovers (e.g. 403(b), 457(b), 401(k), etc.).

For further information or for questions about your account, please contact PARS.

(800) 540-6369
Monday – Friday
9:00AM – 5:00PM Pacific Time



CMSA Resolution No. 339

***RESOLUTION OF CENTRAL MARIN SANITATION AGENCY
AUTHORIZING THE ADOPTION OF THE PARS TRUST
ALTERNATIVE RETIREMENT PLAN***

WHEREAS, it is determined to be in the best interest of the Central Marin Sanitation Agency (CMSA) and its employees to provide a qualifying retirement system for its employees not currently eligible for such a qualifying retirement system, thereby meeting the requirements of Section 11332 of the Omnibus Budget Reconciliation Act (OBRA '90) and Section 3121(b)(7)(F) of the Internal Revenue Code; and

WHEREAS, PARS has made such a system available to the CMSA and its eligible employees and qualifies under OBRA 90 Section 11332, Internal Revenue Code Sections 3121(b)(7)(F) and 457(b), and meets the meaning of the term "retirement system" as given by Section 218(b)(4) of the Federal Social Security Act.

NOW THEREFORE, BE IT RESOLVED THAT

The Board of Commissioners hereby adopts the PARS Trust, including the PARS Section 457(b) Alternative Retirement Plan, effective September 10, 2019; and

The Board of Commissioners hereby appoints the General Manager, or his/her successor or his/her designee as CMSA's Plan Administrator for the PARS Section 457(b) Alternative Retirement Plan/Trust; and

CMSA's Plan Administrator is hereby authorized to implement the plan(s), execute the PARS legal and administrative documents on behalf of CMSA and to take whatever additional actions are necessary to maintain the CMSA's participation in PARS and to maintain PARS compliance of any relevant regulation issued or as may be issued; therefore, authorizing him/her to take whatever additional actions are required to administer the CMSA's PARS plan(s).

ADOPTED at the meeting of the Central Marin Sanitation Agency Commissioners, County of Marin, State of California, on October 8, 2019, by the following vote.

AYES:

NAYS:

ABSTAIN:

ABSENT:

Dean DiGiovanni, Commission Chair

ATTEST:

By _____
Eli Beckman, Commission Secretary

AGREEMENT FOR ADMINISTRATIVE SERVICES

This Agreement for Administrative Services (“Agreement”) is made this ____ day of _____, 2019, between Phase II Systems, a corporation organized and existing under the laws of the State of California, doing business as Public Agency Retirement Services and PARS (hereinafter “PARS”) and the Central Marin Sanitation Agency (“Agency”).

WHEREAS, Agency is desirous of retaining PARS, as Trust Administrator, to provide administrative services with respect to the Central Marin Sanitation Agency PARS Section 457(b) Alternative Retirement Plan and Trust (“Plan”);

WHEREAS, by written resolution and pursuant to Sections 1.1 and 2.1 of the Trust, the Agency’s governing body has appointed by position or title a Plan Administrator to act on its behalf in all matters relating to the Plan and PARS Trust (“Plan Administrator”);

WHEREAS, pursuant to Section 3.3 of the Trust, the Agency has the power to delegate certain duties related to the Plan, and PARS accepts those duties pursuant to the terms contained in the Agreement, and that this Agreement represents the entire delegation of duties to PARS from the Agency with regards to the Plan;

WHEREAS, PARS accepts the terms of this Agreement with the understanding by the Agency and Plan Administrator that PARS does not hold custody of any assets of the Plan, and does not have any independent authority or discretion for the investment, distribution or escheatment of Plan assets without the express consent of, and direction from the Plan Administrator.

NOW THEREFORE, THE PARTIES AGREE:

1. **Services.** PARS will provide the services pertaining to the Plan as described in the exhibit attached hereto as “Exhibit 1A” (“Services”) in a timely manner, subject to the further provisions of this Agreement.
2. **Fees for Services.** PARS will be compensated for performance of the Services as described in the exhibit attached hereto as “Exhibit 1B”.
3. **Payment Terms.** Payment for the Services will be remitted directly from Plan assets unless the Agency chooses to make payment directly to PARS. In the event that the Agency chooses to make payment directly to PARS, it shall be the responsibility of the Agency to remit payment directly to PARS based upon an invoice prepared by PARS and delivered to the Agency. If payment is not received by PARS within thirty (30) days of the invoice delivery date, the balance due shall bear interest at the rate of 1.5% per month. If payment is not received from the Agency within sixty (60) days of the invoice delivery date, payment plus accrued interest will be remitted directly from Plan assets, unless PARS has previously received written communication disputing the subject invoice that is signed by a duly authorized representative of the Agency.
4. **Fees for Services Beyond Scope.** Fees for services beyond those specified in this Agreement will be billed to the Agency at the rates indicated in the PARS standard fee schedule in effect at the time the services are provided and shall be payable as

described in Section 3 of this Agreement. Before any such services are performed, PARS will provide the Agency with a detailed description of the services, terms, and applicable rates for such services. Such services, terms, and applicable rates shall be agreed upon in writing and executed by both parties.

5. **Information Furnished to PARS.** PARS will provide the Services contingent upon the Agency providing PARS the information specified in the exhibit attached hereto as “Exhibit 1C” (“Data”). It shall be the responsibility of the Agency to certify the accuracy, content and completeness of the Data so that PARS may rely on such information without further audit. It shall further be the responsibility of the Agency to deliver the Data to PARS in such a manner that allows for a reasonable amount of time for the Services to be performed. Unless specified in Exhibit 1A, PARS shall be under no duty to question Data received from the Agency, to compute contributions made to the Plan, to determine or inquire whether contributions are adequate to meet and discharge liabilities under the Plan, or to determine or inquire whether contributions made to the Plan are in compliance with the Plan or applicable law. In addition, PARS shall not be liable for non performance of Services to the extent such non performance is caused by or results from erroneous and/or late delivery of Data from the Agency. In the event that the Agency fails to provide Data in a complete, accurate and timely manner and pursuant to the specifications in Exhibit 1C, PARS reserves the right, notwithstanding the further provisions of this Agreement, to terminate this Agreement upon no less than ninety (90) days written notice to the Agency.
6. **Suspension of Contributions.** In the event contributions are suspended, either temporarily or permanently, prior to the complete discharge of PARS’ obligations under this Agreement, PARS reserves the right to bill the Agency for Services under this Agreement at the rates indicated in PARS’ standard fee schedule in effect at the time the services are provided, subject to the terms established in Section 3 of this Agreement. Before any such services are performed, PARS will provide the Agency with written notice of the subject services, terms, and an estimate of the fees therefore.
7. **Plan Distributions.** The Plan Administrator is responsible for notifying PARS of any Participant’s eligibility for a distribution, and PARS accepts the Plan Administrator’s contractual delegation of distribution processing and certain escheatment responsibilities. PARS is entitled to rely on, and is under no duty whatsoever to audit the efficacy of the Agency’s procedures for identifying an employee’s change-in-status or eligibility for a distribution.
8. **Non-Contribution Reports.** PARS prepares and submits a periodic Non-Contribution report to the Plan Administrator which includes all Participants who have received no new contributions for a period of time, as specified by the Plan Administrator. PARS is not obligated by law or otherwise to provide a Non-Contribution report and this report in no way obligates PARS to generate distributions without specific instruction from the Agency’s Plan Administrator as outlined in Section 7.
9. **Escheatment of Unclaimed Accounts.** PARS will administer the escheatment of Participant accounts which are deemed unclaimed pursuant to applicable state and

federal laws, under the conditions further described in the provisions of this Agreement. It is acknowledged by the Agency and Plan Administrator that any escheatment duties that PARS has arise only as a result of contractual, not statutory, obligations that PARS accepts as a delegatee of the Plan Administrator, as contained in this Agreement. For the purposes of determining the timing of distributability under any unclaimed property law, a Participant account becomes “payable or distributable” as of the date on which the Plan Administrator notifies PARS, in an acceptable form of notification, of a change-in-status together with the proper authorization to commence the distribution process.

10. **Records.** Throughout the duration of this Agreement, and for a period of five (5) years after termination of this Agreement, PARS shall provide duly authorized representatives of Agency access to all records and material relating to calculation of PARS’ fees under this Agreement. Such access shall include the right to inspect, audit and reproduce such records and material and to verify reports furnished in compliance with the provisions of this Agreement. All information so obtained shall be accorded confidential treatment as provided under applicable law.
11. **Confidentiality.** Without the Agency’s consent, PARS shall not disclose any information relating to the Plan except to duly authorized officials of the Agency, subject to applicable law, and to parties retained by PARS to perform specific services within this Agreement. The Agency shall not disclose any information relating to the Plan to individuals not employed by the Agency without the prior written consent of PARS, except as such disclosures may be required by applicable law.
12. **Independent Contractor.** PARS is and at all times hereunder shall be an independent contractor. As such, neither the Agency nor any of its officers, employees or agents shall have the power to control the conduct of PARS, its officers, employees or agents, except as specifically set forth and provided for herein. PARS shall pay all wages, salaries and other amounts due its employees in connection with this Agreement and shall be responsible for all reports and obligations respecting them, such as social security, income tax withholding, unemployment compensation, workers’ compensation and similar matters.
13. **Indemnification.** PARS and Agency hereby indemnify each other and hold the other harmless, including their respective officers, directors, employees, agents and attorneys, from any claim, loss, demand, liability, or expense, including reasonable attorneys’ fees and costs, incurred by the other as a consequence of, to the extent, PARS’ or Agency’s, as the case may be, negligent acts, errors or omissions with respect to the performance of their respective duties hereunder.
14. **Compliance with Applicable Law.** The Agency shall observe and comply with federal, state and local laws in effect when this Agreement is executed, or which may come into effect during the term of this Agreement, regarding the administration of the Plan. PARS shall observe and comply with federal, state and local laws in effect when this Agreement is executed, or which may come into effect during the term of this Agreement, regarding Plan administrative services provided under this Agreement.

15. **Applicable Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of California. In the event any party institutes legal proceedings to enforce or interpret this Agreement, venue and jurisdiction shall be in any state court of competent jurisdiction.
16. **Force Majeure.** When a party's nonperformance hereunder was beyond the control and not due to the fault of the party not performing, a party shall be excused from performing its obligations under this Agreement during the time and to the extent that it is prevented from performing by such cause, including but not limited to: any incidence of fire, flood, acts of God, acts of terrorism or war, commandeering of material, products, plants or facilities by the federal, state or local government, or a material act or omission by the other party.
17. **Ownership of Reports and Documents.** The originals of all letters, documents, reports, and data produced for the purposes of this Agreement shall be delivered to, and become the property of the Agency. Copies may be made for PARS but shall not be furnished to others without written authorization from Agency.
18. **Designees.** The Plan Administrator of the Agency, or their designee, shall have the authority to act for and exercise any of the rights of the Agency as set forth in this Agreement, subsequent to and in accordance with the written authority granted by the Governing Body of the Agency, a copy of which writing shall be delivered to PARS. Any officer of PARS, or his or her designees, shall have the authority to act for and exercise any of the rights of PARS as set forth in this Agreement.
19. **Notices.** All notices hereunder and communications regarding the interpretation of the terms of this Agreement, or changes thereto, shall be effected by delivery of the notices in person or by depositing the notices in the U.S. mail, registered or certified mail, return receipt requested, postage prepaid and addressed as follows:
- (A) To PARS: PARS; 4350 Von Karman Avenue, Suite 100, Newport Beach, CA 92660; Attention: President
- (B) To Agency: Central Marin Sanitation Agency; 1301 Andersen Drive, San Rafael, CA 94901; Attention: _____ [Plan Administrator Title]
- Notices shall be deemed given on the date received by the addressee.
20. **Term of Agreement.** This Agreement shall remain in effect for the period beginning _____, 2019 and ending _____, 2022 ("Term"). This Agreement will continue unchanged for successive twelve month periods following the Term unless either party gives written notice to the other party of the intent to terminate prior to ninety (90) days before the end of the Term.
21. **Amendment.** This Agreement may not be amended orally, but only by a written instrument executed by the parties hereto.
22. **Entire Agreement.** This Agreement, including exhibits, contains the entire understanding of the parties with respect to the subject matter set forth in this Agreement. In the event a conflict arises between the parties with respect to any term, condition or provision of this Agreement, the remaining terms, conditions and provisions shall remain in full force and legal effect. No waiver of any term or

condition of this Agreement by any party shall be construed by the other as a continuing waiver of such term or condition.

23. **Attorneys Fees.** In the event any action is taken by a party hereto to enforce the terms of this Agreement the prevailing party herein shall be entitled to receive its reasonable attorney's fees.

24. **Counterparts.** This Agreement may be executed in any number of counterparts, and in that event, each counterpart shall be deemed a complete original and be enforceable without reference to any other counterpart.

25. **Headings.** Headings in this Agreement are for convenience only and shall not be used to interpret or construe its provisions.

26. **Effective Date.** This Agreement shall be effective on the date first above written, and also shall be the date the Agreement is executed.

AGENCY:

BY: _____
Plan Administrator Name

TITLE: _____

DATE: _____

PARS:

BY: _____
Tod Hammeras

TITLE: Chief Financial Officer

DATE: _____

EXHIBIT 1A

SERVICES

PARS will provide the following services for the Central Marin Sanitation Agency PARS 457(b) Alternative Retirement Plan:

1. Plan Installation Services:

- (A) Meeting with appropriate Agency personnel to discuss plan provisions, implementation timelines, benefit communication strategies, data reporting and contribution submission requirements;
- (B) Providing the necessary analysis and advisory services to finalize these elements of the Plan;
- (C) Providing the documentation needed to establish the Plan to be reviewed and approved by Agency legal counsel. Resulting final Plan document must be approved by the Agency prior to the commencement of PARS Plan Administration Services outlined in Exhibit 1A, paragraph 2 below.

2. Plan Administration Services:

- (A) Monitoring the receipt of Plan contributions made by the Agency to the trustee of the PARS Trust ("Trustee"), based upon information received from the Agency and the Trustee;
- (B) Performing periodic accounting of Plan assets, including the allocation of employer and employee contributions, distributions, investment activity and expenses (if applicable) to individual Participant accounts, based upon information received from the Agency and/or Trustee;
- (C) Acting as ongoing liaison between the Participant and the Agency in regard to distribution payments, which shall include use by the Participants of toll-free telephone communication to PARS;
- (D) Coordinating the processing of Participant distribution payments pursuant to authorized written Agency certification of distribution eligibility, authorized direction by the Agency, the provisions further contained in this Agreement, and the provisions of the Plan;
- (E) Directing Trustee to make Participant distribution payments, pursuant to the Agency authorization provisions in this Agreement, and producing required tax filings regarding said distribution payments;
- (F) Notifying the Trustee of the amount of Plan assets available for further investment and management, or, the amount of Plan assets necessary to be liquidated in order to fund Participant distribution payments;
- (G) Coordinating actions with the Trustee as directed by the Plan Administrator within the scope of this Agreement;
- (H) Preparing and submitting a periodic Non-Contribution report which includes all Participants who have received no new contributions for a period of time as specified by the Plan Administrator, unless directed by the Agency otherwise. PARS is not obligated by law or otherwise to provide a Non-Contribution report and this report in

no way obligates PARS to generate distributions without specific instruction from the Agency Plan Administrator as outlined in Section 7 of this Agreement;

- (I) Preparing and submitting a monthly report of Plan activity to the Agency, unless directed by the Agency otherwise;
 - (J) Preparing and submitting an annual report of Plan activity to the Agency;
 - (K) Preparing individual annual statements and mailing in bulk to the Agency, unless directed by the Agency otherwise.
3. Plan Compliance Services: Preparing draft amendments and other associated documents to the Plan or Trust, as required by federal and state regulatory agencies, to be reviewed and approved by Agency's legal counsel.
 4. PARS is not licensed to provide and does not offer tax, accounting, legal, investment or actuarial advice.

DRAFT

EXHIBIT 1B
FEES FOR SERVICES

1. PARS will be compensated for performance of Services, as described in Exhibit 1A based upon the following schedule:

(A) A distribution fee equal to \$20.00 per terminated Participant (“Distribution Fee”), which shall be deducted solely from the terminating Participant’s account or paid by the Agency.

Distribution Fee Payment Option (Please select one option below):

- Distribution Fee shall be paid solely from the terminating Participant’s account.
- Distribution Fee shall be paid by the Agency.

(B) An annual asset fee paid by the Agency or from Plan assets based on the following schedule (“Asset Fee”):

<u>For Plan Assets from:</u>	<u>Annual Rate:</u>
\$1 to \$500,000	2.00%
\$500,001 to \$2,500,000	1.50%
\$2,500,001 to \$5,000,000	1.25%
\$5,000,001 to \$10,000,000	1.00%
\$10,000,001 and above	0.75%

Annual rates are prorated and paid monthly. The annual Asset Fee shall be calculated by the following formula [Annual rate divided by 12 (months of the year) multiplied by the Plan asset balance at the end of the month within each asset range]. If the Asset Fee is taken from Plan assets, the total Asset Fees due in a given month shall be allocated proportionately among Participants of the Agency’s Plan in that month, based on account balance. Trustee and Investment Management Fees are not included.

(C) The annual asset fee referenced above shall be paid as follows:

Annual Asset Fee Payment Option (Please select one option below):

- Annual Asset Fee shall be invoiced to and paid by the Agency.
- Annual Asset Fee shall be paid from Plan assets.

(D) A fee equal to any IRS application fees and or legal fees incurred related to any federal or state required Plan compliance changes. Such fees will not be charged to the Agency without prior authorization by the Plan Administrator.

(E) A fee equal to the out of pocket costs charged to PARS by an outside contractor for formatting contribution data to a suitable electronic format, charged only if the contribution data received by PARS from the Agency is not sent electronically (Excel, CSV, TXT, or other approved format) (“Data Processing Fee”).

EXHIBIT 1C
DATA REQUIREMENTS

PARS will provide the Services under this Agreement contingent upon receiving the following information:

1. Contribution Data – transmitted to PARS electronically (Excel, CSV, TXT, or other approved format) containing the following items of employee information related to the covered payroll period:
 - (A) Agency name
 - (B) Employee’s legal name
 - (C) Employee’s social security number
 - (D) Payroll date
 - (E) Employer contribution amount
 - (F) Employee contribution amount
2. Distribution Data – written Plan Administrator’s (or authorized Designee’s) direction to commence distribution processing, which contains the following items of Participant information:
 - (A) Agency name
 - (B) Participant’s legal name
 - (C) Participant’s social security number
 - (D) Participant’s address
 - (E) Participant’s phone number
 - (F) Participant’s birthdate
 - (G) Participant’s condition of eligibility
 - (H) Participant’s effective date of eligibility
 - (I) Signed certification of distribution eligibility from the Plan Administrator, or authorized Designee
3. Executed Legal Documents:
 - (A) Certified Resolution
 - (B) Plan Document
 - (C) Trust Agreement
 - (D) Trustee Investment Forms
4. Other information pertinent to the Services as reasonably requested by PARS.

CENTRAL MARIN SANITATION AGENCY
TOTAL ANNUAL COST OF PARS PROGRAM

Scenario 1 7.5% Ee	Er (a)	\$ 45,000	0.00%	\$ -	Total Er Cost a + b
	Ee	\$ 45,000	7.50%	\$ 3,375	
Total % contribution			<u>7.50%</u>		
				<u>Assets under management</u>	<u>\$ 3,375</u>
				(b) Management fee to CMSA at 2%	<u>\$ 68</u>
					<u>\$ 68</u>
Scenario 2 7.5% Er	Er (a)	\$ 45,000	7.50%	\$ 3,375	Total Er Cost a + b
	Ee	\$ 45,000	0.00%	\$ -	
Total % contribution			<u>7.50%</u>		
				<u>Assets under management</u>	<u>\$ 3,375</u>
				(b) Management fee to CMSA at 2%	<u>\$ 68</u>
					<u>\$ 3,443</u>
Scenario 3 6.2 / 1.3	Er (a)	\$ 45,000	6.20%	\$ 2,790	Total Er Cost a + b
	Ee	\$ 45,000	1.30%	\$ 585	
Total % contribution			<u>7.50%</u>		
				<u>Assets under management</u>	<u>\$ 3,375</u>
				(b) Management fee to CMSA at 2%	<u>\$ 68</u>
					<u>\$ 2,858</u>
Scenario 4 1.3 / 6.2	Er (a)	\$ 45,000	1.30%	\$ 585	Total Er Cost a + b
	Ee	\$ 45,000	6.20%	\$ 2,790	
Total % contribution			<u>7.50%</u>		
				<u>Assets under management</u>	<u>\$ 3,375</u>
				(b) Management fee to CMSA at 2%	<u>\$ 68</u>
					<u>\$ 653</u>
Scenario 5 3.75 / 3.75	Er (a)	\$ 45,000	3.75%	\$ 1,688	Total Er Cost a + b
	Ee	\$ 45,000	3.75%	\$ 1,688	
Total % contribution			<u>7.50%</u>		
				<u>Assets under management</u>	<u>\$ 3,375</u>
				(b) Management fee to CMSA at 2%	<u>\$ 68</u>
					<u>\$ 1,755</u>

CENTRAL MARIN SANITATION AGENCY
TOTAL ANNUAL COST OF PARS PROGRAM

Scenario 6 6.2 / 6.2	Er (a) Ee	\$ 45,000 \$ 45,000	6.20% <u>6.20%</u>	\$ 2,790 \$ 2,790	Total Er Cost a + b
	Total % contribution		<u>12.40%</u>		
			Assets under management	<u>\$ 5,580</u>	
			(b) Management fee to CMSA at 2%	<u>\$ 112</u>	<u>\$ 2,902</u>
Scenario 7 6.2 / 3.8	Er (a) Ee	\$ 45,000 \$ 45,000	6.20% <u>3.80%</u>	\$ 2,790 \$ 1,710	Total Er Cost a + b
	Total % contribution		<u>10.00%</u>		
			Assets under management	<u>\$ 4,500</u>	
			(b) Management fee to CMSA at 2%	<u>\$ 90</u>	<u>\$ 2,880</u>
Scenario 8 3.8 / 6.2	Er (a) Ee	\$ 45,000 \$ 45,000	3.80% <u>6.20%</u>	\$ 1,710 \$ 2,790	Total Er Cost a + b
	Total % contribution		<u>10.00%</u>		
			Assets under management	<u>\$ 4,500</u>	
			(b) Management fee to CMSA at 2%	<u>\$ 90</u>	<u>\$ 1,800</u>
Scenario 9 5.0 / 5.0	Er (a) Ee	\$ 45,000 \$ 45,000	5.00% <u>5.00%</u>	\$ 2,250 \$ 2,250	Total Er Cost a + b
	Total % contribution		<u>10.00%</u>		
			Assets under management	<u>\$ 4,500</u>	
			(b) Management fee to CMSA at 2%	<u>\$ 90</u>	<u>\$ 2,340</u>



BOARD MEMORANDUM

October 3, 2019

To: CMSA Commissioners and Alternates

From: Jason Dow, General Manager

Subject: **New Cogeneration System Selection and Prepurchase Agreement**

Recommendation: Approve selection of a cogeneration system supplier based on the proposal analysis, and authorize the General Manager to enter into a cogeneration system prepurchase contract with the selected supplier.

Summary: In May 2019, the Board authorized the General Manager to prepare a cogeneration system prepurchase contract and solicit proposals from qualified suppliers. On September 23, 2019, proposals were received from two qualified suppliers, Western Energy Systems and Peterson Power Systems. With the assistance of Carollo Engineers, staff has been reviewing the proposals and scoring them according to the Board accepted proposal evaluation criteria.

As of the date of this memorandum, staff and Carollo are resolving/clarifying all remaining open proposal questions and have prepared an initial score for each proposal. Staff expects to report a final selection recommendation at the October Board meeting.

Fiscal Impact: The Agency's Capital Improvement Program has approximately \$7.3 million allocated in FY20 through 22 to design and construct a new cogeneration system, including the purchase of the new cogeneration equipment. Approximately \$150,000 has been expended to date for Carollo's final design work, and their design contract is for \$545,226. The estimated range of capital costs for the prepurchase of the cogeneration system based on the two proposals received is between \$1.53 and \$2.39 million.

Discussion: Based on the recommendations of the 2017 Facilities Master Plan and the 2018 Cogeneration System Predesign, CMSA has selected to construct a new 995 kilowatt cogeneration system. At the May 2019 meeting, the Board authorized the General Manager to prepare a cogeneration system prepurchase contract and solicit proposals from qualified suppliers. In June 2019, the Board approved a professional services agreement with Carollo Engineers to prepare the final design contract for the Cogeneration System Installation Project, including preparation of the prepurchase specifications and Request for Proposal (RFP) documents. Staff and Carollo Engineers developed the proposed evaluation criteria which were reviewed and accepted by the Board at the July 2019 meeting. On August 27, 2019 staff issued the cogeneration system prepurchase Request for Proposal (RFP) documents and Western

Energy Systems and Peterson Power Systems submitted proposals by the proposal receipt due date of September 23, 2019. The Board approved evaluation criteria that form the basis of the proposal evaluation, which includes the following:

1. Various minimum pass/fail requirements regarding relevant experience, track record, engine efficiency, meeting of minimum technical specifications, etc. – Both proposals passed these requirements.
2. A point scoring system:
 - a. Supplier's location, references, and statement of experience: 0-15 points
 - b. Supplier's responsiveness to the RFP specifications: 0-10 points
 - c. Cogeneration System Package Capital Cost: up to 55 points
 - d. Cogeneration Engine Maintenance Cost: up to 20 points

Due to the technical complexity and length of the proposals, and numerous exceptions taken by both proposers, staff and Carollo Engineers has been holding multiple follow-up email and phone communications with both proposers to ensure a clear understanding of their proposal contents, and discuss any exceptions taken to ensure a true equal comparison.

Staff expects to report a final selection recommendation at the October Board meeting, and if approved, CMSA would execute a prepurchase contract with the selected supplier shortly thereafter. The following components are included in the prepurchase contract:

1. Supply of a complete cogeneration engine generator system, including accessories such as electrical switchgear, heat recovery system and waste heat system, exhaust emissions treatment equipment, control systems, exhaust silencer, battery systems, and all other required systems and components in the technical specifications.
2. Assistance for delivery, offloading, storage, start-up, commissioning, inspection, and training during the installation phase of the project.
3. Preparation of detailed shop drawings and product data, to be used by Carollo Engineers for completing the final design of the cogeneration system installation project.
4. Delivery to CMSA and taxes.
5. Various warranties and guarantees on the above systems, including a performance bond.

The prepurchase contract requires the selected supplier to provide a submittal package for review within a set number of days from contract execution, and delivery of the cogeneration engine generator system to CMSA within a set number of weeks from contract execution. Liquidated damages could be assessed against the selected supplier if these dates are not met. The contract also includes a detailed payment schedule describing payment amounts and their qualifying events, with the last project payment being issued at the beginning of the project warranty period.

Attachment: Cogeneration Engine Generator System Agreement

SECTION 00500

AGREEMENT

Cogeneration Engine Generator System

(CMSA Contract No. 20-05)

THIS AGREEMENT, made and entered into this _____ day of _____ 2019 by and between the CENTRAL MARIN SANITATION AGENCY, (hereinafter referred to as the "CMSA"), and _____, whose place of business is located at (insert address) (hereinafter designated as the "Vendor").

WITNESSETH: That the parties hereto do mutually agree as follows:

ARTICLE 1: For and in consideration of the payments and agreements hereinafter described to be made and performed by the CMSA, the Vendor agrees to furnish all the necessary labor, materials and equipment necessary to design, fabricate, test and deliver a **Cogeneration Engine Generator System** to CMSA in strict accordance with the Cogeneration Engine Generator System Documents listed below in this Agreement.

ARTICLE 2: CMSA shall pay Vendor for furnishing all the necessary labor, materials, and equipment necessary to design, fabricate, test and deliver a **Cogeneration Engine Generator System** to CMSA for the Total Lump Sum Proposal Price as set forth in the Proposal, which is attached hereto as Exhibit 1, at the time, in the manner, and upon the conditions set forth in the Cogen Engine Generator System Documents.

ARTICLE 3: The Cogeneration Engine Generator System Proposal Form, Performance Bond, General and Special Provisions, and the Cogen Engine Generator System Documents listed immediately below and all future properly issued change orders, addenda or modifications are incorporated in and made a part of this Agreement.

Specifications

Section 00100	Request for Proposal
Section 00200	Instructions for Proposals
Section 00400	Cogeneration Engine Generator System Proposal Form
Section 00500	Agreement
Section 00610	Performance Bond
Section 01000	General Provisions
Section 01100	Supplementary Provisions
Section 01330	Submittal Procedures
Section 01410	Regulatory Requirements
Section 01600	Product Requirement
Section 01610	Project Design Criteria

Section 01612	Seismic Design Criteria
Section 01614	Wind Design Criteria
Section 01756	Testing, Training, and Facility Start-up
Section 01770	Closeout Procedures
Section 01782	Operation and Maintenance Data
Section 01783	Warranties and Bonds
Section 113120	ANSI Horizontal End Suction Pumps
Section 13447	Electric Actuators
Section 15050	Common Work Results for Mechanical Equipment
Section 15082	Piping Insulation
Section 15521	Hot Water System Components
Section 15757	Plate and Frame Heat Exchangers
Section 15958	Mechanical Equipment Testing
Section 16050	Common Work Results for Electrical
Section 16075	Identification for Electrical Systems
Section 16123	600-Volt or Less Wires and Cables
Section 16222	Low Voltage Motors up to 500 Horsepower
Section 16235	Cogeneration Engine Generator System
Section 16240	Battery Systems
Section 16251	Generator Control System for Parallel Operation
Section 16285	Surge Protection Devices
Section 16290	Electrical Power Monitoring
Section 16295	Protective Relays
Section 16412	Low Voltage Molded Case Circuit Breakers
Section 16414	Low Voltage Power Circuit Breakers
Section 16430	Low Voltage Switchgear
Section 17710	Control Systems: Panels, Enclosures, and Panel Components

CONTRACT FIGURES

One – line Diagram
 SCADA Block Diagram
 Heat Loop Recovery System Process Flow Diagram

ARTICLE 4: Should any part, term, or provision of this Agreement, the Cogeneration Engine Generator System Documents, or any document required herein or therein to be executed or delivered, be declared invalid, void or unenforceable, all remaining parts, terms and provisions shall remain in full force and effect and shall in no way be invalidated, impaired or affected thereby. If the provisions of any law causing such invalidity, illegality, or unenforceability may be waived, they are hereby waived to the end that this Agreement and the Cogeneration Engine Generator System Documents may be deemed valid and binding agreements, enforceable in accordance with their terms to the greatest extent permitted by applicable law.

ARTICLE 5: This Agreement shall be deemed to have been entered into in San Rafael, Marin County, State of California, and governed in all respects by California law (excluding choice of law rules). The exclusive venue for all disputes or litigation hereunder shall be in Marin County. Both parties hereby waive any rights under California Code of Civil Procedure Section 394 or other applicable law to file a motion to transfer any action or proceeding arising out of this Agreement.

ARTICLE 6: The Vendor is aware of, and hereby agrees to comply with, Section 3700 of the Labor Code requiring every employer to be insured against liability for Worker's Compensation or to undertake self-insurance before commencing any of the work pursuant to this Agreement.

ARTICLE 7: The Vendor represents to CMSA that it has the expertise, design, manufacturing, and testing capabilities, and financial capabilities to perform and complete all obligations under this Agreement and the Cogeneration Engine Generator System Documents.

ARTICLE 8: The Vendor represents to CMSA that it is and will be at all times fully qualified and capable of providing the Cogeneration Engine Generator System Equipment and services in conformity with the requirements of this Agreement and the Cogeneration Engine Generator System Documents and possesses or will timely obtain all necessary licenses and/or permits required to perform all the work and services required by this Agreement and the Cogeneration Engine Generator System Documents.

ARTICLE 9: The Vendor shall insure that the Cogeneration Engine Generator System Equipment is delivered free and clear of all liens, rights of conditional vendors, encumbrances, and claims of laborers or material men, and in conformance with the requirements in the Cogeneration Engine Generator System Documents.

IN WITNESS, these parties have caused this Agreement to be executed the day and year first above written.

VENDOR

CENTRAL MARIN SANITATION AGENCY

By: _____

By: _____

Jason R. Dow, P.E. General Manager

Title: _____

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BOARD MEMORANDUM

October 3, 2019

To: CMSA Commissioners and Alternates

From: Jacky Wong, Assistant Engineer

Approved: Jason Dow, General Manager

Subject: Accept Completion of the Primary Clarifiers Gates Rehabilitation Project (CMSA Contract No. 19-09)

Recommendation: Accept the Primary Clarifiers Gates Rehabilitation Project as complete, and authorize the General Manager to file the Notice of Completion with Marin County.

Summary: The Primary Clarifiers Gates Rehabilitation Project's (Project) construction contract was awarded to Bartley Pump PM in April 2019, for the lump sum cost of \$419,500. Bartley Pump completed the construction work in accordance with the plans and specifications on October 2, 2019, and the new equipment is operating per design. One Contract Change Order (CCO) was issued during construction for a net savings of \$5,000, resulting in a final contract amount of \$414,500.

Discussion: The Project scope of work included replacing ten hydraulic gate actuators on primary clarifiers 1 – 5 with electric motorized actuators, installing new gate stems and actuator pedestals suited for the new actuators, and constructing a new electrical distribution and control system for the actuators.

The Project's Notice to Proceed was issued on April 29, 2019. Bartley Pump subsequently provided equipment submittals for engineering review in early June, began the onsite construction activities in mid-July, took delivery of the motorized actuators in mid-September, and completed the field work on October 2, 2019.

During the equipment submittal period, the stainless steel sluice gate manufacturer, Waterman, determined there was no need to install the base plates as specified in the contract documents. CMSA staff negotiated a \$5,000 deductive change order with the contractor to remove this work from the Project scope.

The Project work has been inspected and found to meet construction contract requirements. Staff recommends full acceptance of the Project by the Board and authorize the filing of the

Project’s Notice of Completion with Marin County. The Project’s 5% retainage, \$20,725, will be released 30 days after the filing.

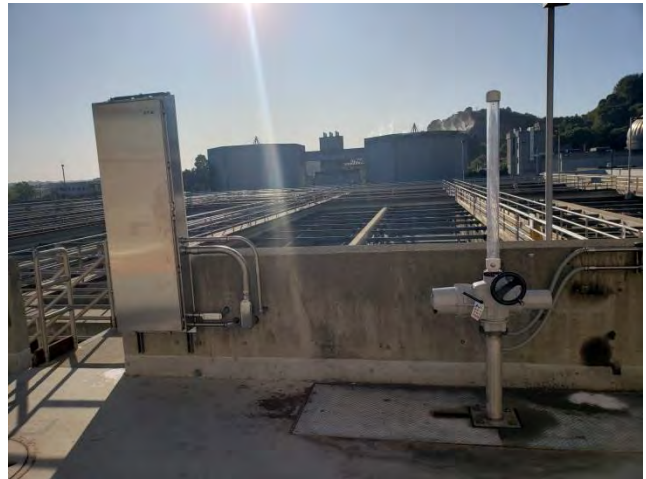
Economic Summary: The FY20 Capital Improvement Program (CIP) budget is \$469,500 for various gates rehabilitation activities, and \$414,500 has been expensed on this Project. Remaining funds will be used to replace other gates as needed. The total Project expenditures are detailed in the table below:

FY20 Gates Rehabilitation Budget	\$469,500
Project Expenditures	
Design Engineering	By staff
Contract Construction Base Bid	\$419,500
Contract Change Order No. 1	(-\$5,000)
Construction Management	By staff
Total Project Cost	\$414,500

Project Photos: The photos below show the gates before and after installation.



Old primary clarifier hydraulic gate.



New electrical distribution panel on the left and new motorized gate operator on the right.

Alignment with Strategic Plan: This project is a strategic action supporting Goal 1 - Objective 1.4 in the Agency's FY20 Business Plan as shown below.

Goal One: CMSA will continue to operate and maintain its wastewater facilities to produce high quality effluent and biosolids, within a changing regulatory environment.

Objective 1.3: Deliver critical and high priority Agency projects.

Action 2: Replace the primary clarifier hydraulic gate actuators

BOARD MEMORANDUM

October 3, 2019

To: CMSA Commissioners and Alternates

From: Jason Dow, General Manager

Subject: Organic Waste and Power Delivery Programs Presentation

Recommendation: Receive the presentation on the Agency's Organic Waste and Power Delivery Programs.

Summary: On Saturday, September 21, I gave a presentation at the annual Water Environment Federation Technology Conference (WEFTEC) in Chicago. The presentation was on the Agency's Organic Waste and Power Delivery Programs, and was one of eight presentations during a "Co-Digestion – What Can We Handle" workshop. Chair DiGiovanni and I thought the Board would like to see the presentation at the October 8 Board meeting.

Discussion: The Water Environment Federation (WEF) was founded in 1928, and is a not-for-profit technical and educational organization of 35,000 individual members and 75 affiliated Member Associations representing water quality professionals around the world. WEF, as a global water sector leader, has a mission is to connect water professionals; enrich the expertise of water professionals; increase the awareness of the impact and value of water; and provide a platform for water sector innovation.

A consultant team of Rashi Gupta from Carollo Engineers and Ganesh Rajagopalan from Kennedy Jenks proposed the Co-Digestion workshop for WEFTEC's 92nd annual conference. Rashi and Ganesh were aware of CMSA's organic waste receiving program and asked me to give a presentation at their workshop, if it was selected by WEF. I thought giving the presentation would be a great way to share information about our partnership with Marin Sanitary Service, why the Food-to-Energy program is a success, the benefits and costs of having an organic waste receiving facility, and the technical and administrative work needed to deliver and sell renewable power.

I learned that not many agencies or municipalities receive and process food waste, and fewer agencies sell renewable power. Overall the presentation was well received, and many attendees commented on the Agency's innovative work.

Attachment: CMSA Organic Waste and Power Delivery Programs Presentation



CENTRAL MARIN SANITATION AGENCY'S ORGANIC WASTE AND POWER DELIVERY PROGRAMS



SEPTEMBER 21, 2019



WORKSHOPS

PRESENTATION OUTLINE

- About CMSA and its Organic Waste Program
- Food to Energy Program with Marin Sanitary Service
- Operating & Maintaining the Organic Waste Facility
- Program Benefits, Metrics, & Cost Information
- Power Delivery – Interconnection & Purchase Agreements
- Lessons Learned and What's Next



WORKSHOPS

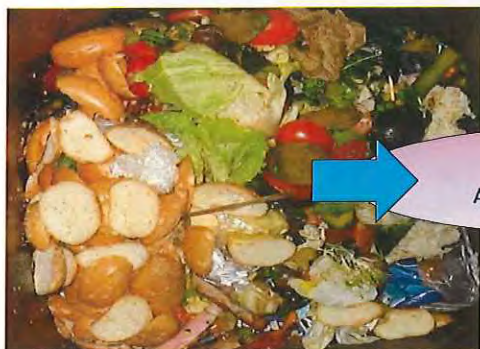
ABOUT CMSA AND ORGANIC WASTE PROGRAM

CENTRAL MARIN SANITATION AGENCY - CMSA

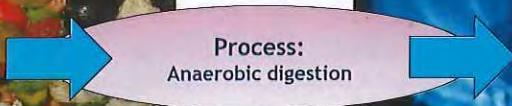
- Regional Wastewater Agency in San Rafael, Marin County
- Serves about 110,000 people and San Quentin State Prison
- Joint Powers Agency (JPA) with four satellite collection agencies
- Wide range of influent flows: 7.5MGD (ADWF) to 121 MGD (PWVF)
- Contract services:
 - Collection system O&M for two agencies
 - Pump station O&M for SQ prison
 - Source control for seven local agencies



ORGANIC WASTE TO ENERGY

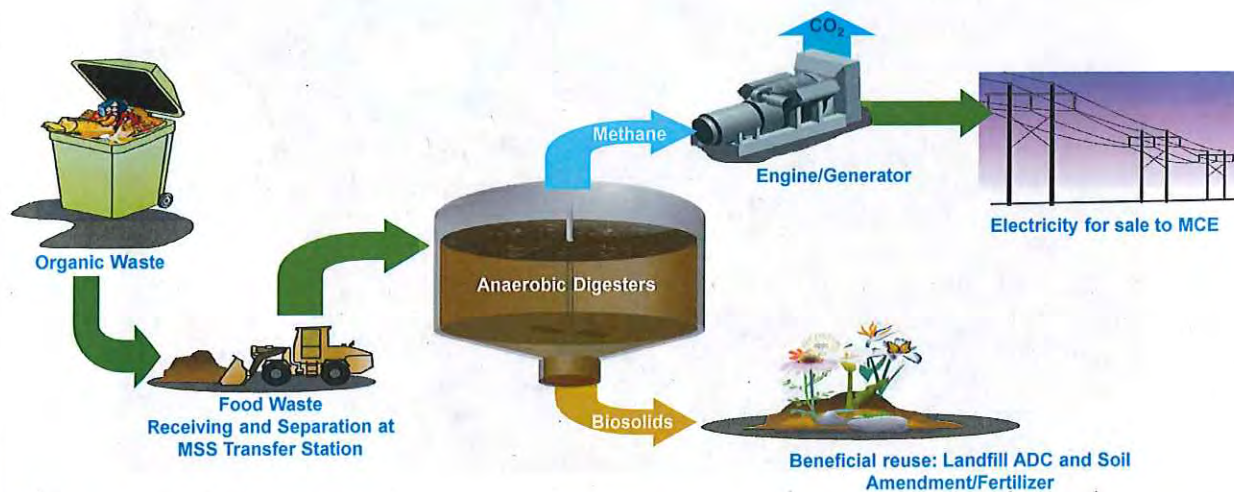


Organic Waste



Biogas (methane)

ORGANIC WASTE TO ENERGY?



FIRST FOG LOAD – NOVEMBER 2013



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WORKSHOPS

FIRST FOOD WASTE LOAD – JANUARY 2014



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WORKSHOPS

FOOD TO ENERGY PROGRAM



WORKSHOPS

PUBLIC-PRIVATE PARTNERSHIP



Marin Sanitary Service
CONSERVATION - OUR EARTH, OUR MISSION, OUR JOB



Central Marin Sanitation Agency



WORKSHOPS

MARIN SANITARY PROGRAM DETAILS

- **Focus on Contamination Removal**
- **Customer Enrollment**
 - **Pre-consumer** commercial food waste is collected and then transported to the MSS transfer station for processing to remove contamination and then delivered to CMSA.
 - Some **post-consumer** food waste; 3 - 4 so far
- **Roll-out plan**
 - **Recruit** up to 250+ commercial food waste producers
 - Continue adding more participants incrementally
- **Program outreach**
 - Kitchen staff training
 - Frequent monitoring
 - Retraining as-needed



WORKSHOPS

FOOD WASTE COLLECTION



WORKSHOPS

MSS EQUIPMENT



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the water quality event

WORKSHOPS



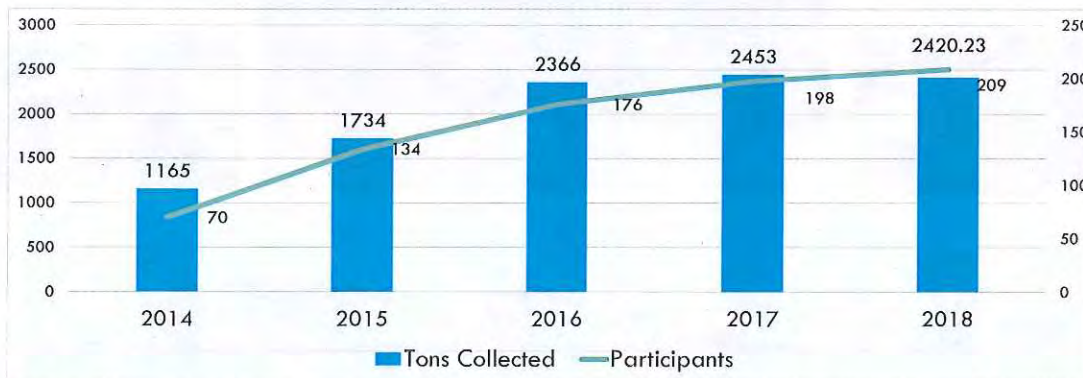
CLEAN FEEDSTOCK

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the water quality event

WORKSHOPS

F2E COLLECTION STATISTICS

Customers enrolled	209
Collection Days	6
Avg. Daily Weight (tons)	8
YTD tons diverted (2014-2018)	7,191



CMSA ORGANIC WASTE FACILITY



DIGESTION AND BIOGAS CLEANING



Anaerobic digesters with membrane covers

Biogas H₂S Removal



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the water quality event™

WORKSHOPS

BIOGAS CLEANING & COGENERATION



Biogas - moisture and siloxane removal

750 kW cogeneration system



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WORKSHOPS

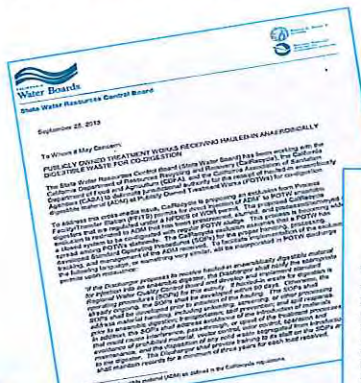
OPERATING & MAINTAINING - ORGANIC WASTE FACILITY (OWF)



WORKSHOPS

PERMITTING AN OWF

SWRCB Executive Order for Co-digestion of FW with FOG



CMSA REGULATED UNDER NPDES PERMIT

CMSA NPDES Permit No. CA0038628
Fats, Oils & Grease (FOG)/Food-to-Energy (F2E) Receiving Facility Operations Document
 October 9, 2014

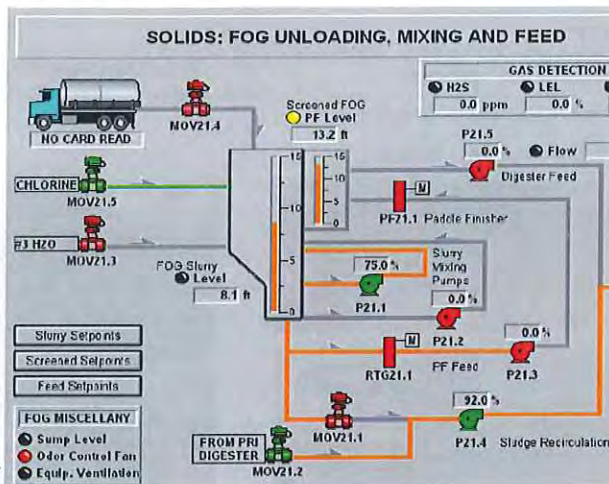
Purpose
 This operating procedure (SOP) is intended to ensure that the delivery and processing of Fats, Oils, and Grease (FOG) and Food Waste (FW) transported to the CMSA Treatment Plant are conducted in a safe, efficient manner that protects the physical facilities, maintains adequate treatment capacity, ensures proper overall operation, maximizes beneficial reuse, and maintains acceptable effluent quality. This procedure is designed to comply with the requirements in Special Provisions section C, subsection 5d in CMSA's NPDES permit, relating to Fats, Oils, and Grease, or food processing waste, for injection into anaerobic digesters, and the SOP content requirement listed in the September 25, 2013 letter from the State Water Resources Control Board (SWRCB) for publicly-owned treatment works (POTW) receiving hauled-in anaerobically digestible waste for co-digestion.



WORKSHOPS

OWF OPERATIONS

- Receive loads between 6:00 am and 12:00 pm
- Mix material for 1 hour
- Final screenings removal
- Feed material to digesters over 6-10 hours



SCADA Overview Screen of the OWF



WORKSHOPS

PREVENTATIVE MAINTENANCE



DAILY

- HOSE DOWN EQUIPMENT AND RECEIVING STATION
 - RINSE OUT PUMPS AND PIPING
- CLEANOUT HEAVY OBJECT TRAP (FOG SCREEN)



WORKSHOPS

PREVENTATIVE MAINTENANCE

WEEKLY

- Pomace Bins - dumped
- Rock Trap Grinder - cleaned
- Equipment Area - cleaned



Monthly

- Pumps – flushed and inspected
- Paddle Finisher – inspected and adjusted



Quarterly

- Receiving tank cleaning and coating inspection



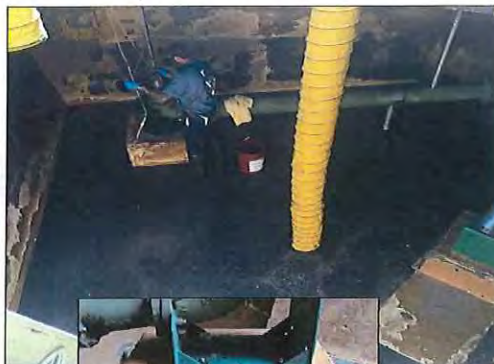
PREVENTATIVE MAINTENANCE

Receiving Tank Quarterly Cleaning



CORRECTIVE MAINTENANCE

TANK COATING FAILURE



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WORKSHOPS

UNPLANNED CORRECTIVE MAINTENANCE

FEED PUMP HOSES

- MOST UNPREDICTABLE FAILURE REGARDLESS OF HOSE MATERIAL
 - \$2,118 PER HOSE LABOR/MATERIAL
 - AVERAGE 6 HOSE REPLACEMENTS PER YEAR
 - PADDLE FINISHER FEED PUMP LEADS HOSE REPLACEMENTS
 - TWO HOSES AND FIVE GALLONS OF GLYCERIN - CRITICAL INVENTORY



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WORKSHOPS

METRICS, BENEFITS, & COST INFORMATION

2018 OPERATIONAL METRICS – FEED & DIGESTER INFO

Digester Health

	Alkalinity mg/L	VA mg/l	VA/ALK	PH	HRT days	VSR %
Min	4,828	50.3	0.01	7.31	32.6	58.8
Max	5,411	87.7	0.016	7.38	57.1	69.7
Ave	5,113	61.8	0.0121	7.34	45.8	65.4

Digester Feed

Material	TS - lbs	VS - lbs	%VS
Primary Sludge	3.58 million	3.09 million	41%
TWAS	3.14 million	2.65 million	35%
Organic Slurry	1.97 million	1.80 million	24% (32.8% max)

Organics Delivered

Organics	Amount	Loads
Food Waste	2,422 tons	360
FOG	3.1 million gallons	655

Biogas Use

	Biogas	Cogeneration
Max month	320K ft ³ /d	22.8 hours/d
Ave month	275K ft ³ /d	20.6 hours/d

PROGRAM BENEFITS

- A LOCAL RENEWABLE ENERGY PROJECT
- REDUCES LANDFILLING OF FOOD WASTE; REJECT MATERIAL IS COMPOSTED BY MSS
 - COMPLIANCE WITH SB 1323 – ORGANIC WASTE DIVERSION
- INCREASES CMSA'S ENERGY SELF SUFFICIENCY TO ALIGN WITH STATE RENEWABLE ENERGY GENERATION GOALS
- UTILIZATION OF EXISTING UNUSED ASSET CAPACITY – COGENERATION SYSTEM AND DIGESTERS
- CMSA TO DELIVER ENERGY TO LOCAL UTILITY GRID (MCE) IN NEAR FUTURE
- REDUCES GREENHOUSE GAS EMISSIONS

PROGRAM REVENUES AND EXPENSES

CMSA Operating Objective: Annual Revenues > Expenses

- Capital Expenses (2013):
 - MSS Equipment – \$530K
 - CMSA OWF – \$2 million
- Operational Expenses (2018):
 - MSS – \$315K for collection, processing, disposal and outreach
 - CMSA - \$215K for operations, maintenance, administration, and supplies
- CMSA Revenues (2018):
 - Tipping fees - \$145K
 - Avoided NG purchasing due to biogas generation - \$141K

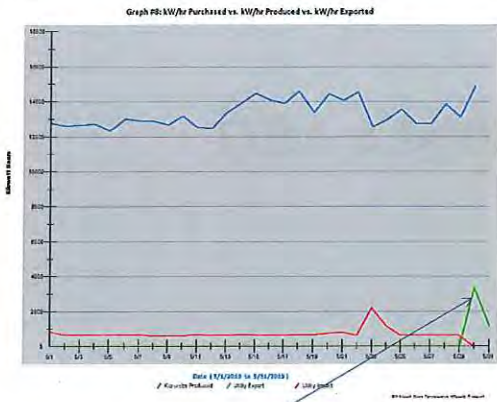
POWER DELIVERY

POWER DELIVERY - INTERCONNECTION

- Need approval form local electrical utility
- Utility performs electrical system evaluations
- CMSA needed to:
 - Design, install, and test protective relays
 - Pay for utility review of design work
 - Test and possibly replace a ground detection bank
 - Install a revenue meter
- Permission to Operate received on 3/14/19



POWER DELIVERY – POWER SALE AGREEMENT



Power export

- Two electrical utilities serve CMSA – PG&E and MCE
- Identified and evaluated several Feed-in-Tariffs from both utilities
- Selected Small Generator Power Purchase Agreement with MCE
 - Minimal administration, no power scheduling, buy what we deliver – no delivery commitments
- Purchase price is \$0.105 kWh
- Attained the Commercial Operations Date on 4/26/19
- First delivered power on May 29



WORKSHOPS

POWER DELIVERY – NEW COGEN SYSTEM

- Plan – install a new higher capacity cogeneration system and use the existing system as a back-up
- Engineer predesign completed, and final design underway
- Public bidding for construction scheduled for early 2020
- Prepurchasing a 995 kW high efficiency system (40% +/-)
- Online in early 2021
- Before operation we need a new utility interconnection agreement and a second MCE PPA.



WORKSHOPS

LESSONS LEARNED & WHAT'S NEXT

LESSONS LEARNED - EQUIPMENT



Hatch Lever



Paddle Finisher Chute

Ladder Cleats



Hazardous Air Monitor



NEXT – DIGESTER PILOT STUDY

- Purchased a pilot digester system, made repairs, added equipment, and got it ready for operation
- Worked with a consultant technical advisory group to prepare a study plan
- Study will last nine months and test different organic waste feed levels
- Determine if there is an organic waste loading limit, to prevent a digester upset

Test digester system as of 7/12



QUESTIONS ?



BOARD MEMORANDUM

October 3, 2019

To: CMSA Commissioners and Alternates
From: Kate Brouillet, Administrative Assistant
Approved: Jason Dow, General Manager
Subject: October Informational Items

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

- A. Letter dated September 5, 2019 from Michele Mark Levine, Government Finance Officers Association
Re: Award of Financial Reporting Achievement for Comprehensive Annual Financial Report
- B. Letter dated September 13, 2019 from Adam Krantz, National Association of Clean Water Agencies
Re: Membership confirmation
- C. Letter dated September 23, 2019 to Anna Gallagher, California Regional Water Quality Control Board
Re: Monthly Self-Monitoring Report (SMR) – August 2019



Government Finance Officers Association
203 North LaSalle Street, Suite 2700
Chicago, Illinois 60601-1210
312.977.9700 fax: 312.977.4806



A

September 5, 2019

Jason Dow
General Manager
Central Marin Sanitation Agency
1301 Anderson Drive
San Rafael, CA 94901

Dear Mr. Dow:

We are pleased to notify you that your comprehensive annual financial report (CAFR) for the fiscal year ended 2018 qualifies for GFOA's Certificate of Achievement for Excellence in Financial Reporting. The Certificate of Achievement is the highest form of recognition in governmental accounting and financial reporting, and its attainment represents a significant accomplishment by a government and its management.

When a Certificate of Achievement is awarded to a government, an Award of Financial Reporting Achievement (AFRA) is also presented to the individual(s) or department designated by the government as primarily responsible for its having earned the Certificate. This award has been sent to the submitter as designated on the application.

We hope that you will arrange for a formal presentation of the Certificate and Award of Financial Reporting Achievement, and that appropriate publicity will be given to this notable achievement. A sample news release is enclosed to assist with this effort.

We hope that your example will encourage other government officials in their efforts to achieve and maintain an appropriate standard of excellence in financial reporting.

Sincerely,

A handwritten signature in black ink that reads "Michele Mark Levine".

Michele Mark Levine
Director, Technical Services Center



GOVERNMENT FINANCE OFFICERS ASSOCIATION
NEWS RELEASE

FOR IMMEDIATE RELEASE

09/05/2019

For more information contact:
Michele Mark Levine, Director/TSC
Phone: (312) 977-9700
Fax: (312) 977-4806
E-mail: mlevine@gfoa.org

(Chicago, Illinois)--The Certificate of Achievement for Excellence in Financial Reporting has been awarded to **Central Marin Sanitation Agency** by Government Finance Officers Association of the United States and Canada (GFOA) for its comprehensive annual financial report (CAFR). The Certificate of Achievement is the highest form of recognition in the area of governmental accounting and financial reporting, and its attainment represents a significant accomplishment by a government and its management.

An Award of Financial Reporting Achievement has been awarded to the individual(s) or department designated by the government as primarily responsible for preparing the award-winning CAFR.

The CAFR has been judged by an impartial panel to meet the high standards of the program, which includes demonstrating a constructive "spirit of full disclosure" to clearly communicate its financial story and motivate potential users and user groups to read the CAFR.

Government Finance Officers Association is a major professional association servicing the needs of over 20,000 appointed and elected local, state, and provincial-level government officials and other finance practitioners. It provides top quality publications, training programs, services, and products designed to enhance the skills and performance of those responsible for government finance policy and management. The association is headquartered in Chicago, Illinois, with offices in Washington, D.C.

JD

9/16/19

B



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www.nacwa.org



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Albuquerque, NM

CHIEF EXECUTIVE OFFICER

Adam Krantz

Jason R. Dow
General Manager
Central Marin Sanitation Agency
1301 Andersen DR
San Rafael, CA 94901-5339

September 13, 2019

Dear Jason,

Thank you for your membership in NACWA. This year, the Association will celebrate its 50th Anniversary – a monumental occasion made possible by you, our Public Utility Members. Our priority this year is to celebrate you for the work that you do and the support that you give to this organization. Enclosed, please find your Fiscal Year (FY) 2020 dues invoice, and NACWA's *Year-At-A-Glance – Advocating and Collaborating for a Resilient Clean Water Future*.

Through your membership and engagement, we were able to achieve great things this past year. And while these achievements, outlined in the *Year-At-A-Glance*, were significant, the year ahead will be pivotal. In the next year, policy decisions on issues such as PFAS, affordability, resiliency, nutrients, and integrated planning implementation, will have a significant impact on the clean water sector. NACWA is actively and aggressively advocating on your behalf—addressing the legislative, regulatory, legal and communications impact of each issue. Unique to NACWA, we engage on each of these fronts to ensure that you can deliver service that provides optimum benefit both to the environment and to the communities you serve.

As I noted above, this year will be a celebration of you! In addition to our advocacy work, we will be offering enhanced opportunities for Utility Executives to engage with one another and share management challenges, innovations, and solutions in a way that advances the water sector as a whole. NACWA will also be providing complimentary and timely opportunities to share information on the hottest Clean Water topics through web seminars, publications and social media tools. I invite you to take full advantage of your membership – to utilize the NACWA staff for information, and engage yourself and your staff through participation on committees, NACWA conferences and webinars, and to also gain much deserved recognition for your hard work and innovation through our unmatched awards programs.

On behalf of NACWA's Board of Directors and the National Office Staff, I thank you for your membership and your support of and engagement in this Association. It is our privilege to work for you. Please feel free to contact me or my staff with ideas to enhance your membership experience. We look forward to continuing to serve you and to celebrating the great work you do!

Sincerely,

Adam Krantz
NACWA CEO

Enclosures: FY 2020 Dues Invoice
NACWA *Year-At-A-Glance*



September 23, 2019

California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

Attention: Anna Gallagher

Subject: Monthly Self-Monitoring Report (SMR) – August 2019

The August 2019 monthly self-monitoring report 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 #R2-2018-003, Alternate Monitoring and Reporting Requirements Order #R2-2016-0008 and the Mercury and PCBs Order #R2-2017-0041. Additionally, effective August 1, 2019, Order #R2-2019-0017 changed CMSA nutrient monitoring from twice per month to once per month and removed influent nutrient monitoring requirements. The results provided in this report comply with these new requirements.

Violations

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

Blending Events

The CMSA treatment facility did not exceed the maximum secondary capacity of 30 MGD. No blending events occurred during this monitoring period.

Data Validation

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

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)).



Loren C. Finton
Treatment Plant Manager

