



Central Marin Sanitation Agency

COMMISSION REGULAR MEETING AGENDA

Tuesday, January 12, 2021

Via Zoom Electronic Meeting

7:00 p.m.

NOTE: Consistent with the Governor's Executive Order N-25-20 on the Brown Act and the Bagley Keene Act, this Board meeting will be held via Zoom® conferencing. There will be NO physical location of the meeting. Please be advised that this meeting will be recorded. The Agenda packet is available for review and download on the Agency website the Friday before the meeting: **www.cmsa.us**

To participate: Join the Zoom Meeting by clicking the link below, or copy and paste the address into your browser. You may also participate by phone at the number below.

Join Zoom Meeting Online:

<https://zoom.us/j/94020345570>

Phone in:

+1 669-900-9128

Meeting ID:

940 2034 5570

Public Comment: Public comments for this meeting can be submitted via email to the Recording Secretary at kbrouillet@cmsa.us. The public comment period opens when the agenda is posted online and will close two hours prior to the start of the meeting. Include your name and the item you'd like to provide written comment on. Written comments submitted will be read into the record during the Public Comment period of the Board meeting.

To provide comments during the meeting:

- If in the Zoom teleconference, use the "raise hand" feature. The Host will notify and unmute you when it is your turn to speak.
- If on a phone, press *9 ("star + 9"), and the Host will notify and unmute you when it is your turn to speak. If you experience an issue providing comments in the meeting, please email those comments to the Recording Secretary at kbrouillet@cmsa.us.

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AGENDA

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**

- a) Minutes – Regular Board Meeting, December 8, 2020
- b) Treasurer's Report – December 2020
- c) NPDES, Process, and Maintenance Report – December 2020
- d) Performance Metric Report – December 2020
- e) FY21 Asset Management Program 2nd Quarter Report
- f) Analytical Laboratory Services Agreement

5. **New Financial Software Presentation – Tyler Incode 10**

Recommendation: Accept the presentation of the new financial software system, Tyler Incode 10, and provide any comments or direction to the General Manager as appropriate.

6. **2020 Performance Metric Report**

Recommendation: Accept the Agency's 2020 Performance Metric Report.

7. **Proposed Revisions to the CMSA Fats, Oils, and Grease (FOG) Ordinance**

Recommendation: Accept the proposed FOG Ordinance revisions, and schedule the Public Hearing for the revised Ordinance at the February 9, 2021 Board meeting.

8. **Procurement of Six Return Activated Sludge Pumps**

Recommendation: Authorize the General Manager to purchase six Fairbanks Morse return activated sludge pumps and spare parts for \$250,000.

9. **January Informational Items**

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

CONTINUED ON NEXT PAGE

10. **North Bay Watershed Association (NBWA) Report***

11. **Oral Reports by Commissioners/General Manager***

12. **Next Scheduled Meeting**

Tuesday, February 9, 2021 at 7:00 p.m. by Zoom Conference.

*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, December 8, 2020

Via Zoom Electronic Meeting

NOTE: Consistent with the Governor's Executive Order N-25-20 on the Brown Act and the Bagley Keene Act concerning the COVID-19 shelter-in-place protocol, this Board meeting was held via Zoom® conferencing. There was no physical location for the meeting. The minutes are an official record of the Board meeting. There are also official audio and video recordings available on the Agency's website at www.cmsa.us. The time stamps on these minutes refer to the items' start times on the video recording of the meeting. Please contact CMSA at 415-459-1455 for information about receiving a copy of these records.

1. Call Meeting to Order/Pledge of Allegiance

Chair Boorstein called the meeting to order at 7:03 p.m. A quorum was present.

2. Roll Call

00:00:55

Present: Eli Beckman, Michael Boorstein, Maribeth Bushey, Dean DiGiovanni, and Doug Kelly

Absent: None

Staff Present: Jason Dow, General Manager; Kate Brouillet, Recording Secretary

Public Present: Michele Pla, EPC Consultants

3. Open Period for Public Participation

00:01:16

There were no members of the public in attendance.

4. Consent Calendar

00:02:09

- a) Minutes – Regular Board Meeting, November 10, 2020
- b) Treasurer's Report – Operating Account – November 2020
- c) Schedule of Investments and its Capital Reserve Summary – November 2020
- d) NPDES, Process, and Maintenance Report – November 2020
- e) Performance Metric Report – November 2020
- f) Revised Treatment Plant Manager Job Description
- g) CASA 2021 Virtual Winter Conference
- h) Biosolids Reuse Agreement with Lystek International Limited
- i) Authorization to Re-Bid the Secondary Clarifier No. 3 Rehabilitation Project (CMSA Contract No. 21-24)

GM Dow said that he would like to pull item #4h, the Biosolids Reuse Agreement with Lystek, as he recently spoke with Lystek's General Manager, Jim Dunbar, and they had a few minor revisions to the termination terms in the agreement, which was emailed out to the Board yesterday.

Commissioner Kelly asked that GM Dow read the revised termination provisions.

GM Dow referred to Section 7 of the agreement, "Termination for Convenience," and said that the first change was after the second sentence adding the phrase, "after the termination date" for consistency, and the second change was striking the phrase "receipt of notice of termination," in the last sentence and replacing it with "termination date."

Comments from the Public

There were no members of the public in attendance.

ACTION: Commissioner DiGiovanni moved to approve Consent Calendar items 4a through 4i, including the revised Lystek agreement as sent to the Board via email; second, Commissioner Kelly.

VOTE: The item was passed unanimously by roll call vote.

AYES: Beckman, Boorstein, Bushey, DiGiovanni, Kelly

NAYS: None

ABSTAIN: None

5. Liquid Organic Waste Storage and Biogas Treatment Upgrades Project – Professional Services Agreement

00:04:53

GM Dow said that this project includes the evaluation and design of a new above-grade liquid organic waste storage tank, modifications to upgrade the existing biogas treatment system, and to evaluate options for new and used lubricant tanks for the new cogeneration engine. He said that in October 2020, staff prepared a Request for Proposals to solicit design services proposals from engineering consulting firms for this project. He said four proposals were received, and based on an evaluation of each firm's qualifications, approach, and proposed cost, staff selected GHD. He said GHD is familiar with the Agency's facilities, has worked with CMSA staff before on several projects, and has relevant subject matter expertise. He said the Agency's 10-year Capital Improvement Program has allocated a total of \$259,200 for this project and GHD's estimate is \$189,251.

Commissioner Kelly asked who the second ranked proposer was.

GM Dow said Carollo Engineers came in second, and they were just a few points below on the evaluation criteria, but the services were approximately \$50K higher.

Comments from the Public

There were no members of the public in attendance.

ACTION: Commissioner Kelly moved to approve the Professional Services Agreement with GHD Inc. for the Liquid Organic Waste Storage and Biogas Treatment Upgrades in the amount of \$189,251, and authorize the General Manager to sign it; second, Commissioner Beckman.

VOTE: The item was passed unanimously by roll call vote.

AYES: Beckman, Boorstein, Bushey, DiGiovanni, Kelly

NAYS: None

ABSTAIN: None

6. Cogeneration System Installation Project – Construction Management Support Services

00:10:28

GM Dow said that in October 2020, staff prepared a Request for Qualifications to provide construction management support services for the Cogeneration System Installation Project, and sent it to several local construction management firms. He said an internal project team evaluated the submitted statements of qualifications and selected Psomas due to their project approach, team qualifications, proposed cost structure, and past project experience with CMSA's selected installation contractor, design engineer, and cogeneration system supplier. GM Dow briefly described the proposed scope of work and project schedule. He referred to the chart in the staff memo, and said the negotiated construction management support services fee is \$120,030, approximately 3.3% of the project's construction cost. He said the Capital Improvement Program allocates a \$6,681,401 in FY21 and FY22 for the project, and the expenses are projected to be \$5,311,616.

Commissioner DiGiovanni remarked that the selection of Psomas is solid, as they have great experience, and it is good that the projected expenses are coming in under budget.

Chair Boorstein said that RVSD has worked with Psomas in the past few years, and the district did not receive any complaints from the public.

Commissioner Kelly asked about the estimate from the second proposer.

GM Dow replied that did not recall the firm, but the second proposer's estimate was higher.

Comments from the Public

There were no members of the public in attendance.

ACTION: Commissioner DiGiovanni moved to approve the Professional Services Agreement with Psomas Inc. for the Cogeneration System Installation Project construction management support services, and authorize the General Manager to sign it; second, Commissioner Beckman.

VOTE: The item was passed unanimously by roll call vote.

AYES: Beckman, Boorstein, Bushey, DiGiovanni, Kelly

NAYS: None

ABSTAIN: None

7. Biosolids Land Application Feasibility Study at the Las Gallinas Valley Sanitary District

00:16:45

GM Dow summarized CMSA's beneficial reuse of its biosolids. He said that Cal Recycle has prepared the regulations to implement Senate Bill 1383 that has a provision requiring 75% of organic material to be diverted from landfills by January 1, 2025. He said staff believes this regulation will likely limit or prohibit the Redwood Landfill from accepting biosolids. He said that HDR Engineering has completed a Regional Biosolids Land Application Feasibility Study for the Las Gallinas Valley Sanitary District (LGVSD), and its key findings are that the LGVSD site can be permitted for Class B biosolids land application and the site has an annual capacity of up to 600 dry tons of biosolids. He referred to the attachment to the staff memo and said that LGVSD's manager, Mike Prinz, is seeking interest from Marin's wastewater agencies with treatment plants to participate in further exploration of a biosolids management program at the LGVSD site.

Commissioner Beckman said that he supports this effort, and for the additional composting facilities that LGVSD might be able to offer in the future.

Commissioner Kelly said that it is a good idea to support projects with other local districts.

Commissioner DiGiovanni said that he supports this initiative that would enable greater biosolids disposal diversification for the Agency.

Comments from the Public

There were no members of the public in attendance.

ACTION: Commissioner Bushey moved to authorize the General Manager to send a letter to the Las Gallinas Valley Sanitary District to express the Agency's interest in exploring a regional biosolids management program; second, Commissioner DiGiovanni.

VOTE: The item was passed unanimously by roll call vote.

AYES: Beckman, Boorstein, Bushey, DiGiovanni, Kelly

NAYS: None

ABSTAIN: None

8. FY20 Comprehensive Annual Financial and Popular Annual Financial Reports 00:22:53

GM Dow said final drafts of the Agency's FY20 Comprehensive Annual Financial Report (CAFR) and Popular Annual Financial Report (PAFR) are ready for Board review. He said the CAFR summarizes Agency programs, projects, and services, and contains the audited financial statements and financial and operational trend information. He said the PAFR condenses the contents of the CAFR into summarized, easy to read presentations that highlight key Agency and financial information. He said with the Board's acceptance of these documents, they will be submitted to the Government Finance Officers Association (GFOA) for consideration of the Certificate of Achievement and Outstanding Achievement award programs for its CAFR and its PAFR, respectively. He said the Agency has received the Certificate of Achievement for Excellence in Financial Reporting award for the past eighteen consecutive years and the Outstanding Achievement award for the past ten consecutive years.

The Board commented favorably on the two documents and asked GM Dow to thank staff for their good work.

Comments from the Public

There were no members of the public in attendance.

ACTION: Commissioner Beckman moved to accept the FY20 Comprehensive Annual Financial and Popular Annual Financial Reports; second, Commissioner Kelly.

VOTE: The item was passed unanimously by roll call vote.

AYES: Beckman, Boorstein, Bushey, DiGiovanni, Kelly

NAYS: None

ABSTAIN: None

9. Strategic Business Plan Agreement with EPC Consultants

00:26:43

Chair Boorstein introduced Michele Pla of EPC Consultants, who joined the meeting.

GM Dow said that at the November meeting, the Board approved the format, development process, and general schedule for the Agency's next 5-year Strategic Business Plan, and authorized staff to prepare a professional services agreement with EPC Consultants to facilitate the development of the SBP. He said staff worked with Ms. Pla to prepare a scope of work, fee estimate, and tentative schedule, and said that the format and dates for the Board member interviews will be coordinated by staff or Ms. Pla.

Ms. Pla said she would prepare questions for the Board in advance.

The Board briefly discussed the schedule for the Board workshops, and agreed that the workshops should be separate from the regular Board meetings.

GM Dow said that staff will plan for separate workshop meetings in April and May, and will include an item on February's meeting agenda with proposed dates and times.

Comments from the Public

There were no members of the public in attendance.

ACTION: Commissioner DiGiovanni moved to approve the professional services agreement with EPC Consultants to facilitate development of the Agency's next 5-year Strategic Business Plan, and authorize the General Manager to sign it; second, Commissioner Beckman.

VOTE: The item was passed unanimously by roll call vote.

AYES: Beckman, Boorstein, Bushey, DiGiovanni, Kelly

NAYS: None

ABSTAIN: None

The Board thanked Ms. Pla and she left the meeting.

10. December Informational Items

00:32:14

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

11. North Bay Watershed Association (NBWA) Report

00:32:32

Commissioner Boorstein said that he attended the December 4, 2020 virtual NBWA Board meeting. He said that there was a presentation by the Bay Restoration Regulatory Integration Team (BRRIT), with representatives from the Coastal Conservancy, EPA Region 9, and BRITT NOAA, who provided an overview of improvements to the permitting process to benefit wetland restoration, flood management, and public access projects in the San Francisco Bay and along the bay shoreline.

12. Oral Reports by Commissioners/General Manager

00:34:16

GM Dow referred to his handout and reported:

- He gave a virtual presentation to the Bioresources Alliance Symposium in mid-November on the Agency's organic waste and power delivery programs. He said State Senator Ben Allen, who was in attendance, is interested in touring the Agency; GM Dow will advise the Board of the date.
- The recent OIT recruitment to replace a retired Operator had 168 applicants; a top candidate was selected, Ashley Woods, who has a projected start date by the end of the year.
- Evoqua submitted their digester membrane cover inspection report which indicated that both covers are in good condition and have at least five year's more life.

Commissioner Kelly said that he wanted to highlight that CMSA was able to attract a high number of applicants for the open OIT position. He mentioned that investments through CalPERS is not showing as high a return as expected, and recommends that the Board take a cautious view.

Commissioner Bushey said that San Rafael has a new mayor, Kate Colin, and she will be joining the SRSD Board at the City Council's next meeting. She said that "Mayor Kate" will be the first woman to hold the office of Mayor for San Rafael, and the City Council has four women members for the first time.

Chair Boorstein and Commissioner Kelly said that RVSD's public service announcements are now showing on various media channels during prime time, are inexpensive to run, and asked the recording secretary to present two of the videos for viewing by the Board.

13. Next Scheduled Meeting

00:44:22

The next regular Board meeting is Tuesday, January 12, 2021 at 7:00 p.m. by Zoom Conference.

Chair Boorstein adjourned the meeting at 8:46 p.m.

Respectfully submitted,

Kate Brouillet, Recording Secretary

Dean DiGiovanni, Secretary

**CENTRAL MARIN SANITATION AGENCY
TREASURER'S REPORT
As of the Month Ended December 31, 2020**

Description	Account Type	Book Value	Market Value (1)	% Portfolio	Projected Year End
Cash in Banks:					
WestAmerica Bank (<i>See Schedule 1 for Account Activity</i>)	General Acct	\$ 429,378.41	\$ 429,378.41		
US Bank 2015 Revenue Bonds (Restricted)	Debt Serv Acct	2.19	2.19		
US Bank 2020 Revenue Bonds (Restricted)	Project/DS Acct	9,073,133.30	9,073,133.30		
Wells Fargo Bank (Restricted)	Escrow Acct	81,179.86	81,179.86		
Total cash in banks		\$ 9,583,693.76	\$ 9,583,693.76		
Pooled Short-Term Investments:					
CAMP Cash Reserve Pool: .14% at 11/30/20	Investment Acct	\$ 381,026.89	\$ 381,026.89	2.1%	
Local Agency Investment Fund (LAIF): .62% at 10/31/20	Investment Acct	17,428,538.90	17,428,538.90	97.9%	
Total pooled short-term investments		\$ 17,809,565.79	\$ 17,809,565.79	100.0%	
Designations of Pooled Short-Term Investments:					
Current Operating Fund (2)		\$ 2,371,364.29	\$ 2,371,364.29	13.3%	
Operating Reserve (Unrestricted) (3)		3,267,204.50	3,267,204.50	18.3%	\$ 3,267,205
Capital Reserves (Restricted) (4) - <i>See Schedule 2</i>		1,977,586.00	1,977,586.00	11.1%	\$ 989,252
Capital Reserves (Unrestricted) (5) - <i>See Schedule 2</i>		9,693,411.00	9,693,411.00	54.4%	\$ 6,763,503
Contingency and Emergency Reserve (Unrestricted)		500,000.00	500,000.00	2.8%	\$ 500,000
Total designations of pooled short-term investments		\$ 17,809,565.79	\$ 17,809,565.79	100.0%	

NOTES:

- (1) Market values are per the fiscal agent's respective monthly statements
 (2) Current operating fund is residual of other designations
 (3) Operating reserves calculated at 25% operating budget

- (4) Includes capacity charges and debt service coverage
 (5) 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

FY 21 INVEST-July 2020 to June 2021.xlsx Dec 2020 1/7/2021

Central Marin Sanitation Agency
Schedule 1 - Operating Account Activity for WestAmerica Bank
For the Month of December 2020

Beginning Balance at December 1, 2020	\$ 69,728.78
<u>Cash Receipts (Deposits into Westamerica):</u>	
Transfers from LAIF	\$ 1,150,000.00
JPA Service Charges (FY21 Q2: SD#2) RVSD, , SRSD	259,882.85
Capacity Charges: (SRSD 2 Single Family Dwellings and 3 Multi-Dwelling Units <includes credit for 14 existing fixtures)	26,573.71
Permit and Inspection Fees	9,684.00
SRSD - FOG Program (FY21 1Q: July-September)	9,127.22
SD#2 FOG Program (FY21 1Q: July-September)	119.54
Revenue from Haulers & RVs	8,887.11
Revenue from Organic Waste Programs	17,242.21
SD 2 Operations & Maintenance Contract (FY21: October)	51,619.79
SQSP Wastewater Services Contract (FY21: October)	132,683.00
SQ Village Operations & Maintenance Contract (FY21: October & November)	1,315.39
Marin Airpporter Property Use (FY21: December)	5,400.00
Misc Revenue: Recovered ACH Fraud Insurance Claim; CalCARD Incentive Payment	71,742.31
Prior period implementation corrections recording OSAS transactions not entered Incode	8,360.38
Miscellaneous Reimbursements: CSRMA Health & Wellness Program	3,200.00
Void checks #2020316 and #2020355	471.34
Total Cash Receipts	<u>\$ 1,756,308.85</u>
<u>Cash Disbursements (Withdrawals from WestAmerica):</u>	
December 2020 Operating account disbursements register (see Schedule 1a)	\$ 677,402.28
Regular Payroll paid 12/04/20	166,830.49
Regular Payroll paid 12/18/20	153,150.29
Regular Payroll paid 12/31/20	159,601.95
Transfers to EFTPS Federal Payroll Taxes (12/08, 12/14, 12/23, 12/30)	96,318.69
Final Separation Pay (2)	31,201.19
Prior period implementation corrections recording OSAS transactions not entered Incode	111,972.07
Bank Fee	182.26
Total Cash Disbursements	<u>\$ 1,396,659.22</u>
Ending balance at December 31, 2020	<u><u>\$ 429,378.41</u></u>

Central Marin Sanitation Agency
Schedule 1a - Operating Account Disbursements Register
For the Month of December 2020

Check Number	Date	Vendor/Payee	Amount	Description
2020382				Last check from prior month's register
2020383	12/4/2020	Byron Jones	249.15	Reimbursement for retiree health benefits by check, November 2020
2020384	12/4/2020	Phillip Frye	212.39	Reimbursement for retiree health benefits by check, November 2020
2020385	12/14/2020	Navia Benefit Solutions	893.73	Flexible spending account, PPE 11/28/2020
2020386	12/14/2020	SEIU Local 1021	1,135.01	Union dues, PPE 11/28/2020
2020387	12/15/2020	Abraham Clark	173.20	Employee Expense Reimb: Safety shoes
2020388	12/15/2020	Amazon	1,231.82	Network power cables, computer equipment and accessories, MICR ink for Agency checks, fiber signal testing equipment
2020389	12/15/2020	Aramark Uniform Services	1,041.72	Uniform service, November 2020
2020390	12/15/2020	AT&T Dataplan	467.26	Fax and emergency phone service, 12/02/2020-01/01/2021
2020391	12/15/2020	Automation Direct Co., Inc.	381.50	IO modules for Headworks blower pressure transmitter
2020392	12/15/2020	Calmat Co./Shamrock Materials	8.99	Propane
2020393	12/15/2020	Chemurgic Agricultural	5,280.80	Sodium bisulfite (1 delivery)
2020394	12/15/2020	City Electric Supply	286.98	Electrical connectors
2020395	12/15/2020	County of Marin	5,466.00	Annual CUPA permit renewals for Agency and SQ Prison Pump Station storage tanks (2 invoices)
2020396	12/15/2020	CWEA TCP	96.00	Certification renewal fee, one employee
2020397	12/15/2020	Dealers Industrial Equipment	2,041.20	VFD for centrifuges
2020398	12/15/2020	Evoqua Water Tech LLC	44,895.30	Digester cover inspections
2020399	12/15/2020	Galco Industrial Electronics	450.89	Conduit fittings
2020400	12/15/2020	Harrington Industrial Plastics	3,143.79	Biotower odor mister pump motor and filter; chemical pump pressure regulator rebuild kit; ferric system piping parts (4 invoices)
2020401	12/15/2020	Hazen and Sawyer	1,875.73	Prof Svcs: Process control consulting, October 2020
2020402	12/15/2020	Home Depot Credit Services	1,121.79	Electrical and painting supplies, fire hose, and E/I storage cabinets
2020403	12/15/2020	IEDA, Inc.	867.00	Labor relations, December 2020
2020404	12/15/2020	Instrumart	5,370.12	Flow meters (2) for ferric metering pumps
2020405	12/15/2020	Jeremy Schwarm	170.50	Employee Expense Reimb: Safety shoes
2020406	12/15/2020	Kaman Industrial Technologies	2,885.24	Biotower pump rebuild parts
2020407	12/15/2020	Koff & Associates, Inc.	2,250.00	Prof Svcs: OIT recruitment, payment #3
2020408	12/15/2020	Kone Inc	153.94	Monthly elevator maintenance, December 2020
2020409	12/15/2020	Lystek International LTD	10,738.99	Biosolids beneficial reuse fee, November 2020
2020410	12/15/2020	Marin Office Supply	1,045.28	Office supplies, November 2020
2020411	12/15/2020	Marin Resource Recovery Center	98.00	Maintenance Annex clean-up area waste disposal
2020412	12/15/2020	Marin Sanitary Service	3,579.34	Grit box and rag bin disposal, November 2020
2020413	12/15/2020	McInerney & Dillon, P.C.	120.00	Legal services, construction/contract law, November 2020
2020414	12/15/2020	Michael Foster	11,553.32	SD2 PS Maint: Plug and check valves (6) (Note B)
2020415	12/15/2020	Navia Benefit Solutions	56.65	Monthly participant fee, November 2020
2020416	12/15/2020	P.G. & E.	5,942.76	Electricity service, 10/20-11/17/2020 (2 invoices)
2020417	12/15/2020	Pacific EcoRisk	3,708.00	NPDES Chronic Toxicity Testing
2020418	12/15/2020	Promium LLC	3,672.00	Annual LIMS lab software maintenance fee, 12/1/2020-11/30/2021
2020419	12/15/2020	Regional Monitoring Program	47,104.00	Annual participant fee, 01/01-12/31/2021
2020420	12/15/2020	Rock Steady Juggling	400.00	Pub Ed Program: Virtual outreach at one school (Note B)
2020421	12/15/2020	Sample Traps LLC	156.81	Sample containers
2020422	12/15/2020	SPURR	7,331.91	Natural gas supply, October 2020
2020423	12/15/2020	Super Bright LEDs, Inc	419.41	LED corn bulbs (5)
2020424	12/15/2020	SWRCB FEES	62,521.00	Annual NPDES Permit Fee, 07/01/2020-06/30/2021
2020425	12/15/2020	Thatcher Company of	8,049.28	Ferric chloride (1 delivery)
2020426	12/15/2020	Thomas Fish Company	437.25	Rainbow trout for monthly bioassay testing for June, October, and November 2020 (3 invoices)
2020427	12/15/2020	ULINE	494.70	Nitrile gloves
2020428	12/15/2020	Univar USA Inc	3,665.16	Sodium hypochlorite (1 delivery)
2020429	12/15/2020	Van Bebbler Bros., Inc.	674.81	Pump guards and toe-kicks (2 invoices)
2020430	12/15/2020	Waste Management	10,291.57	Biosolids disposal, November 2020

Central Marin Sanitation Agency
Schedule 1a - Operating Account Disbursements Register
For the Month of December 2020

Check Number	Date	Vendor/Payee	Amount	Description
2020431	12/15/2020	West Yost Water Engineered	7,440.00	Prof Svcs: RAS Pumps Replacement Project - Design Services, 10/10-11/06/2020
2020432	12/15/2020	Wine Country Balance	495.00	Balance certification
2020433	12/23/2020	Allied Fluid Products	1,426.57	Pump for monthly bioassay testing equipment
2020434	12/23/2020	Atmospheric Analysis	2,479.00	Biogas quarterly testing; and Organic Waste Receiving Facility POC testing
2020435	12/23/2020	Brown International Corp	2,707.75	Replacement blades for Organic Waste Receiving Facility paddle finisher
2020436	12/23/2020	California Public Employee	3,584.00	Reimbursement for retiree health benefits by check, December 2020
2020437	12/23/2020	Comcast	195.01	Internet service, 12/04/2020-01/03/2021
2020438	12/23/2020	Denali Water Solutions	7,907.59	Biosolids hauling, October 2020 (3 invoices)
2020439	12/23/2020	Environmental Express Inc.	421.13	Sample containers
2020440	12/23/2020	Fastenal Company	319.82	Maintenance vending machine replenishment, November 2020
2020441	12/23/2020	Fisher Scientific	1,378.26	Solutions, chemicals, vials, buffers, and gloves for laboratory, November 2020
2020442	12/23/2020	Occumetric	275.00	OIT Recruitment: pre-employment testing
2020443	12/23/2020	Rockwell Solutions	2,720.44	Rock trap grinder parts for Organic Waste Receiving Facility
2020444	12/23/2020	Russ Turnbull	239.98	Employee Expense Reimb: Safety glasses
2020445	12/23/2020	Sloat Garden Center	129.87	Plants for landscaping
2020446	12/23/2020	Univar USA Inc	7,404.42	Sodium hypochlorite (2 deliveries)
2020447	12/23/2020	Water Components	410.29	SD2 PS Maint: Pipe and hose repair kit (Note B); Ferric piping and fittings (4 invoices)
2020448	12/23/2020	Watson-Marlow Inc	12,484.32	Hoses and lubricant for Organic Waste Receiving Facility
2020449	12/23/2020	Wells Fargo Vendor	755.94	Lease payment for three printer/copiers, 12/20/2020-01/19/2021
2020450	12/23/2020	Navia Benefit Solutions	893.73	Flexible spending account, PPE 12/12/2020
2020451	12/23/2020	SEIU Local 1021	1,102.55	Union dues, PPE 12/12/2020
2020452	12/23/2020	Automation Direct Co., Inc.	381.50	Process control input modules (2)
2020453	12/23/2020	CalCard	7,984.80	State of California Purchase Card, October-November 2020
2020254-6		VOID	-	Additional pages required for stub
2020457	12/23/2020	Caltest	20,877.15	Analyses for pretreatment, pilot digester, NPDES, biosolids, and stormwater/oil & grease testing; monthly influent and effluent analyses, October-November 2020 (37 invoices)
2020458	12/23/2020	ERS Industrial Services Inc	12,340.00	Grit removal service for influent channel cleaning
2020459	12/23/2020	Harrington Industrial Plastics	417.47	Ferric system piping supplies (3 invoices)
2020460	12/24/2020	Amazon	1,645.27	Replacement drive for storage server, webcams (2), A/P check printing stock, ethernet radios (5), misc. computer supplies
2020461	12/24/2020	Automation Direct Co., Inc.	461.45	PLC power supplies, lighting installation tool, and electric push button
2020462	12/24/2020	Bay City Boiler	4,895.00	Annual boiler service
2020463	12/24/2020	Calmat Co./Shamrock Materials	122.75	Propane (2 invoices)
2020464	12/24/2020	Chemurgic Agricultural	10,708.80	Sodium bisulfite (2 deliveries)
2020465	12/24/2020	CWEA TCP	192.00	Certificate renewal and membership fee, one employee
2020466	12/24/2020	Denali water Solutions	7,172.27	Biosolids hauling, November 2020 (3 invoices)
2020467	12/24/2020	EDIS	10,088.26	Dental Admin fee and deposit replenishment, December 2020
2020468-74		VOID	-	Additional pages required for stub
2020475	12/24/2020	Hagel	863.52	Utility and janitorial supplies, November (3 invoices)
2020476	12/24/2020	Harrington Industrial Plastics	153.15	Odor control calibration cylinder
2020477	12/24/2020	Horizon Dist. Inc	29.08	Fertilizer for landscaping
2020478	12/24/2020	Jackson's Hardware	547.58	Power strip, flex seal, marking wand, pest traps, paint bib, plumbing supplies, and misc. hardware (8 invoices)
2020479	12/24/2020	Manco	1,892.12	Pressure instrumentation for channel air blowers
2020480	12/24/2020	Marin Municipal Water	2,856.57	Water and fire line service, October-November 2020 (4 invoices)
2020481	12/24/2020	Marin Resource Recovery Center	45.00	Yard waste disposal
2020482	12/24/2020	MSA Corporate	677.31	Replacement O2 sensor for Headworks
2020483	12/24/2020	Pipette.com	116.00	Pipette calibration instruments
2020484	12/24/2020	Platt	581.95	Emergency lighting supplies (3 invoices)
2020485	12/24/2020	Powerstride Battery Co	1,270.43	Replacement batteries for Agency electric carts (12)

Central Marin Sanitation Agency
Schedule 1a - Operating Account Disbursements Register
For the Month of December 2020

Check

Number	Date	Vendor/Payee	Amount	Description
2020486	12/24/2020	Univar USA Inc	3,669.13	Sodium hypochlorite (1 delivery)
2020487	12/24/2020	Van Bebber Bros., Inc.	2,168.29	Grit classifier box for Headworks
2020488	12/24/2020	Waste Water Solids Management	25,516.25	Primary effluent sump cleaning services
2020489	12/24/2020	Western Exterminator Co	188.50	Pest control, November 2020
TOTAL - CHECKS			436,842.56	

Payments by Bank Draft:

Date	Vendor/Payee	Amount	
12/4/2020	Cal Public Employee Retirement	67,811.89	Medical insurance
12/8/2020	CalPERS	42,238.85	Retirement pension contribution: Agency and employees, PPE 11/28/2020 (Note C)
12/21/2020	CalPERS	1,009.00	CalPERS Classic and Pepra
12/23/2020	CalPERS	42,249.99	Retirement pension contribution: Agency and employees, PPE 12/12/2020 (Note C)
12/8/2020	Employment Development Department	14,919.77	State and SDI Taxes, PPE 11/28/2020
12/23/2020	Employment Development Department	12,060.10	State and SDI Taxes, PPE 12/12/2020
12/13/2020	Employment Development Department	1,294.12	State and SDI Taxes for Batis, S retirement
12/29/2020	Employment Development Department	5,212.78	State and SDI Taxes for Bender, J retirement
12/4/2020	ICMA Retirement Trust-457	1,850.00	Deferred compensation contributions, PPE 11/28/2020 (Note A)
12/23/2020	ICMA Retirement Trust-457	1,850.00	Deferred compensation contributions, PPE 12/12/2020 (Note A)
12/4/2020	Lincoln Financial Group	2,680.52	Life insurance
12/4/2020	Nationwide Retirement	17,983.80	Deferred compensation and MARA contributions, PPE 11/28/2020 (Note A)
12/23/2020	Nationwide Retirement	17,996.61	Deferred compensation and MARA contributions, PPE 12/12/2020 (Note A)
12/4/2020	Vision Service Plan -(CA)	977.62	Vision insurance
TOTAL - BANK DRAFTS		230,135.05	

Payments by Automatic Clearing House:

Date	Vendor/Payee	Amount	
12/16/2020	Nitel Inc	1,301.56	Primary telephone and internet service, November 2020
12/2/2020	Payments to 26 retirees	7,080.45	Reimbursement for retiree health benefits
12/15/2020	Public Agency Retirement Svcs	211.08	Retirement pension contribution: part-time and internship employees, PPE 11/28/2020 (Note C)
12/24/2020	Public Agency Retirement Svcs	221.58	Retirement pension contribution: part-time and internship employees, PPE 12/12/2020 (Note C)
12/16/2020	Tyler Technologies Inc	260.00	Financial software consulting fees
TOTAL - ACH		9,074.67	

Board Member Compensation:

Date	Vendor/Payee	Amount	
12/15/2020	Dean DiGiovanni	225.00	Stipend for 12/08/2020 Regular Board meeting
12/15/2020	Douglas T Kelly	225.00	Stipend for 12/08/2020 Regular Board meeting
12/15/2020	Eli H. Beckman	225.00	Stipend for 12/08/2020 Regular Board meeting
12/15/2020	Maribeth Bushey	225.00	Stipend for 12/08/2020 Regular Board meeting
12/15/2020	Michael Owen Boorstein	450.00	Stipend for 12/08/2020 Regular Board meeting and 12/04/2020 NBWA Board meeting
TOTAL - BOARD MEMBER COMPENSATION		1,350.00	

GRAND TOTAL	677,402.28
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Notes:

A: Not an Agency Expense. Expense funded through Payroll deduction.

B: Not an Agency Expense. CMSA will be reimbursed for this expense.

C: CMSA is partially reimbursed for this expense per Employee Labor Agreements.

CENTRAL MARIN SANITATION AGENCY
SCHEDULE 2 - CAPITAL RESERVES SUMMARY FOR TREASURER'S REPORT

Year-to-Date as of the Month Ended December 31, 2020

	Monthly Amounts Received (Used)	YTD Amounts Received (Used)
Restricted Capital Reserves Sources and Uses		
Capacity charges revenue	\$ 26,574	\$ 972,803
Debt coverage collection revenue	-	809,551
	<u>26,574</u>	<u>1,782,354</u>
Total restricted capital reserve funding sources		
Capacity charges usage for capital (1st)	(109,334)	(796,602)
Debt coverage usage for capital (2nd)	-	-
	<u>(109,334)</u>	<u>(796,602)</u>
Total restricted capital reserve uses		
Net change		985,752
Balance - beg of year		991,834
Balance - end of month/year		<u><u>\$ 1,977,586</u></u>
Unrestricted Capital Reserves Sources and Uses		
Capital fee revenue	\$ -	\$ 626,000
Unrestricted operating-reserve-transfer-in	-	-
SRF/FEMA cost reimb proceeds received	-	-
	<u>-</u>	<u>626,000</u>
Total unrestricted capital reserve funding sources		
Capital fee usage to fund CIP (3rd)	-	-
Unrestricted capital reserve draw (4th)	-	-
Short-term cash flow balancing	-	-
	<u>-</u>	<u>-</u>
Total unrestricted capital reserve uses		
Net change		626,000
Balance - beg of year		9,067,411
Balance - end of month/year		<u><u>\$ 9,693,411</u></u>
Total capital reserve balances		<u><u>\$ 11,670,997</u></u>
Total approved CIP budget		\$ 8,559,701
Total CIP funded from capital reserve sources		<u>(796,602)</u>
Total approved capital budget remaining		<u><u>\$ 7,763,099</u></u>

**BOARD MEMORANDUM**

January 7, 2021

To: CMSA Commissioners and Alternates

From: Chris Finton, Treatment Plant Manager

Approved: Jason Dow, General Manager

Subject: December 2020 NPDES Permit Compliance, Treatment Process, and Maintenance Activities Report

Recommendation: Accept the December 2020 NPDES Permit Compliance, Treatment Process, and Maintenance Activities Report.

I. NPDES Permit Compliance

Our NPDES permit testing for December 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 December 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 9.8 MPN, well below the 35 MPN permit limit.

II. Influent Flow

December in central Marin County saw daytime temperatures in the mid 60's down to lows in the mid 30's, all driven by a high-pressure weather system sitting over California. CMSA recorded 1.46 inches of rain at the Agency's rain gauge and the series of small spread out wet weather events did not result in wastewater blending. The treatment plant's average daily influent flow was 10.0 MGD.

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

December Monthly Influent Flows	San Rafael (SRSD)	Ross Valley (RVSD)	San Quentin (SQSP)	Corte Madera (SD#2)	CMSA Plant Total
Average Daily (MGD)	3.9 MGD	4.7 MGD	0.52 MGD	0.93 MGD	10.0 MGD
Total for Month (MG)	120.6 MG	145.7 MG	16.0 MG	28.9 MG	311.2 MG
Percent of Flow	38.8 %	46.8%	5.1 %	9.2 %	100 %

Wet Weather Peak Flow*	San Rafael (SRSD)	Ross Valley (RVSD)	San Quentin (SQPS)	Corte Madera (SD2)	CMSA
12/13 Total Days Flow	6.6 MG	7.3 MG	.70 MG	1.6 MG	16.2 MG
Peak Flow Rate	15.8 MGD	15.3 MGD	1.6 MGD	2.9 MGD	35.9 MGD

* The time for peak flows and maximum day's flow varies depending on an area's rainfall during the storm

III. Treatment Process

A series of small and brief rain events required operators to place additional process tanks into service temporarily and then remove them from service a few days later to maintain the proper amount of treatment equipment online. Additionally, staff tested the original aeration system's centrifugal blowers, our backups to the online high-speed aeration blowers, isolated all of the disinfection and dechlorination pumps for individual pressure testing, locked and tagged out the cogeneration system for unscheduled repair work, and returned the San Rafael influent screen to service after scheduled corrective maintenance.

The Mixed Liquor Suspended Solids (MLSS) inventory averaged 921 mg/l in December, a 3.4% increase in inventory from last month. The solids inventory is in alignment with our target Mean Cell Residence Time (MCRT) of 2.7 days.

Graph #3 shows the coliform most probable number (MPN), which represents the effectiveness of the disinfection process. All 15 coliform samples collected in December were well below our daily permit limit of 10,000 MPN and below our monthly KPI of 30 MPN. The total coliform monthly geometric mean for December was 1.4 MPN, below our permit's monthly limit of 240 MPN.

Graph #4 shows the Total Suspended Solids (TSS), which is a good indicator of the effluent quality. The TSS monthly average in December was 7.8 mg/l, which is 52.0% of our Key Performance Indicator (KPI) of 15 mg/l, and is 26.0% of our permit's monthly average limit of 30 mg/l.

IV. Maintenance Activities

The cogeneration system produced 96.8% of the Agency's power in December, and MCE supplied the balance. The system, as indicated on Graph #8, was temporarily offline on December 8 and again on December 15 for staff to remove and replace separate damaged cylinder heads.

The majority of December's work activities were spent performing annual process equipment preventative maintenance. In addition, technicians completed a planned project to replace the grease, oil, and bearings on digester mixing pump No. 1; replaced three grit classifier inlet covers; replaced both the isolation and check valves at Saba Lane pump station; replaced the UV damaged drawdown tubes at the San Quentin Peroxide Station; replaced the main bearing on Headworks screen No. 1; installed a new filter on the odor misting system; and replaced the hose and glycerin on a feed pump at the Organic Waste Receiving Facility. Utility staff cut up and disposed of several equipment pallets, are in the process of completing an air distribution piping painting project near the primary clarifiers and completed their monthly survey and debris removal from Agency property on Andersen Hillside.

Attachment: December 2020 NPDES Permit Compliance, Treatment Process, and Maintenance Activities Report

NPDES Permit Compliance, Treatment Process, and Maintenance Activities Report
December 2020



Original grit classifier cover



Newly installed stainless-steel grit classifier cover



Grit classifiers after refurbishment and coating

Monthly Compliance Summary Table

Central Marin Sanitation Agency

December, 2020

Final Effluent Monitoring

Parameter	Frequency	Units	Results	Limit
Carbonaceous BOD Highest Weekly Average	Weekly	mg/L	10.3	Maximum 40
Carbonaceous BOD Monthly Average	Monthly	mg/L	7.5	Maximum 25
Carbonaceous BOD Monthly Removal Rate	Monthly	%	97.2	Minimum 85
Total Suspended Solids Highest Weekly Average	Weekly	mg/L	9.1	Maximum 45
Total Suspended Solids Monthly Average	Monthly	mg/L	7.8	Maximum 30
Total Suspended Solids Monthly Removal Rate	Monthly	%	97.9	Minimum 85
Chlorine Residual Instant Limit	Instant	mg/L	ND	Maximum 0.0
Ammonia Monthly Average	Monthly	mg/L	34.9	Maximum 60
Ammonia Maximum Daily	Daily	mg/L	37.5	Maximum 120
pH Lower Limit	Continuous	SU	6.8	Minimum 6
pH Upper Limit	Continuous	SU	7.2	Maximum 9
Bacteriological Analysis				
Total Coliform Monthly Geometric Mean	3 X Week	MPN/100mL	1.4	Maximum 240
Total Coliform Daily Maximum	3 X Week	MPN/100mL	7.8	Maximum 10,000
Enterococcus Quarterly Geometric Mean	Quarterly	MPN/100mL	9.8	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	9.7	Maximum 85
Copper Monthly Average	Monthly	ug/L	9.7	Maximum 49
Cyanide Daily Limit	Monthly	ug/L	J1.9	Maximum 41
Cyanide Monthly Average	Monthly	ug/L	J1.9	Maximum 21
Mercury Weekly Average	Weekly	ug/L	0.0034	Maximum 0.072
Mercury Monthly Average	Monthly	ug/L	0.0034	Maximum 0.066
Mercury Monthly Loading	Monthly	kg/mo	0.00266	
Mercury Annual Loading (watershed permit)	Jan-Dec	kg/yr	0.03879	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	13.5	21.4	23.2	8.7
Influent Flow	16.2	30.7	35.9	10.0
# Days Blended				0

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

Glossary of Terms

NPDES Permit Compliance Summary Table

- **Ammonia:** 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

December 2020

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:	418.6	mg/l	Expected removal efficiencies as outlined in Metcalf & Eddy Wastewater Engineering Manual.
Average TSS out:	182.2	mg/l	
Average Percent Removal Achieved:	51.5	%	Design 50-70% Removal
Average Total Carbonaceous Biochemical Oxygen Demand (CBOD) in:	294.1	mg/l	
Average CBOD out:	160.1	mg/l	
Average Percent Removal Achieved:	42.0	%	Design 25-40% Removal
Average Plant Influent Flows:	10.0	MGD	

BIOTOWER PERFORMANCE

Average TSS out:	111.5	mg/l	
Average CBOD out:	64.1	mg/l	
Average Percent CBOD Removal Achieved:	60.0	%	Design 25-30% Removal

AERATION TANKS/ACTIVATED SLUDGE

Dissolved Oxygen set point:	2.5	mg/l
Average MLSS:	921.0	mg/l
Average MCRT:	2.7	Days
Average SVI:	131	

SECONDARY CLARIFIERS

Average WAS concentration:	6,469	mg/l
Average TSS out:	9.2	mg/l

FINAL EFFLUENT

Average Effluent TSS for the month:	7.8	mg/l	(Maximum Limit: 30mg/l)
Week #1 weekly average	8.0	mg/l	(Maximum Limit: 45mg/l)
Week #2 weekly average	6.7	mg/l	"
Week #3 weekly average	6.9	mg/l	"
Week #4 weekly average	9.1	mg/l	"
Week #5 weekly average	N/A	mg/l	"
Monthly average TSS removal efficiency through the plant:	97.9	%	(Minimum Limit: 85%)

Average Effluent CBOD:	7.5	mg/l	(Maximum Limit: 25mg/l)
Week #1 weekly average	6.3	mg/l	(Maximum Limit: 40mg/l)
Week #2 weekly average	6.3	mg/l	"
Week #3 weekly average	6.5	mg/l	"
Week #4 weekly average	10.3	mg/l	"
Week #5 weekly average	N/A	mg/l	"
Monthly average CBOD removal efficiency through the plant:	97.2	%	(Minimum Limit: 85%)

Disinfection Dosing Rate:	3.1	mg/l	monthly average
Total Coliform Monthly Geometric Mean:	1.4	MPN	(Maximum 240)
The Daily Maximum Total Coliform Count for the month:	7.8	MPN	(Maximum 10,000)
Enterococcus Monthly Geometric Mean:	N/A	MPN	(Maximum 35 MPN)
Effluent pH for the month was:	Min	6.8	MPN (Min 6.0)
	Max	7.2	MPN (Max 9.0)

DIGESTER TREATMENT

Average Thickened Waste Concentration from the RDT:	6.6	%	
Average percent of Volatile Solids destroyed:	85.3	%	
Cubic feet of biogas produced:	9,035,520 (Total)	291,468 (Daily Average)	
Average temperature of the digester:	101.8	degrees Fahrenheit	

EXECUTIVE SUMMARY PROCESS PERFORMANCE DATA

December 2020

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

DEWATERING

Average Centrifuge Feed concentration:	2.5	%
Average Biosolids concentration:	27.1	%
Average TSS of the Centrate:	171	mg/l
Solids capture of the Centrifuge:	99.36	%
Polymer use per Dry ton of biosolids:	11.35	#/dry ton
Average polymer feed rate per run:	3.23	gpm
Average concentration of the polymer batches:	0.328	%
Average sludge feed rate per run:	56.7	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 rain gauge recordings for the month. There were no blending events in the month of December.

Graph #2:

Depicts individual collection agency flows.

The Y-axis is in the flow range of 0-8 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 1.4 MPN through December, which is less than our KPI of 30 MPN and permit limit of 240 MPN.

Graph #4:

Depicts the total suspended solids in the effluent.

Our monthly average was 7.7 mg/l versus our KPI of 15 mg/l and permit monthly average limit of 30 mg/l. Total suspended solids in the effluent remained below CMSA's KPI metric for the entire month.

Graph #5:

Depicts the effluent CBOD which measures the oxygen demand of the wastewater.

The December effluent CBOD average was 7.6 mg/l, below our NPDES limits of 40 mg/l weekly and 25 mg/l for the month. CBOD in the effluent remained below the KPI for the entire month.

Graph #6:

Depicts the degree to which the biosolids have been dewatered.

Our biosolids % concentration met or exceeded our KPI of 25% throughout December. No dewatering operations occurred on December 13.

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 December averaged 291,468 cubic feet per day, which exceeded our monthly KPI of 200,000 cubic feet per day.

Graph #8:

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

operations. The green line represents power exported to the grid. In December, CMSA exported 14,341 kWh. On December 8 and 15 the cogeneration system was offline for cylinder head replacement work.

Glossary of Terms

Process Performance Data Sheet

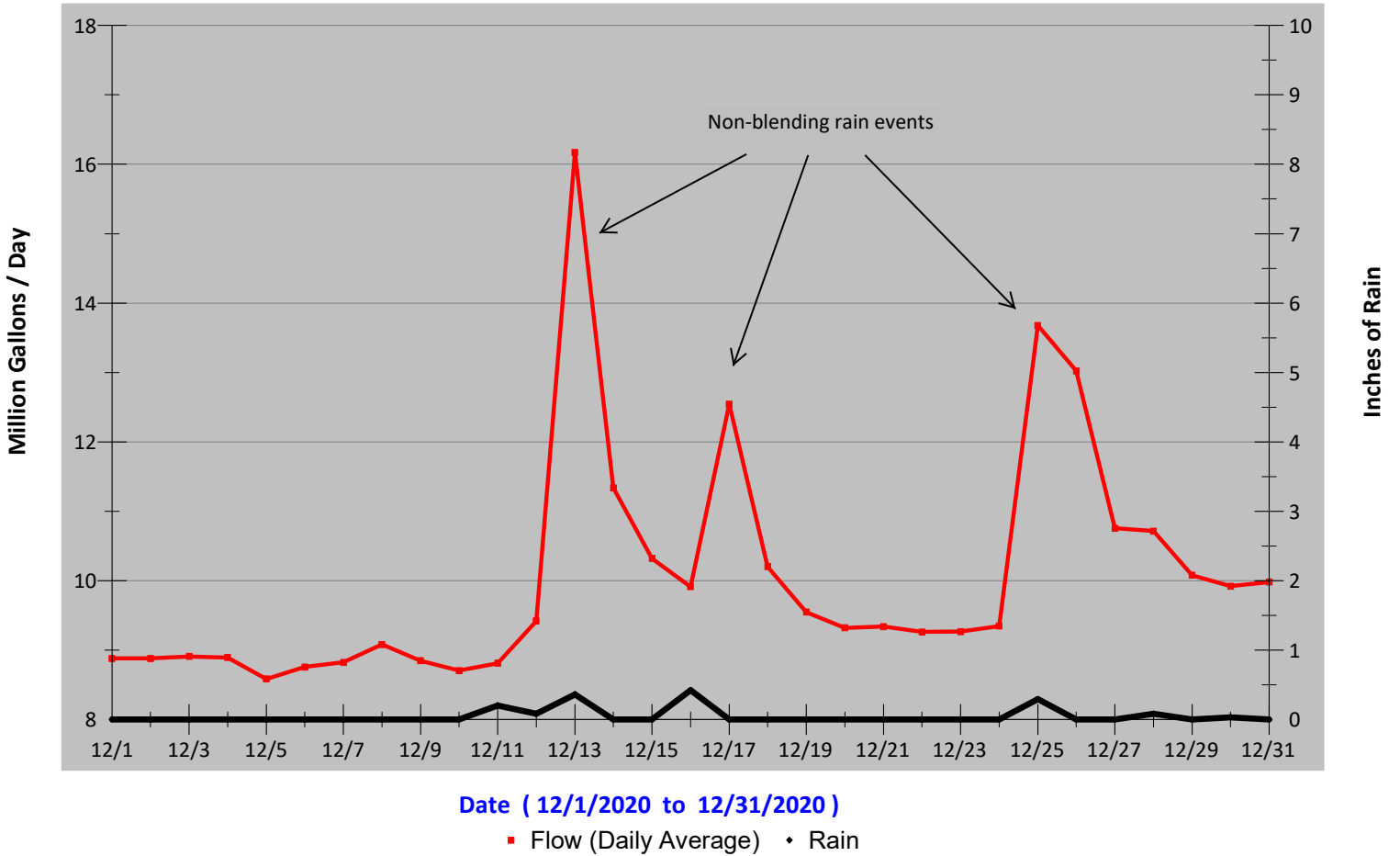
- **Aeration Tanks:** A biological process that takes place after the biotowers, where biomass (microorganisms) is mixed with the wastewater to feed on dissolved and suspended organic material. High speed blowers are used to provide compressed air to mix the tank contents.
- **Anaerobic Digesters:**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

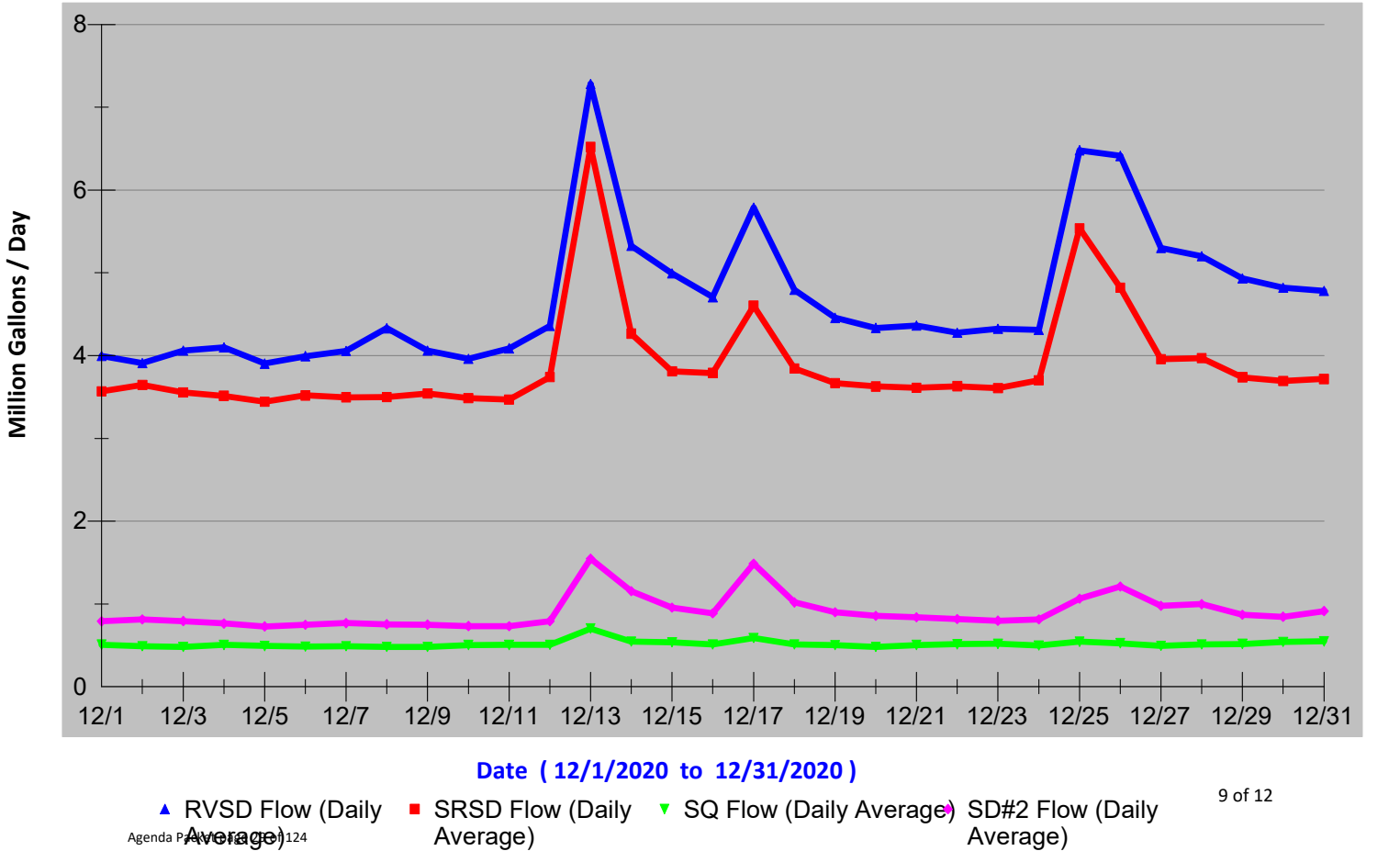
- kg/month (Kilograms per Month): 1 kilogram = 2.205 lbs.
- KPI (Key Performance Indicators): The Agency’s process performance goals.
- Kwh (Kilowatt Hours): A unit of electric power equal to using 1 Kw for 1 hour.
- Milligrams per Liter (mg/L): A measure of the concentration by weight of a substance 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

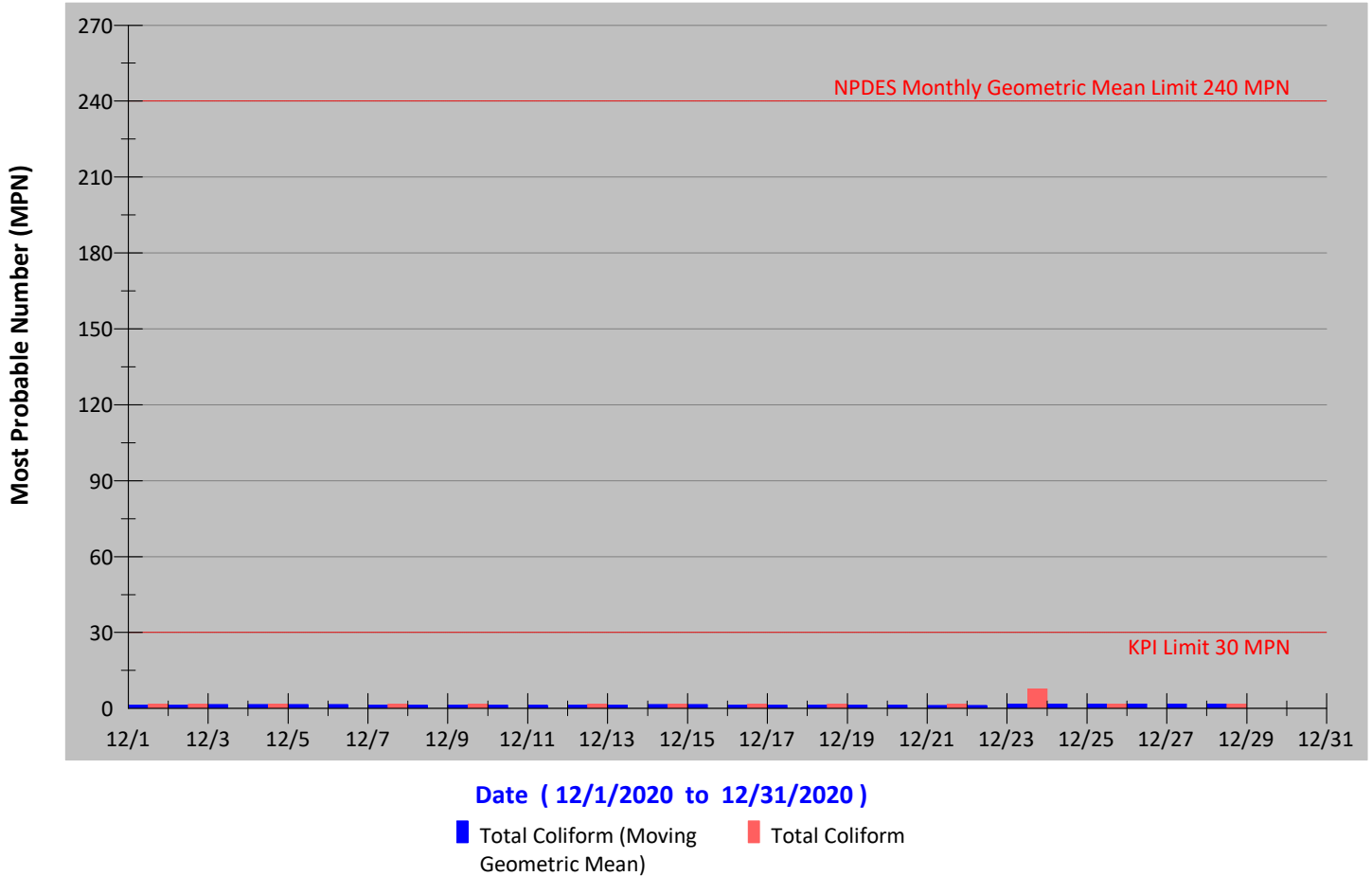


(#1) CMSA Influent Flow

Graph #2: Collection System Influent Flows

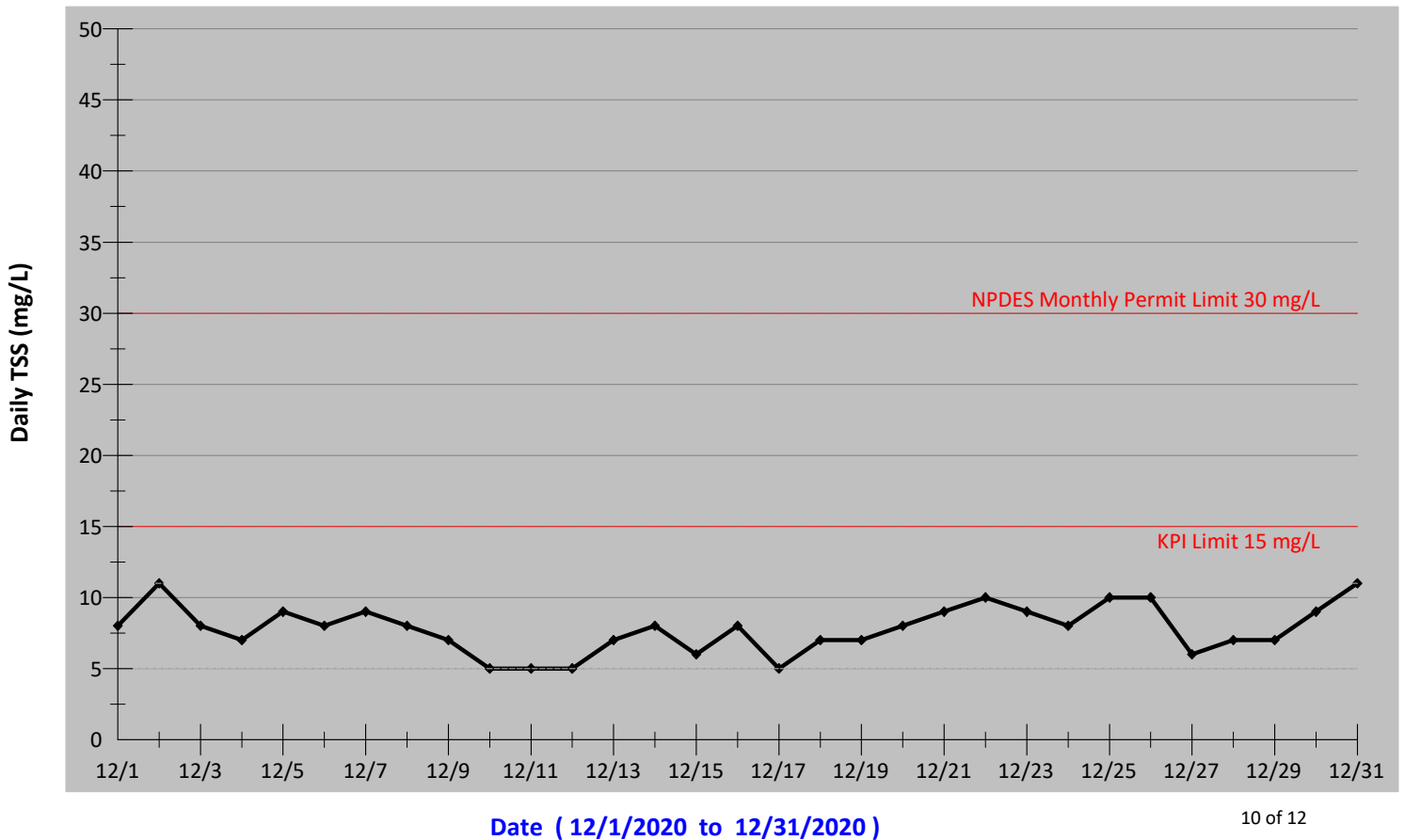


Graph #3: Total Coliform & Monthly Geometric Mean



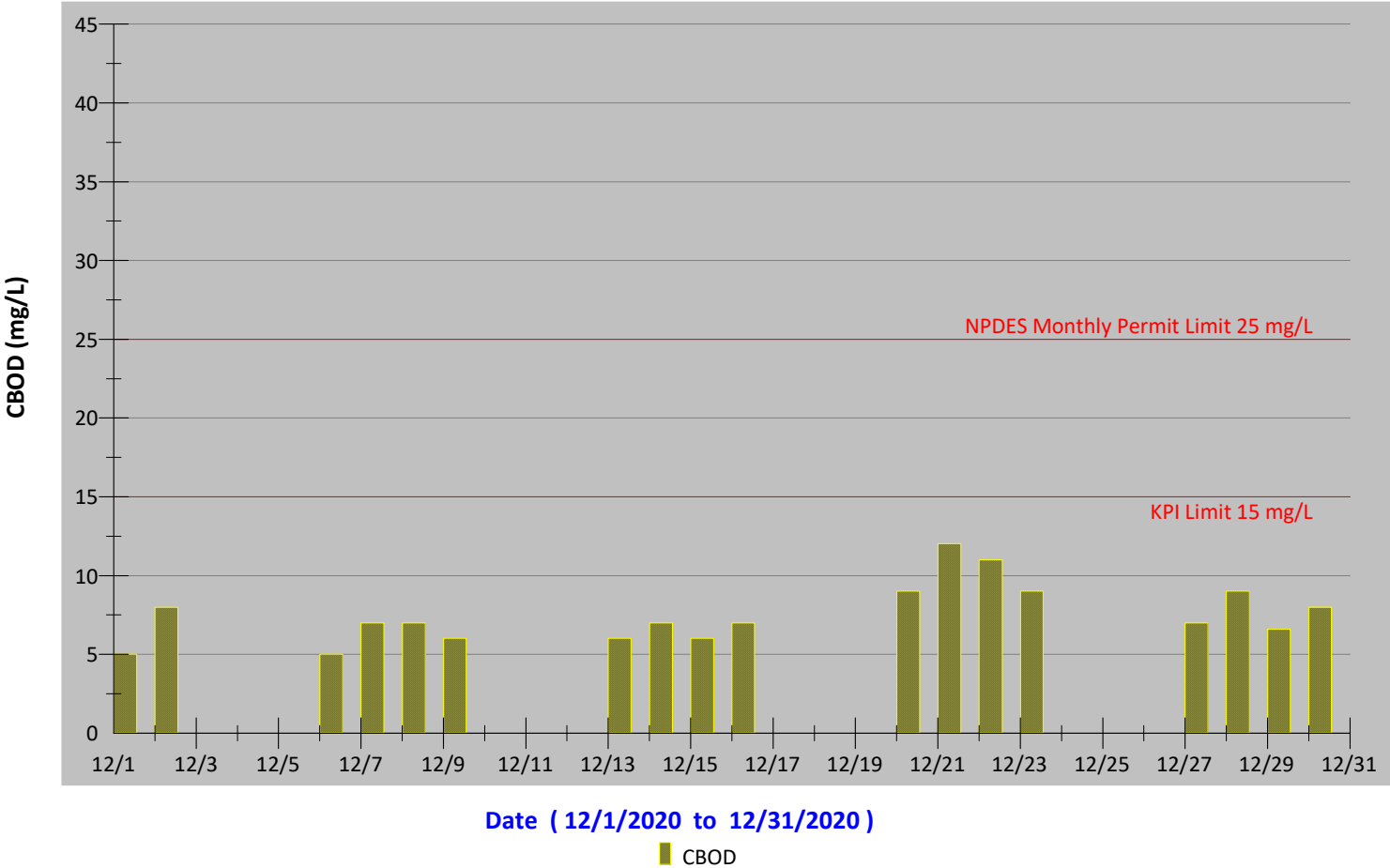
(#3) Total Coliform & Monthly Geometric Mean

Graph #4: Effluent Total Suspended Solids (TSS)



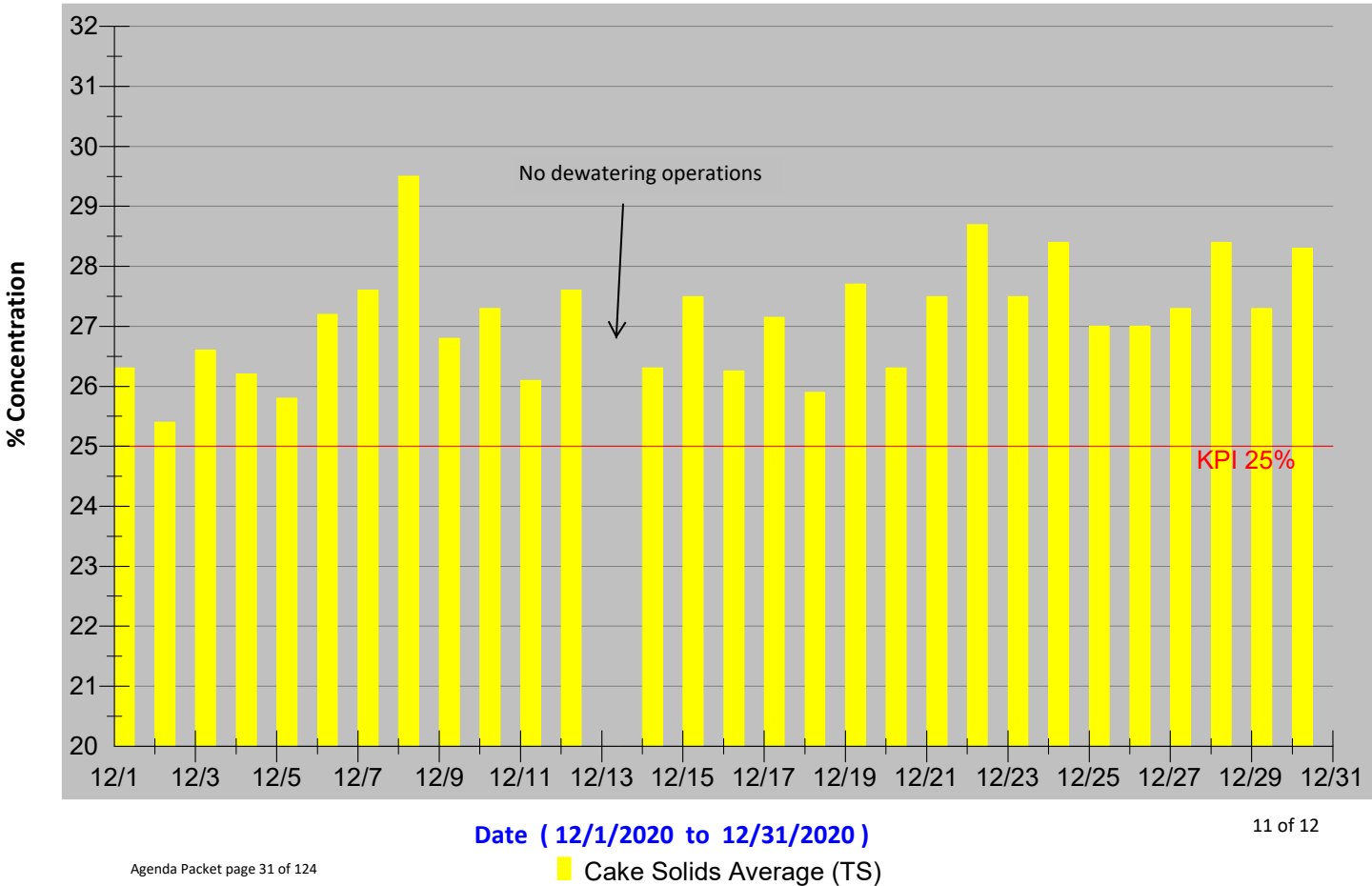
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Graph #5: Effluent Carbonaceous Biological Oxygen Demand (CBOD)

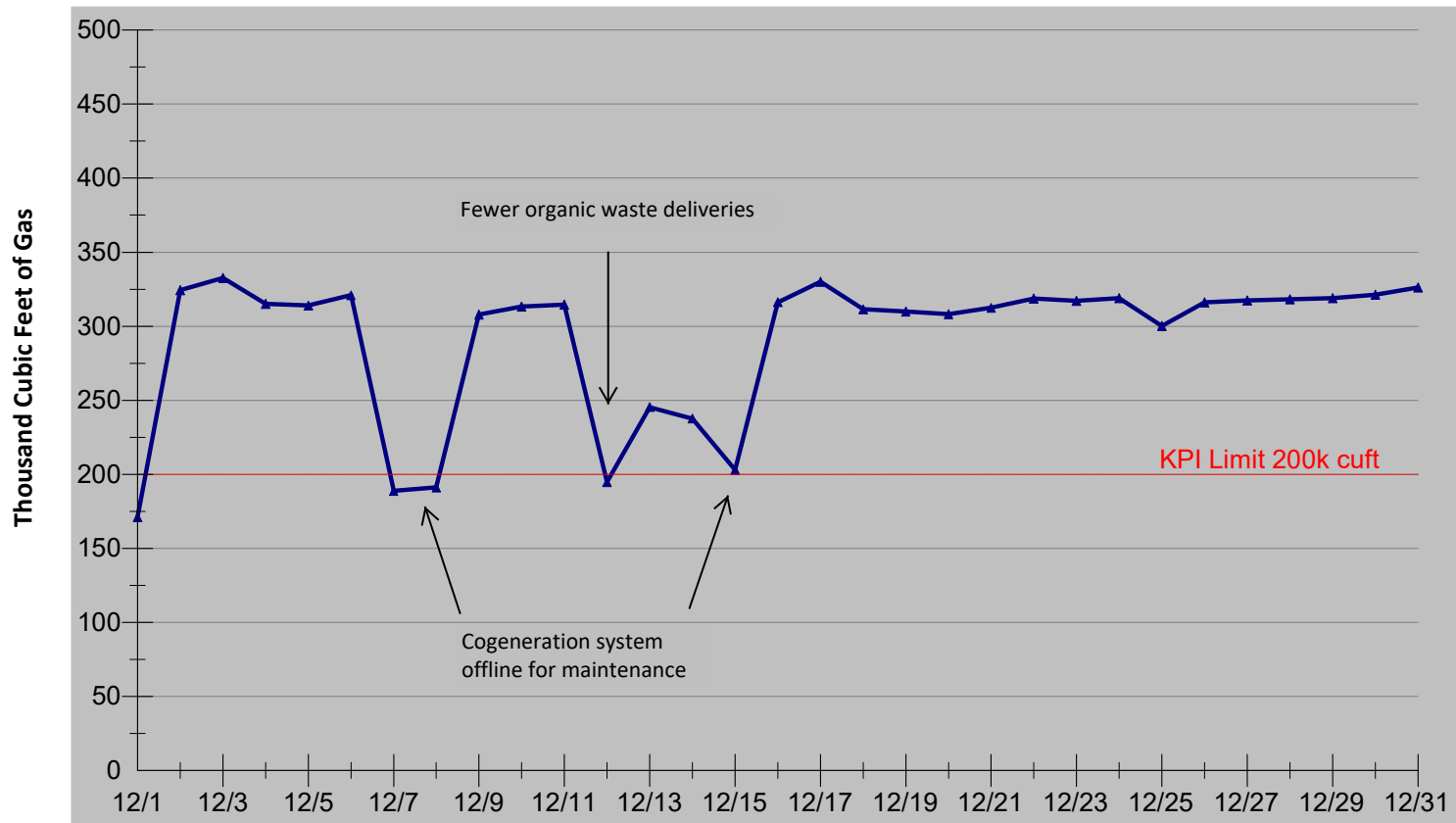


(#5) Effluent Carbonaceous Biological Oxygen Demand (CBOD)

Graph #6: Biosolids Concentration



Graph #7: Biogas Production (Measured Use)

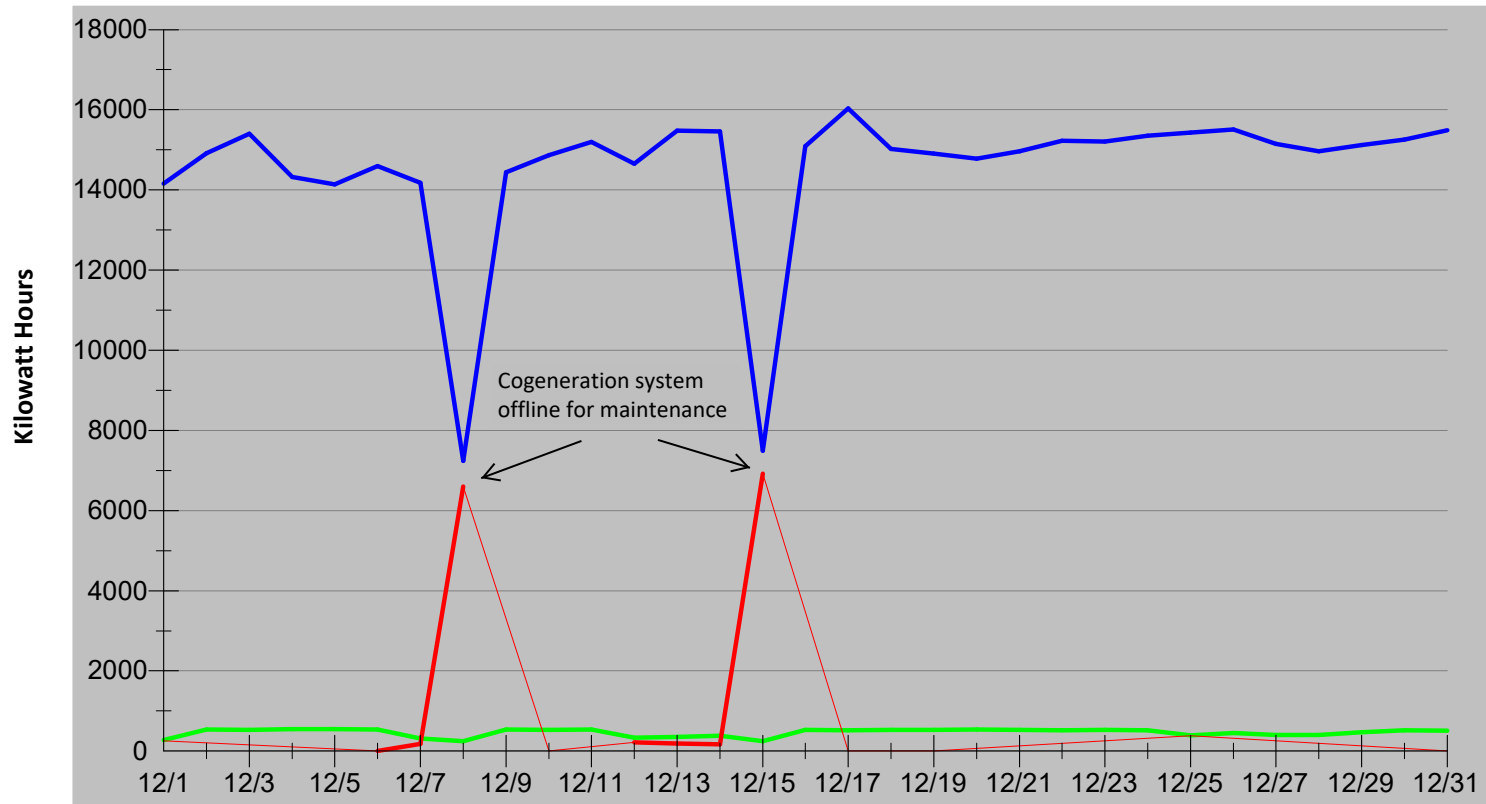


Date (12/1/2020 to 12/31/2020)

▲ Biogas Produced

(#7) Biogas Production

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



Date (12/1/2020 to 12/31/2020)

▲ Kilowatts Produced ▲ Utility Export ▲ Utility Import

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BOARD MEMORANDUM

January 7, 2021

To: CMSA Commissioners and Alternates

From: Jason Dow, General Manager

Subject: Performance Metric Report – December 2020

Recommendation: Accept the December 2020 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 most of our metric goals/targets. Noteworthy metrics or variances are described below.

Table I – Treatment/Process Metrics

Effluent quality remained very good during the small rain events and throughout the month, and the Agency did not have any effluent exceedances for calendar year 2020. This is the third consecutive year of 100% NPDES permit compliance.

Renewable energy exported to MCE continuous to be lower than our target range due to operating the cogeneration system in demand following instead of a base output mode. With two months of energy production, natural gas and energy procurement, and power delivery information, staff will perform an economic evaluation to determine the most economically advantageous mode of operation.

Table II – Employee Metrics

Due to the COVID-19 Public Health Orders, all training since March 2020 and the foreseeable future will be internal or web-based. Over the past month most staff attended COVID Site Specific Plan refresher training, several staff received classification specific development training, and the General Manager participated in the first of three NACWA executive education seminars.

Due to the mild weather in December, Maintenance staff concentrated on preventative maintenance work resulting in the metric (Item 2) exceeding our KPI goal.

Table III - Environmental and Regulatory Compliance Metrics

There weren't any final effluent permit exceedances in December. Environmental Services Analysts completed most of the annual dental office inspections in the CMSA, Las Gallinas Valley Sanitary District, and Novato Sanitary District service areas.

Process Control Analyses (Item 3) and Quality Control Testing (Item 5) continue to be higher than their target ranges due to the additional sampling and analyses performed for the digester pilot study, secondary system process control, and implementation of the new ELAP standards.

Table IV - Public Outreach

There were three odor alerts posted to the website, and the Agency did not receive any public odor complaints. Alerts were posted for taking process tanks out of service after rain events as flows subsided, cleaning the primary influent channel to remove deposited grit and debris, and chlorine contact tank preventative maintenance.

Monthly public education events may include staff attendance at public outreach events, school classroom and/or juggler show presentations, and Agency tours. All public outreach and in-person school events have been cancelled since March due to the COVID-19 shelter-in-place order.

Public Outreach Events

- None in December

School Events – Juggler Show Presentations and Classroom Events

Rock Steady Juggling developed an online outreach presentation to accommodate the current COVID-19 requirements. There were two virtual presentations in December.

Date	School	Attendees
12/7	Hidden Valley Elementary in San Anselmo	220
12/18	Brandeis Marin in San Rafael	90

CMSA Tours

- None in December

Attachment:

- December 2020 Performance Metric Report

CMSA CY20 PERFORMANCE METRICS – December 2020

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)	311.2 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)	332.5 wt 140.0 wt	360 – 665 wt
3) Conventional Pollutant Removal	Removal of the conventional NPDES pollutants - Total Suspended Solids (TSS) and Biological Oxygen Demand (BOD) a. tons of TSS removed; % TSS removal b. tons of BOD removed; % BOD removal	507.8 tons; 97.9% 352.1 tons; 97.2%	> 85% > 85%
4) Priority Pollutants Removal	Diversion of priority NPDES metals from discharge to the S.F. Bay: a. % Mercury b. % Copper	96.6% 84.8%	88 – 99% 84 – 98%
5) Biogas Production	Biogas generated in our anaerobic digesters, in million cubic feet (Mft ³) Natural gas equivalent of the biogas, in million cubic feet (Mft ³)	9.03 Mft ³ 5.78 Mft ³	6.0 to 9.5 Mft ³ 3.8 to 6.1 Mft ³
6) Power Produced	Power produced from cogeneration of biogas and purchased natural gas - in kilowatt hours. Power produced from cogeneration of biogas and delivered to the grid Cogeneration system runtime on biogas, <i>in hours (hrs.); % time during month</i> Biogas value (natural gas cost equivalent).	450,054 kWh 14,341 kW 674 hrs; 90.6% \$33,112	380 to 480,000 kWh 35,000 to 65,000 kWh 558 hrs.; 75% \$25,000 to \$45,000
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.	\$3,500 /Mg 1,494 kWh/Mg	\$3,500-\$5,500/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 = 48.25 hrs External = 0	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);	923 hrs 543 hrs (95.2%) 26.0 hrs (2.7%) 1.7	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>	21 hr; (1,303.75) 0.6%; (1.4%)	< 5%

CMSA CY20 PERFORMANCE METRICS – December 2020

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	370	150-750
3) Process Control Analyses	# of analyses by the CMSA laboratory for process control monitoring	1,719	400-1,250
4) Contract Laboratory Analyses	# of analyses by contract laboratories for regulatory compliance reporting	39	0-50
5) Quality Control Testing	# of CMSA performed laboratory analyses for QA/QC purposes	625	100-300
6) Water Quality Sample Analyses	# of ammonia, total and fecal coliform, enterococcus, and/or sulfide analyses performed for the CMSA member agencies	48	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 – 293 businesses regulated	48	variable
8) FOG Program Inspections	Inspections of food service establishments (FSEs) in the Almonte, TCSD, SD2, RVSD, SRSD, and LGVSD service areas – approx. 311 FSEs are regulated and 25 FSEs have waivers.	0	20 – 50
9) Permits Issued/Renewed	Permits issued for the pretreatment, pollution prevention, and FOG source control programs, and for groundwater discharge	2	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>	0; <i>(0)</i>	3,000/year
2) School Events	Participation or sponsorship in school outreach events; attendees; <i>(YTD)</i>	310; <i>(2,386)</i>	variable
3) Agency Tours	Tours given to students and the public; # of people, <i>(YTD)</i>	0; <i>(75)</i>	variable
4) Odor Notifications	Number of odor alerts posted to the Agency website	3	1-10
5) Odor Complaints	Number of odor complaints received from the public	0	0



BOARD MEMORANDUM

January 7, 2021

To: CMSA Commissioners and Alternates

From: Kevin Lewis, Assistant Maintenance Supervisor

Approved: Jason Dow, General Manager

Subject: FY21 Asset Management Program 2nd Quarter Report

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

Summary: For ten years, since February 2011, staff has provided the Board with periodic reports to highlight the Agency's fully implemented Asset Management Program (Program) work activities. Staff publishes quarterly Asset Management (AM) reports in October, January, and April, and the annual report is presented in July.

First Quarter Highlights

1. Motor Operated Valve Replacements for Five Sodium Hypochlorite Storage Tanks – Sodium Hypochlorite is a liquid disinfectant used by the Agency to reduce and/or eliminate harmful microorganisms in treated wastewater prior to discharge into the San Francisco Bay. CMSA has five 6,000-gallon hypochlorite storage tanks and its disbursement is controlled automatically by motor operated diaphragm valves (MOV) that open and close based on a pre-set level within each tank. The original MOV's were installed in the late 1990's during the conversion from gaseous chlorine to hypochlorite, a safer liquid disinfectant. All five MOV's were reaching the end of their life cycles at 20 years in operation, were no longer supported by their manufacturer or aftermarket equipment suppliers and were no longer compatible with current command and control technology protocols. A FY20 capital project was recently completed that involved replacing the original MOV's with Rotork units. To mount the new Rotork MOV's to the floor, Agency technicians fabricated custom brackets. Once the piping and electrical connections were completed and the equipment tested for leaks, the valves were programmed and placed into automatic operation mode.
2. Carrier Water Pumps – The three originally installed carrier water pumps were sized for their original intended use which was to deliver a chlorine solution for both on and off site odor control purposes and to convey disinfection and dechlorination solutions to various onsite injection locations. In the late 1990's, the use of a chlorine solution for offsite odor control

was replaced by targeted Hydrogen Peroxide injection stations, and later augmented in the early 2,000's with Calcium Nitrate injection stations. This two phased odor control project and the addition of chemical induction mixers in 2010 ahead of the chlorine contact tanks for disinfection, shifted the way carrier water was being used for Agency business. By 2019, these 40hp pumps were oversized for Agency needs and they also relied on 30 plus year old command and control technology. An FY20 capital project was recently completed that involved replacing the original pumps with new right sized 5hp energy efficient pumps that were also controlled by variable frequency drive units. Staff removed one pump at a time, the new pumps were fastened to the old pump pedestals, the supply and discharge piping was custom fabricated and welded into place, new variable frequency drives were installed for the smaller motors to improve electrical efficiency.

3. **Biotower Odor Mister Pump** – The biotowers stationary odor misting system pumps a masking agent to cover up or disguise unpleasant odors through a series of misting nozzles at a very high pressure. Recently, several components within the mister's pump unit failed, necessitating a complete replacement. Staff worked with the system vendor to select a new and more robust pump system. Before the new pump was installed, staff reconfigured the misting nozzle piping, installed a multistage reclaimed water filtration system, and fabricated new stainless-steel mounting brackets.

Asset Inventory

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, 22 items were entered, reclassified, or removed from the CMMS asset tree this past quarter.

Asset Locations	Total Assets
CMSA	2,455
Sanitary District No. 2	381
San Quentin Prison Pump Station	31
San Quentin Village Sewer Maintenance District	16

Parts Inventory

The parts inventory is comprised of critical spare parts and equipment, and consumable items for Agency and managed pump station assets – 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 their San Quentin pump station.

Parts Inventory	Parts Quantity	Total Value
CMSA	26,930	\$1,636,031
Sanitary District No. 2	270	\$207,486
San Quentin Prison	41	\$60,386
San Quentin Village	2	\$1,331

Asset Improvements, Repairs, and Refurbishment Work

1) CMSA Construction Project Work

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

There were no construction projects this past quarter at CMSA.

2) CMSA Asset Management Improvements

Projects in the table below are considered routine, recurring, and usual maintenance work for the preservation, protection, or replacement 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
General Facility	Lights and Fixtures	Upgrade to LED lighting	\$30,775	Incandescent and fluorescent fixtures by LED replacements.
Headworks	Influent Screens	Conduit replacement	\$2,218	Replaced corroded explosion-proof conduit fittings. Treated replacement junction box with Flex Seal.
Headworks	Grit Classifiers	Coating project	\$20,641	Cleaned, prepped, and coated all five grit classifiers.
Primary Clarifier	Primary No. 4	Annual PM	\$3,003	Inspected and adjusted tanks, chains, flights, pumps, and drives; replaced 8 flights.
Biotowers	Odor Mister	Pump unit replacement	\$6,685	Replaced failed pump unit and installed filter system.
Secondary Clarifiers	Scum Pump No. 2	Valves	\$2,702	Replaced failed isolation and check valve.
Solids Handling	MCC	Annual PM	\$2,447	Completed annual electrical PM.

Area	Equipment	Improvement	Total Cost	Comments
Solids Handling	Centrifuge No. 1	VFD replacement	\$3,477	Replaced failed drive motor VFD with critical spare.
Solids Handling	Centrifuge No. 2	Bearing replacements	\$11,833	Replaced seals and bearings for bowl and scroll.
Solids Handling Energy Generation	Boilers Nos. 1 and 2	Annual PM	\$5,337	Cleaned and inspected the fire box and tubes; cleaned, inspected and tuned the burner units.
Solids Handling Energy Generation	Biogas Dryer	Compressor replacement	\$4,861	Replaced refrigeration compressor and charged system with refrigerant.
Solids Handling Energy Generation	Cogenerator	Cylinder head replacements	\$13,884	Replaced two separate cylinder heads due to valve and seat wear.
Digesters	MCC	Annual PM	\$2,182	Completed annual electrical PM.
Organic Waste Receiving Facility	Paddle Finisher Feed Pump	Hose replacements	\$7,648	Replaced EPDM hose and hose lubricant on two separate occasions.
Organic Waste Receiving Facility	Digester Feed Pump	Hose replacements	\$2,382	Replaced EPDM hose and hose lubricant on two separate occasions.
Organic Waste Receiving Facility	Odor Scrubber	Fan motor VFD	\$3,928	Installed VFD on fan motor to control speed based on tank level.
Organic Waste Receiving Facility	Slurry Mixing Pump No. 2	New impeller	\$3,084	Installed new impeller.
Disinfection and Dechlorination	Tank Valve Operators	Replaced five MOV's	\$79,366	Hypochlorite tank MOV's, bulkhead fittings, and flexible tubing.
Disinfection and Dechlorination	CCTs Nos.1-4	Annual PM	\$2,440	Replaced O-rings in scum skimmer telescoping valves; replaced corroded thrust bushings.
Disinfection and Dechlorination	Carrier Water Pumps	Replaced pumps and controls	\$65,596	40hp pumps replaced by 5hp pumps and VFD drive units.
Effluent Sampling	PH Measuring Equipment	Sensor replacement	\$4,400	Replaced sensors and salt bridges for units 1 & 2.

Area	Equipment	Improvement	Total Cost	Comments
Offsite Odor Control	Variable Frequency Drive Units	Replaced drive units	\$13,781	VFD units replaced with current VFD technology.

3) CMSA Maintained Assets (San Quentin Prison, Sanitary District No. 2, and San Quentin Village)

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

Asset Owner	Asset	Improvement	Total Cost	Comment
SQSP	Electrical Systems & Controls	Replaced MCC, controls and VFDs	\$16,536	*CMSA managed this construction project. Wet well level indicating equipment also replaced.
SD2	Paradise PS	Pump No.5 refurbishment	\$39,126	Installed impeller, wear ring, and volute.
SD2	Paradise PS	Washdown Piping	\$1,701	Replaced failing copper water line with PVC in the wet well.
SD2	Emergency Generator	Annual Service	\$3,577	Contracted annual generator service; replaced oil, coolant, and fuel filters; changed engine oil and inspected the unit.
SD2	Pixley PS	Added a standalone portable emergency generator	\$9,648	Installed trailer mounted generator and transfer switch, added quick connect plugs. Display information in SCADA.

* Operations and Maintenance Department labor costs only

Work Orders – Second Quarter FY21

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)	287	48.48%	2334.00	23.20%
Corrective-Planned	198	33.45%	1620.75	16.11%
Corrective-Unplanned	47	4.22%	77.50	0.77%
Improvement Project Work	3	0.51%	257.50	2.56%
Coating Projects	2	0.34%	281.00	2.79%
Safety	16	2.70%	89.75	0.89%
Professional Development/Staff Meetings	15	2.53%	164.00	1.63%
Facilities Administration/Housekeeping	32	5.41%	1196.75	11.89%
Process Control and Facility Operations	14	2.36%	4,040.75	40.16%
Total	592	100%	10062.00	100%



BOARD MEMORANDUM

January 7, 2021

To: CMSA Commissioners and Alternates

From: Mark Koekemoer, Regulatory Compliance Manager

Approved: Jason Dow, General Manager

Subject: Analytical Laboratory Services Agreement

Recommendation: Approve the Analytical Laboratory Services Agreement with Alpha Analytical Laboratories, and authorize the General Manager to sign it.

Discussion: Staff has completed a Request for Proposal (RFP) based evaluation process to select an analytical laboratory for certain NPDES permit and source control analyses. At the beginning of this process four laboratories were contacted for staff to ascertain their interest in providing the laboratory services. These included Alpha Analytical Laboratories (Alpha), Caltest Analytical Laboratory (Caltest), TestAmerica Laboratory (Eurofins), and Brelje and Race Laboratory (B&R). Eurofins was non-responsive. Requests for Proposals were provided to Alpha, Caltest, and B&R, of which Alpha and Caltest submitted proposals. Staff evaluated the two proposals by reviewing analytical cost estimates, conducting professional reference checks, and sending split samples for analysis to assess laboratory testing performance and quality.

Professional references were contacted and provided positive feedback on services rendered and support services, such as sample pickup, reporting, and invoicing. Some references also indicated that laboratory contracting services have been setup with multiple laboratories for turnaround, detection limit, and analytical experience purposes. Similarly, CMSA intends to have laboratory service contracts with several regional laboratories for specific purposes, and will bring each to the Board for consideration of approval. The proposed agreement with Alpha Analytical is the first such contract.

Alpha will provide analytical results and invoicing within ten business days. Reporting will be provided in an electronic format which can be imported into CMSA's Laboratory Information Management System (LIMS). This will save valuable data entry time and reduce potential transcription errors.

Fiscal Impact: Alpha Analytical's two-year estimated service fee is \$61,020, or approximately \$30,510 per year. The Agency's FY21 operating budget for contract analytical services is \$77,449. Staff estimates the annual Alpha service fee and those of other contract laboratories will be approximately \$66,631.

Attachment:

- Analytical Laboratory Services Agreement with Alpha Analytical Laboratories

**CENTRAL MARIN SANITATION AGENCY
ANALYTICAL LABORATORY SERVICES****PROFESSIONAL SERVICES AGREEMENT**

This Professional Services Agreement (hereinafter "Agreement") is made and entered into this **12th** day of **January, 2021** by and between the Central Marin Sanitation Agency (hereinafter referred to as "Agency") and Alpha Analytical Laboratories, Inc. (hereinafter referred to as "Laboratory").

RECITALS:

WHEREAS, Laboratory has represented it is a duly qualified analytical laboratory experienced in conducting certified laboratory analytical tests and services (hereinafter referred to as "Services"); and

WHEREAS, in the judgement of the CMSA Commission it is necessary and desirable to employ the services of Laboratory to perform laboratory analyses required with NPDES Permit and/or Pretreatment regulations.

NOW, THEREFORE, for and in consideration of the promises contained herein, and the payments to be made by Agency, the parties agree to the following:

1. LABORATORY'S SCOPE OF SERVICES:

Laboratory shall provide the Services described in **Exhibit A** attached hereto and by this reference made a part of this Agreement. CMSA requires notification if our analyses are to be subcontracted to another laboratory at any time, and reserves final rights of refusal. If the Agency desires to engage Laboratory to perform optional or additional services, the Agency and Laboratory will prepare and execute an amendment to this Agreement for the performance of the optional or additional services.

2. AGENCY'S OBLIGATIONS:

The Agency shall:

- (A) Provide access to and make provisions for the Laboratory to enter the Agency's facilities as needed by Laboratory in order for it to perform the Services, subject only to Laboratory providing the Agency with reasonable advance notice of its need for access to one or more of the Agency's facilities.
- (B) Make available to Laboratory all pertinent data, contract documents, record drawings, reports, studies, and other records (hereinafter collectively "Information") requested by Laboratory for its review and use, and reliance in its performance of the Services.

- (C) Provide review comments on project deliverables per the agreed upon activity and project schedules.

3. FEES:

The fees for furnishing the Services to be performed under this Agreement are set forth in the fee and task proposal which is attached hereto as **Exhibit B** and by this reference incorporated herein and made a part of this Agreement. Said fees shall remain in effect for the entire term of the Agreement. If there is a problem with results due to Laboratory's error, re-analysis and resubmittal of reports shall be done at no further charge to CMSA.

If during the performance of the Services, Laboratory makes a good faith determination that there will be a balance remaining in a task upon its completion, the Laboratory, with the Agency's prior agreement, which shall not be unreasonably withheld, may reallocate that amount among other tasks that have not been completed but have exceeded or are estimated to exceed the amount originally allocated for those tasks.

a. Discount Schedule:

Payment for results not received according to the above shall be discounted as follows:

Metals, cyanide, and nutrient results received:

- 13-17 working days after receipt of samples: minus 25%
- 18-22 working days after receipt of samples: minus 50%
- 23-27 working days after receipt of samples: minus 75%

All other analyses received:

- 18-22 working days after receipt of samples: minus 25%
- 23-27 working days after receipt of samples: minus 50%
- 28-33 working days after receipt of samples: minus 75%

Exceptions to the above are:

If STLC were to be requested (usually for biosolids disposal), these orders would take longer than other analyses and therefore typically require an additional five days of turnaround time. This is due in part to the 48-hour extraction process, followed by a rigorous, labor intensive filtration process, and only then subsequent conventional extraction, digestion, and analyses.

Biosolids projects with multiple organics analyses require an additional 10 days of

turnaround time, or 27 days to report results without penalty, as extracts are often run through the instrument multiple times due to matrix interferences and re-runs at dilution. CMSA agrees that, if one or a few analyses will not be completed by the time in the discount schedule, due to sample matrix difficulties, the rest of the data from the list can be submitted even if the entire list is not complete. The only item(s) to be discounted will be those that are submitted after the time in the discounting schedule.

4. PAYMENT:

The Agency shall pay Laboratory for proper performance of the Services according to the fee schedule set forth in **Exhibit B**. On a monthly basis, Laboratory will provide the Agency with a written invoice setting forth the reimbursable analytical services incurred during that month together with supporting documentation as requested by the Agency. The fees for services under this Agreement shall be due within thirty (30) calendar days after approval by the Agency of the invoice covering the services and reimbursable expenses.

5. AGREEMENT TIME:

This Agreement shall commence on **January 12, 2021** and shall terminate on **January 11, 2023**. Time is of the essence with respect to this Agreement. This Agreement's Time may be extended by mutual agreement of the parties, consumer price adjusted (CPI) in 1-year increments.

6. INSURANCE:

The Laboratory shall procure and maintain at all times during the performance of the Agreement at its expense the following insurances:

- (A)(i) **Workers' Compensation and Employer's Liability Insurance** for protection of Laboratory's employees as required by the State of California and as will protect Laboratory from loss or damage because of personal injuries, including death to any of its employees. Employers Liability insurance shall be provided in amounts not less than:

\$1,000,000 each accident for bodily injury

\$1,000,000 each employee for bodily injury by disease

\$1,000,000 policy limit for bodily injury by disease

- (A)(ii) **Comprehensive Automobile Liability Insurance** shall provide coverage for bodily injury and property damage liability. This policy shall protect Laboratory against all liability arising out of the use of owned or leased automobiles both passenger and commercial. Automobiles, trucks, and other vehicles and equipment (owned, not owned, or hired, licensed or unlicensed for road use) shall be covered under this policy. Limits of liability for Comprehensive Automobile Liability Insurance shall not be less than \$1,000,000 per accident for bodily injury and property damage.

(A)(iii) **Comprehensive General Liability Insurance** as will protect Laboratory and the Agency from any and all claims for damages or personal injuries, including death, which may be suffered by persons, or for damages to or destruction to the property of others, which may arise from the Laboratory's Services under this Agreement. Said insurance shall provide a minimum of \$1,000,000 Combined Single Limit coverage for personal injury, bodily injury, and property damage for each occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately for this Agreement or the general aggregate limit shall be twice the required occurrence limit. Such insurance will insure Laboratory and the Agency from any and all claims arising from the following:

1. Personal injury;
2. Bodily injury;
3. Property damage;
4. Broad form property damage;
5. Independent contractors;
6. Blanket contractual liability.

(A)(iv) **Professional Liability Insurance** shall protect Laboratory from claims arising out of negligent acts, errors or omissions of Laboratory in the performance of the Service in an amount of not less than \$1,000,000. The policy shall cover the indemnity provisions under this Agreement. Laboratory shall maintain this insurance for twelve (12) months after the Services required under this Agreement have been completed.

(B) Laboratory agrees to procure and maintain such insurances at Laboratory's expense in full force and effect in a company or companies satisfactory to the Agency. All coverage shall remain in effect until completion of the Services.

(C) Laboratory will furnish the Agency with certificates of insurance issued by Laboratory's insurance carrier(s) and countersigned by an authorized agent or representative of the insurance company. The certificates shall show that the insurance will not be cancelled, altered, or reduced without at least ten (10) days' prior written notice to the Agency. The certificates for liability insurance will show that liability assumed under this Agreement is included.

(D) Laboratory hereby grants to CMSA a waiver of any right to subrogation which any insurer of said Laboratory may acquire against CMSA by virtue of the payment of any loss under such insurance. Laboratory agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the CMSA has received a waiver of subrogation endorsement from the insurer.

(E) The general liability and automobile liability insurance policies shall contain or be endorsed to contain the following provisions:

- (i) The Agency, its members including San Rafael Sanitation District, Ross Valley Sanitary District, Sanitary District No. 2 of Marin County, the City of San Rafael, the Town of Corte Madera, their respective commissioners, directors, councilmembers, officers, officials, employees and volunteers are to be

covered as additional insured as respects: liability arising out of activities performed by or on behalf of the Laboratory; products and completed operations of the Laboratory; premises owned, occupied or used by the Laboratory; or automobiles owned, leased, hired or borrowed by the Laboratory. The coverage shall contain no special limitations on the scope of protection afforded to the Agency, its members including San Rafael Sanitation District, Ross Valley Sanitary District, Sanitary District No. 2 of Marin County, the City of San Rafael, the Town of Corte Madera, their respective commissioners, directors, councilmembers officers, officials, employees and volunteers.

- (ii) For any claims related to this Agreement, the Laboratory's insurance coverage shall be primary insurance as respects the Agency, its members including San Rafael Sanitation District, Ross Valley Sanitary District, Sanitary District No. 2 of Marin County, the City of San Rafael, the Town of Corte Madera, their respective commissioners, directors, councilmembers, officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the Agency, its members including San Rafael Sanitation District, Ross Valley Sanitary District, Sanitary District No. 2 of Marin County, the City of San Rafael, the Town of Corte Madera, their respective commissioners, directors, councilmembers, officers, officials, employees and volunteers shall be excess of the Laboratory's insurance and shall not contribute to it.
- (iii) The Laboratory's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- (iv) Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party except after ten (10) days' prior written notice by mail, has been given to the Agency. Laboratory agrees to provide notification to the Agency in the event the insurance policies are suspended, voided, or reduced in coverage or limits.

- (F) Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to CMSA.

Failure to provide and maintain the insurance required by this Agreement will constitute a material breach of this Agreement. In addition to any other available remedies, Agency may suspend payment to the Laboratory for any services provided during any time that insurance was not in effect and until such time as the Laboratory provides adequate evidence that Laboratory has obtained the required insurance coverage.

CMSA, at its discretion, may waive insurance requirements or reduce the above stated coverage limits based on the Laboratory's scope of work and complexity of the associated tasks.

7. NONDISCRIMINATORY EMPLOYMENT:

The Laboratory and/or any permitted sub-Laboratory, shall not unlawfully discriminate against any individual based on race, color, religion, nationality, sex, sexual orientation, age, condition of disability, or other protected category. Laboratory and/or any permitted sub-Laboratory understands and agrees that Laboratory and/or any permitted sub-Laboratory is bound by and will comply with the nondiscrimination mandates of all federal, state and local statutes, regulations and ordinances.

8. LICENSING AND PERMITS:

The Laboratory shall procure and maintain as required the appropriate licenses and permits required to perform the Services throughout the life of this Agreement.

9. BOOKS OF RECORD AND AUDIT PROVISION:

The Laboratory shall maintain on a current basis complete books, analytical records and supporting documentation relating to this Agreement and the Services performed. Such records shall include, but not be limited to, documents supporting all billings to the Agency for the Services performed. The books and records shall be original entry books with a general ledger itemizing all debits and credits for the work on this Agreement. In addition, Laboratory shall maintain detailed payroll records including all subsistence, travel and field expenses, and canceled checks, receipts and invoices for all items. These documents and records shall be retained for at least five years from the completion of this Agreement. Laboratory will permit Agency to audit all books, accounts or records relating to this Agreement or all books, accounts or records of any business entities controlled by Laboratory who participated in this Agreement in any way. Any audit may be conducted on Laboratory's premises or, at Agency's option, Laboratory shall provide all books and records within a maximum of fifteen (15) days upon receipt of written notice from Agency. Laboratory shall refund any moneys erroneously charged.

10. TITLE TO INFORMATION & DOCUMENTS:

It is understood that any and all documents, including but not limited to Information, documents, and reports concerning this Agreement's Services prepared by and/or submitted to the Laboratory, shall be the property of the Agency. The Agency may provide the Laboratory's work product(s) to another person or entity in the future for a separate specific assignment. However, Laboratory retains all intellectual property rights, including copyrights, applicable to its work. The Laboratory may retain reproducible copies of the documents that it prepares as part of the Services. In the event of the termination of this Agreement, for any reason whatever, Laboratory shall promptly deliver all Information, including but not limited to writings, plans, reports and other documents to Agency without exception or reservation.

11. TERMINATION:

- (A) **Notice to Cure.** If the Laboratory at any time fails to properly and diligently perform the Services covered by the Agreement, or has committed a material breach of a provision of this Agreement, the Agency shall give the Laboratory written notice that within two (2) working days of its receipt of said notice, Laboratory shall commence and continue satisfactory correction of such default or breach with diligence and promptness.
- (B) **Laboratory Default.** If Laboratory fails to commence, within two (2) working days after receipt from the Agency of the notice issued under the above paragraph (A) and diligently thereafter, to correct the default or breach, then the Agency may pursue any remedies available by common law, statute, or this Agreement, including, but not limited to, one or more of the following:
- (i) withhold any sums due or thereafter to become due to Laboratory under the Agreement and during such period such withheld amounts shall not accrue interest; or
 - (ii) terminate the Agreement.

Within seven (7) business days of Laboratory's correction of the default or breach, the Agency shall release to the Laboratory any monies withheld.

- (C) **Termination for Convenience.** The Agency may for its convenience and at any time and for any reason terminate Laboratory's Services and this Agreement. For example, if Laboratory misses the analysis submittal time limits three or more times in any six-month period, CMSA may terminate the contract immediately. Termination shall be by service of written notice to Laboratory at its address for notice set forth below. Upon receipt of such notice, Laboratory shall, unless the notice directs otherwise, immediately discontinue performing the Services.

Upon such termination, sub-laboratories shall be entitled to payment only for the Services completed as of the date of termination pursuant to the Agreement.

Laboratory shall not be entitled to any claim or claim for any additional compensation, lost profit, or other damages in the event of such termination.

12. RELATIONSHIP BETWEEN THE PARTIES:

It is expressly understood that in the performances of the Services herein, the Laboratory, and the agents and employees thereof, shall act as an independent contractor and not as officers, employees or agents of the Agency. Laboratory shall be solely responsible to pay all required taxes, including but not limited to, all withholding social security, and worker's compensation for its employees.

13. AMENDMENT:

This Agreement may be amended or modified only by written agreement of all parties.

14. ASSIGNMENT OF SERVICES AND PERSONNEL:

The Laboratory shall not subcontract or assign any portion of the Services required to be performed pursuant to this Agreement without the prior written approval of the Agency. Further, Laboratory shall not substitute any personnel for those specifically named in its proposal unless personnel with substantially equal or better qualifications and experience are provided and are acceptable to Agency, as is evidenced in writing.

15. JURISDICTION AND VENUE:

This Agreement shall be construed in accordance with the laws of the State of California and the parties hereto agree that venue shall be in Marin County, California.

16. INDEMNIFICATION:

Laboratory shall indemnify, defend, and hold harmless the Agency, its members including San Rafael Sanitation District, Ross Valley Sanitary District, Sanitary District No. 2 of Marin County, the City of San Rafael, the Town of Corte Madera, and their respective commissioners, directors, councilmembers, officers, officials, and employees (collectively "Indemnitees") from any and all claims for damages including, but not limited to, money, expenses, and/or losses (collectively "Claim") to the extent Claim arises from Laboratory's negligence, recklessness, and/or willful misconduct in the performance of the Services under this Agreement.

Notwithstanding the foregoing, for any Claim alleging Laboratory's negligence, recklessness, and/or willful misconduct, Laboratory's obligations and liability for costs of the Indemnitees' defense shall not exceed the Laboratory's proportionate percentage of fault for the Claim.

17. STANDARD OF CARE:

Laboratory shall complete the services required hereunder in accordance with the prevailing standard of care by exercising the skill and ability ordinarily required to perform the same or similar services, under the same or similar circumstances, in the State of California. Laboratory shall, at no cost to the Agency, re-perform any part of the services which fail to satisfy the foregoing standard of care.

18. THIRD PARTIES:

The services to be performed by Laboratory are intended solely for the benefit of Agency and its members. No person or entity not a signatory to this Agreement shall be entitled to rely on Laboratory's performance of its services hereunder, and no right to assert a claim against Laboratory by assignment of indemnity rights or otherwise shall accrue to a third party as a result of this Agreement or the performance of Laboratory's services hereunder.

19. FORCE MAJEURE:

Neither Laboratory nor Agency shall be considered to be in default of this Agreement if delays in or failure of performance shall be due to uncontrollable forces, the effect of which, by the exercise of reasonable diligence, the nonperforming party could not avoid. The term "uncontrollable forces" shall mean any event which results in the prevention or delay of performance by a party of its obligations under this Agreement and which is beyond the control of the nonperforming party. It includes, but is not limited to, fire, flood, earthquake, storms, lightening, epidemic, war, riot, civil disturbance, sabotage, inability to procure permits, licenses, or authorizations from any state, local, or federal agency or person for any of the supplies, materials, accesses, or services required to be provided by either Laboratory or Agency under this Agreement, strikes, work slowdowns or other labor disturbances, and judicial restraint.

20. COMPLIANCE WITH APPLICABLE LAWS:

In performance of the services, Laboratory will comply with applicable regulatory requirements including federal, state, and local laws, rules, regulations, orders, codes, criteria, and standards.

21. WAIVER:

A waiver by either the Agency or Laboratory of any breach of this Agreement shall not be binding upon the waiving party unless such waiver is in writing and executed by the waiving party. In the event of a written waiver, such a waiver shall not affect the waiving party's rights with respect to any other or further breach.

22. SEVERABILITY:

The invalidity, illegality, or unenforceability of any provision of this Agreement, or the occurrence of any event rendering any portion or provision of this Agreement void, shall in no way affect the validity or enforceability of any other portion or provision of the Agreement. Any void provision shall be deemed severed from the Agreement and the balance of the Agreement shall be construed and enforced as if the Agreement did not contain the particular portion or provision held to be void.

23. INTEGRATION:

This Agreement supersedes all prior agreements, contracts, proposals, representations, negotiations, letters, or other communications between the Laboratory and Agency pertaining to this Agreement and the Services to be performed, whether written or oral.

24. NOTICES AND DESIGNATED REPRESENTATIVES:

Mark D. Koekemoer, Regulatory Compliance Manager, is the designated representative for CMSA and will administer this Agreement for CMSA. Robbie Phillips, President, is the

designated representative for the Laboratory. Changes in designated representatives shall occur only by advance written notice to the other party.

All invoices shall be submitted and approved by the designated Agency representative and all notices shall be given to Agency at the following location:

1301 Andersen Drive
San Rafael, CA 94901
(415) 459-1455

Notices shall be given to Laboratory at the following address:

Alpha Analytical Laboratories, Inc.
262 Rickenbacker Circle
Livermore, CA 94551
(925) 828-6226

IN WITNESS WHEREOF, the parties hereunto have executed this Agreement on the date first above written.

APPROVED BY:

CENTRAL MARIN SANITATION AGENCY:

Jason R. Dow, General Manager

LABORATORY:

Robbie Phillips, President

Federal Tax ID #: 68-0002439

EXHIBIT A

Scope of Services

CMSA requires notification if Laboratory's analyses are to be subcontracted to another laboratory at any time and reserves final rights of refusal. The following information and documentation shall be provided with all reported analytical sample results.

1. A cover page with the laboratory information, address and signature of person authorized to report the analytical data.
2. Documentation regarding the sample conditions on arrival at the laboratory. A complete copy of the cooler receipt forms shall be provided with the laboratory data report packages.
3. For each analytical method, the laboratory shall report all detected analytes above the 40 CFR 136, Appendix B Method Detection Limit (MDL) or the Laboratory's Reporting Limit (RL). RLs and MDLS shall be reported for all analytes.
4. All sludge/soil samples shall be reported on a wet weight basis unless dry weight reporting is requested by CMSA.
5. Dilution factors, date of extraction/preparation, and the date of analysis shall be reported for each analyte and method.
6. Method blank reporting shall include all analytes for each analytical method. Analytical results for each sample shall be clearly associated with a particular method blank. Any detected concentration found in method blanks shall be reported. Concentrations reported below the RL are necessary to evaluate low-level determinations of target compounds in samples.
7. Recoveries for surrogate spikes and internal standards shall be reported for all applicable methods. The report shall also specify the control limits for the surrogates and internal standards recoveries.
8. Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries shall be reported for analyses as appropriate for the method. All sample results shall be designated as corresponding to a particular set of MS/MSD analyses. The report shall also specify control limits for spike recoveries and the Relative Percent Difference (RPD) for each spiked analyte.
9. Results for laboratory duplicates shall be reported with RPD limits for duplicate analyses and control limits.
10. Laboratory Control Spike (LCS) results shall be reported with control limits for LCS analyses. Analytical results for each sample shall be clearly associated with a particular LCS sample.
11. Initial Calibration Check/Verification and Continuing Calibration Check/Verification results shall be reported for analyses as appropriate for the method. The report shall also specify the control limits for the calibration check recoveries.
12. Submission of data with Electronic Data Deliverable (EDD) is required for all analyses performed. EDDs are typically transmitted as an Excel or csv file. The EDD shall contain the fields listed in Import Specifications for Analytical Data section below.

Import Specifications for Analytical Data

Introduction

This attachment explains the processes used to transfer data between CMSA and the Laboratory when analyses are subcontracted. Data is transferred using specifically formatted files that are generated by the subcontract facility and imported into the CMSA Laboratory Information Management System (LIMS), Element. The ability to transfer files permits information and data transmission with decreased manual processing, time requirement, and transcription error. This attachment outlines two options for data transfer.

Option 1 - In-network subcontract laboratory

In-Network Subcontract laboratories are limited to any laboratory that uses Element as their LIMS.

Process Samples

Once samples are received from CMSA, samples are processed, and all procedural steps are represented in Element. The samples will go through to completion following the status-driven progression until they achieve an Analyzed status. At that time, the data is ready for delivery to CMSA using an mdb transfer file format.

Create .mdb Transfer File

A Sample Autolog file will be generated by the Laboratory as a data deliverable to CMSA. More than one Transfer File may be included in a Report or EDD format. Transfer files can be generated using either manual or automated processes. Through the Project dialog custom report options can be defined to generate and send the transfer file. The files can be transferred using either email or ClientConnect. The following steps describe how to generate a transfer file manually.

1. From the Report dialog, select the work orders that will be included in the Transfer File.
2. If the contact laboratory is a Network Laboratory, click the **Final** button to create a transfer file. If the client has not been marked as a Network Laboratory, select the EDD format **TRANSFER FILE with Work Order** and click on **Final** to create transfer file.
3. An .mdb transfer file will be created, and automatically placed in the TransferOut directory.
4. The file name is based on the Sample Name field on the samples dialog. The file name will reference a valid Element lab number. Work orders created by Autolog file import will be in the correct format.
5. From the file summary dialog, the file may be emailed to contracting lab for generation of a final client report.

Option 2 - Non-network subcontract laboratory

A subcontract laboratory can populate a specifically formatted template, and provide this format to the subcontracting facility, for file conversion into a system-compatible transfer file. The transfer file will be generated by the Laboratory as an EDD format from their LIMS or manually

populated using a template file. The template file needs to be in either Microsoft® Excel® or Microsoft® Access®.

The template format consists of the following three tables, each on their own worksheet:

- **SAMPDATA:** This table contains analytical data for client samples submitted by the subcontracting laboratory. This includes results and recoveries for surrogate compounds in client samples.
- **QC DATA:** This table contains analytical data and QC calculations for QC samples such as Blanks, Duplicates, Matrix Spikes, Blanks Spikes, Reference Samples and Post Digestion Spikes. If a subcontract lab does not include QC data, this table can be left blank.
- **LNOTE:** This table contains codes and corresponding text to be associated with any qualifiers included in the SAMPDATA and QC DATA tables. If no qualifiers were used, this table can be left blank.

Transfer file data fields

The three worksheets comprise the active areas of the template. Each template worksheet contains specific fields, all relating to the produced analytical data results. The fields of each worksheet are identified in table format presented below. Each of the three worksheets contains their own table of field definitions. When filling out the template, not all fields will be required, or contain data. If no information is available for a specific column, the column header will still need to remain intact.

Each table contains the following column headers:

- **Field:** Name of the field as it appears in the worksheet
- **Type/Size:** Field type, and amount of characters allowed for each field entry
- **Required:** Indicates that the field is required. This data must be provided in order for the transfer file conversion to take place.
- **Note:** Although not all fields are required, adding optional field information is highly recommended.
- **Definition:** Definitions of the information that is to be entered into each field

The Primary Key fields for each table are presented in bold for all three tables. The combination of the primary key fields for each record in the table must make that record unique within that table.

Table 1 – SAMPDATA

SAMPDATA Field	Type/ Size	Required	Definition
CLIENT	TEXT(50)	NO	Name of laboratory where the work originated.
PROJECT	TEXT(50)	NO	Project name at originating laboratory.
PROJECTNUM	TEXT(50)	NO	Project number at originating laboratory.
LABNAME	TEXT(50)	YES	Name of subcontract laboratory.
SAMPLENAME	TEXT(13)	YES	Lab Sample ID from originating lab. The values that come from the Element LIMS are 10 characters long with the exception of RE samples which are 13.

LABSAMPID	TEXT(15)	YES	Lab Sample ID from subcontract lab.
MATRIX	TEXT(10)	YES	Sample Matrix (i.e. soil, water)
SAMPDATE	DATE/TIME	NO	Sampling Date
PREPDATE	DATE/TIME	YES	Date the sample was prepared by the PREPNAME associated with the record.
ANADATE	DATE/TIME	YES	Date the sample was analyzed by the METHODCODE for ANALYTE associated with the record.
BATCH	TEXT(10)	YES	Preparation batch code used to associate client samples with their associated QC samples. Can be NA if batch QC not done.
ANALYSIS	TEXT(50)	YES	Name of the analysis test code.
ANACODE	TEXT(50)	NO	Code associated with the analysis.
METHODCODE	TEXT(50)	YES	Analysis method citation for the analytical method (example EPA 8260B). Maps to SpecificMethod field in Element.
METHODNAME	TEXT(100)	YES	Unique string identifying an analytical method (example: 8260BVOA - Full List). Maps to GeneralMethod field in Element.
DESCRIPTION	TEXT(50)	NO	Analytical method description.
PREPNAME	TEXT(20)	YES	Unique string identifying an extraction or preparation (example 3005A-TR). All records need to have a PREPNAME associated with them even if the PREPNAME is something like 'General Prep', 'NONE' or 'NA'.
ANALYTE	TEXT(50)	YES	Analyte Name
ANALYTEORDER	TEXT(4)	NO	Used for sorting order on report.
CASNUMBER	TEXT(20)	NO	Chemical Abstract Services identifier for the ANALYTE.
SURROGATE	BIT	YES	Indicates if an ANALYTE is a surrogate compound. 1 = TRUE, 0 = FALSE.
RESULT	TEXT(40)	YES	Text final result formatted to the appropriate number of significant figures. Flags such as 'ND', 'DET', 'PRESENT' or 'ABSENT' may also be used in this field.
DL	TEXT(20)	NO	Final Detection Limit formatted to the appropriate number of significant figures. The DL field may be left blank if it is not applicable.
RL	TEXT(20)	NO	Final Reporting Limit formatted to the appropriate number of significant figures. The RL field should almost always be greater in value than the DL field. It may be left blank for surrogates or other analytes where it is not applicable.
UNITS	TEXT(20)	YES	Units in which RESULT, DL and RL are reported.
BASIS	TEXT(5)	YES	'DRY' if the RESULT is reported on a dry weight basis. 'WET' if the RESULT is reported on a wet weight basis. Otherwise 'NA' (for liquids, etc.).
SOLIDMATRIX	BIT	NO	Indicates if the MATRIX can be dry weight corrected. 1 = TRUE, 0 = FALSE. For example Water would get 0 for FALSE.
DILUTION	TEXT(20)	YES	Dilution factor at which the RESULT was obtained for the corresponding ANALYTE.

SPIKELEVEL	TEXT(20)	NO	Concentration, in the same final units as the RESULT, of surrogate compound that was added to the sample. Surrogate Spikes are the only type of QC included in the SAMPDATA table.
RECOVERY	TEXT(20)	NO	Recovery, in percent, of the surrogate spike compound.
UPPERCL	TEXT(20)	NO	Upper control limit, in percent, for the Surrogate RECOVERY.
LOWERCL	TEXT(20)	NO	Lower control limit, in percent, for the Surrogate RECOVERY.
ANALYST	TEXT(5)	NO	Initials of the analyst responsible for the RESULT.
PSOLIDS	TEXT(20)	NO	Percent Solids (dry weight) of the sample formatted to the appropriate number of significant figures. May be left blank for samples or matrices that are not reported on dry weight basis.
LNOTE	TEXT(20)	NO	Comma-separated string of qualifier codes or footnotes (example: Q1,R-01,P-12,OHT). LNOTE qualifiers are typically reported in the header portion of an analytical report. As such, they should be applicable to all analytes of a given method in the sample. Please repeat the code string for all analytes of the same METHODCODE for the associated SAMPLE. The Codes supplied here must match a descriptive text string in the LNOTE table.
ANOTE	TEXT(20)	NO	Comma-separated string of qualifier codes or footnotes (example: A1,B01,P-3,COMP). ANOTE qualifiers are typically reported next to each individual analyte. As such, they are only applicable to the analyte to which they are assigned. The Codes supplied here must match a descriptive text string in the LNOTE table.
RpToMDL	BIT	NO	Indicates if the RESULT was reported down to the DL level. 1 = TRUE, 0 = FALSE.
UNC	TEXT(20)	NO	Uncertainty associated with the RESULT.
MDA	TEXT (20)	NO	Minimum Detectable Activity, typically imported from Instrument for radiochemistry datasets
CERTSTRING	TEXT (20)	NO	Concatenated certification IDs

Table 2 – QC DATA

QC DATA Field	Type/ Size	Required	Definition
LABNAME	TEXT(50)	YES	Name of subcontract laboratory.
LABSAMPID	TEXT(15)	YES	Lab Sample ID from subcontract lab.
QCTY	TEXT(20)	YES	Specific QC identifier. The following codes must be used to identify the different types of QC samples typically found in an analytical batch: <ul style="list-style-type: none"> • Blank • Duplicate • Matrix Spike • Matrix Spike Dup • LCS • LCS Dup • Post Spike • Reference
MATRIX	TEXT(10)	YES	Sample Matrix (i.e. soil, water)

PREPDATE	DATE/TIME	YES	Date the sample was prepared by the PREPNAME associated with the record.
ANADATE	DATE/TIME	YES	Date the sample was analyzed by the METHODCODE for ANALYTE associated with the record.
BATCH	TEXT(10)	YES	Preparation batch code used to associate client samples with their associated QC samples. Can be NA if batch QC not done.
ANALYSIS	TEXT(50)	YES	Name of the analysis test code.
ANACODE	TEXT(50)	NO	Code associated with the analysis.
METHODCODE	TEXT(50)	YES	Analysis method citation for the analytical method (example EPA 8260B). Maps to SpecificMethod field in Element.
METHODNAME	TEXT(100)	YES	Unique string identifying an analytical method (example: 8260BVOA - Full List). Maps to GeneralMethod field in Element.
DESCRIPTION	TEXT(50)	NO	Analytical method description.
PREPNAME	TEXT(20)	YES	Unique string identifying an extraction or preparation (example 3005A-TR). All records need to have a PREPNAME associated with them even if the PREPNAME is something like 'General Prep', 'NONE' or 'NA'.
ANALYTE	TEXT(50)	YES	Analyte Name
ANALYTEORDER	TEXT(4)	NO	Used for sorting order on report.
CASNUMBER	TEXT(20)	NO	Chemical Abstract Services identifier for the ANALYTE.
SURROGATE	BIT	YES	Indicates if an ANALYTE is a surrogate compound. 1 = TRUE, 0 = FALSE.
RESULT	TEXT(40)	YES	Text final result formatted to the appropriate number of significant figures. Flags such as 'ND', 'DET', 'PRESENT' or 'ABSENT' may also be used in this field.
DL	TEXT(20)	NO	Final Detection Limit formatted to the appropriate number of significant figures. The DL field may be left blank if it is not applicable.
RL	TEXT(20)	NO	Final Reporting Limit formatted to the appropriate number of significant figures. The RL field should almost always be greater in value than the DL field. It may be left blank for surrogates or other analytes where it is not applicable.
UNITS	TEXT(20)	YES	Units in which RESULT, DL and RL are reported.
BASIS	TEXT(5)	YES	'DRY' if the RESULT is reported on a dry weight basis. 'WET' if the RESULT is reported on a wet weight basis. Otherwise 'NA' (for liquids, etc.).
SOLIDMATRIX	BIT	NO	Indicates if the MATRIX can be dry weight corrected. 1 = TRUE, 0 = FALSE. For example Water would get 0 for FALSE.
DILUTION	TEXT(20)	YES	Dilution factor at which the RESULT was obtained for the corresponding ANALYTE.
SOURCEID	TEXT(15)	YES	Lab Sample ID assigned to the source of this QC sample by the laboratory conducting the analysis (i.e. the LABSAMPID of the Duplicate or Spike source sample).
SOURCERES	TEXT(40)	YES	Concentration, in the same final units as the RESULT, of the ANALYTE for this record in the sample identified by the SOURCEID field..
SPIKELEVEL	TEXT(20)	NO	Concentration, in the same final units as the RESULT, of ANALYTE that was spiked into this QC sample.

RECOVERY	TEXT(20)	NO	Recovery, in percent, of a spiked analyte or Surrogate.
RPD	TEXT(20)	NO	Relative Percent Difference between the two RESULTS of a QC pair (LCS/LCSD, MS/MSD, sample/DUP). Enter only for LCSD, MSD, and DUP.
UPPERCL	TEXT(20)	NO	Upper control limit, in percent, for the Spike or Surrogate RECOVERY.
LOWERCL	TEXT(20)	NO	Lower control limit, in percent, for the Spike or Surrogate RECOVERY.
RPDCL	TEXT(20)	NO	Control limit, in percent, for the RPD
ANALYST	TEXT(5)	NO	Initials of the analyst responsible for the RESULT.
PSOLIDS	TEXT(20)	NO	Percent Solids (dry weight) of the sample formatted to the appropriate number of significant figures. May be left blank for samples or matrices that are not reported on dry weight basis.
LNOTE	TEXT(20)	NO	Comma-separated string of qualifier codes or footnotes (example: Q1,R-01,P-12,OHT). LNOTE qualifiers are typically reported in the header portion of an analytical report. As such, they should be applicable to all analytes of a given method in the sample. Please repeat the code string for all analytes of the same METHODCODE for the associated SAMPLE. The Codes supplied here must match a descriptive text string in the LNOTE table.
ANOTE	TEXT(20)	NO	Comma-separated string of qualifier codes or footnotes (example: A1,B01,P-3,COMP). ANOTE qualifiers are typically reported next to each individual analyte. As such, they are only applicable to the analyte to which they are assigned. The Codes supplied here must match a descriptive text string in the LNOTE table.
RpToMDL	BIT	NO	Indicates if the RESULT was reported down to the DL level. 1 = TRUE, 0 = FALSE.
UNC	TEXT(20)	NO	Uncertainty associated with the RESULT.
MDA	TEXT (20)	NO	Minimum Detectable Activity, typically imported from Instrument for radiochemistry datasets
CERTSTRING	TEXT (20)	NO	Concatenated certification IDs

Table 3 – LNOTE

LNOTE Field	Type/ Size	Required	Detail
QUALIFIER	TEXT(10)	YES	Unique code used to associate the DESCRIPTION field from this table with one of the codes in the LNOTE or ANOTE fields within the SAMPDATA and QCADATA tables.
DESCRIPTION	TEXT(255)	YES	Descriptive text regarding a quality control event or similar information that needs to be associated with an analysis or a specific analyte via the QUALIFIER codes in the LNOTE and ANOTE fields within the SAMPDATA and QCADATA tables.

Data population guidelines

- When populating the transfer file template, the following guidelines need to be affected in order for Element to successfully convert the transfer file.

- **Re-Extracts:** If records have the same primary key fields, but different values for the PREPDATE, then re-extracts must be created. In the SAMPDATA table, this is done by adjusting the SAMPLENAME and LABSAMPID fields.
- To define the re-extract, add a suffix to the sample ID by entering the three-character statement **RE1** as the 11th, 12th, and 13th characters of the sample ID.
- If there is more than one re-extract, then the last digit is incremented as RE1, RE2, RE3. For example, a SAMPLENAME of **P301013-02** would be changed to **P301013-02RE1**. The second re-extract would be changed to **P301013-02RE2**.
- In the QC DATA table, the LABSAMPID field just needs to be adjusted to make it unique. For example, a LABSAMPID could be changed from **130216BLK1** to **130216BLK2**.
- **SAMPLENAME vs. LABSAMPID:** Element requires that there is a one to one relationship between these two fields in the SAMPDATA table. Some LIMS assign different lab sample IDs to the same sample. The LABSAMPID may need to be adjusted so that there is only one value for each SAMPLENAME.
- **SAMPLENAME:** If desired, this field can be populated with a concatenation of the Lab Sample ID from originating lab and the client sample name.
- It must be in this format: Element LIMS ID + “ (“ + client sample name + “)” For example, **P301013-02 (MW-1)**
- **SAMPDATA vs. QC DATA:** Values entered into like fields on different tables must be the same in order for the QC data to appear on the report.
- For example, The MATRIX field values entered into the QC DATA worksheet must agree with those entered into the MATRIX field of the SAMPDATA worksheet.
- **Bit fields:** The valid values for these fields (such as SURROGATE) are 0 and 1. Text values such as **TRUE** and **FALSE** will not be recognized.
- **Text only:** All entries, aside from date or bit field entries, need to be formatted as text. This formatting is required for both numeric and non-numeric values.
- To format a numeric entry correctly, the value can be prefixed with a single quote. For example, **11223** can be entered as **'112233**.



BOARD MEMORANDUM

January 7, 2021

To: CMSA Commissioners and Alternates

From: Kenneth Spray, Administrative Services Manager

Approved: Jason Dow, General Manager

Subject: New Financial Software Presentation – Tyler Incode 10

Recommendation: Accept the presentation of the new financial software system, Tyler Incode 10, and provide any comments or direction to the General Manager as appropriate.

Summary: CMSA purchased new financial system software, Tyler Incode 10, which includes licensing applications for general ledger, bank reconciliation, budget, billing, cashiering, purchasing, accounts payable, personnel management, employee self-service, fixed assets, project accounting, and document management. This system replaces the Agency's legacy software, Open Systems Accounting, that had been in place for several decades, and offered minimal functionality. The project began in April of 2020 and was completed in October of 2020. Due to COVID restrictions, all implementation, project management meetings, and software trainings were done remotely using virtual meetings rather than held on-site, which was quite an accomplishment given the technical nature of system conversions. The success of the project can be attributed to the excellent configuration programmer assigned and the experience of staff involved.

Fiscal Impact: The complete system including a conversion cost \$126,000, and the project finally came in at \$130,500 due to the customized training from the software vendor that was user-specific developed especially for CMSA staff. Except for the extra training, the actual cost of the project came in on budget.

The customized training tremendously helped CMSA staff to augment what was learned in the generic training. The financial staff are currently fully live on the new Tyler Incode software, are gradually increasing speed and efficiency, and estimate to be highly proficient by the upcoming summer. The legacy software has been archived and is used for reference only.

Attachment:
- Presentation Outline

ATTACHMENT

PRESENTATION OUTLINE

DASHBOARD

- Overview of dashboard, smart cards and tiles are customizable / numerous graphs describe various elements such as revenues, expenditures, and budget / dashboard is an overview of financial operations at-a-glance.

SYSTEM WORKFLOW

- Customized system workflow set up by programmer / electronic approvals for timesheets and payroll, purchasing requisitions and purchase orders, journal entries, and budget

GENERAL FUNCTIONS

- Common / processing packets / all transactions are processed by type as packets for consistency of appearance and operation
- Overview of reporting / budget report / numerous master reports built / have created many custom reports for ease of use and efficiency

APPLICATIONS

- Accounts payable for transactions / project #s when associated with project accounting
- Accounts receivable for billing management / project #s for project accounting
- Bank reconciliation automated, match up transactions per bank statement to general ledger / items remaining are outstanding items to clear the next month
- Cashiering / take in all cash receipts through cashier workstation / automatically posts to general ledger / interfaces with accounts receivable if applies to an invoice
- Fixed assets maintenance / preliminary assets for project accounting / add improvements that extend life or add to asset value / partial disposals / attach documents, e.g., schematics, drawings, warranties, insurance, etc.
- Personnel management / profile / pay information / HR information – certificates, training records, equipment, keys, badges, uniforms, etc.
- Employee Self Service / timesheet entry to enter time daily and work activities / electronic approvals / payroll and benefit change requests for address, phone #s, direct deposit info, tax info, payroll “what if” scenarios paycheck calculator, access history and W2 history, and leave requests

**BOARD MEMORANDUM**

January 7, 2021

To: CMSA Commissioners and Alternates**From:** Jason Dow, General Manager**Subject:** 2020 Performance Metric Report**Recommendation:** Accept the Agency's 2020 Performance Metric Report.

Summary: Staff prepares monthly and annual performance metric reports for the Agency's core business and other provided services. These reports present performance metrics with their definition, measurement, and goals and target ranges in the areas of treatment and process, employee, environmental and regulatory compliance, and public outreach. Monthly reports are included in the Board meeting agenda packet and the annual report is presented in January or February.

2020 Performance Highlights: The Agency's staff and business operations continue to perform at a high level, with the highlights and comparison tables of selected metrics over the past several years shown below.

- CMSA met its NPDES permit requirements for twelve consecutive months, and is eligible for the NACWA Gold Peak Performance Award. This our third consecutive year of 100% NPDES permit compliance.
- Approximately 3.48 billion gallons of wastewater was treated to a high level, with approximately 98% of the conventional pollutants removed. Annual wastewater volume variances are attributable to the number, duration, and intensity of wet weather events each year, which contribute a significant amount of stormwater and groundwater infiltration into the sewer collection system. The primary reasons for the lower influent flows in 2020 was due to rainfall in the CMSA service area being less than the annual average and lower flows from businesses shut down due to COVID shelter-in-place (SIP) public health orders.

	2020	2019	2018	2017	2016	2015	2014	2013
Billion Gallons Treated	3.48	5.01	3.99	4.91	4.33	3.31	4.25	3.44

- 5,828 wet tons of biosolids were produced and beneficially reused either as soil amendment and fertilizer at land application and injection sites, or as alternate daily

cover material at the Redwood Landfill. Biosolids production variances can be due to the amount of settled material flushed from collection systems during major rain events, volume of organic waste materials received, dewatering system performance, and if there is digester draining and cleaning operations.

	2020	2019	2018	2017	2016	2015	2014	2013
Wet Tons of Biosolids	5,828	6,318	6,553	6,324	6,702	5,867	5,947	5,458

- 98.98 million cubic feet of biogas was produced and had an equivalent natural gas procurement value of approximately \$310,743. The increase in biogas production since 2014 is a direct result of the Agency receiving additional quantities of organic waste materials each year. The slight decrease in biogas production in 2020 is directly attributable to less organic waste received from restaurants and commercial kitchens, closed due to local SIP public health orders.

	2020	2019	2018	2017	2016	2015	2014	2013
Biogas Production – million ft ³	98.9	101.1	100.2	102.6	104.7	82.2	79.9	64.5

- Operations and Maintenance staff completed 18,776 hours of preventative (PM) and planned and unplanned corrective (CM) maintenance related work. 2013 was the first year of tracking maintenance work order labor hours. The work order hours increased in 2020 primarily due to staff spending less time working on capital improvements and maintenance specific projects. The PM/CM ratio increase in 2020 was due to the increase in preventative maintenance and an overall decrease in unscheduled corrective maintenance.

	2020	2019	2018	2017	2016	2015	2014	2013
Work Order Hours	18,776	11,267	14,801	12,184	12,794	11,525	10,507	7,511
PM/CM ratio	1.95	0.92	0.61	0.87	0.78	0.84	0.69	0.69

- Overtime was only 1.4% of regular hours worked. Various factors affect overtime authorization during a year, including number of significant wet weather events requiring additional staff, responding to after-hours system and equipment mechanical problems, and maintaining minimum operational staffing.

	2020	2019	2018	2017	2016	2015	2014	2013
Overtime %	1.4%	1.8%	1.8%	1.9%	1.6%	2.0%	2.4%	2.4%

- CMSA employees received 1,692 hours of safety, process control, work practice, leadership, mechanical/technical equipment, project related, employment law, and industry specific training. The significant decrease last year is due to the cancellation of

all off-site conferences, seminars, and training events to comply with COVID SIP public health orders.

	2020	2019	2018	2017	2016	2015	2014	2013
Training Hours	1,692	3,159	2,965	2,439	3,099	2,354	1,898	1,965

- Environmental compliance staff performed 27,993 laboratory analyses for process control, NPDES permit reporting, quality assurance/quality control, and for member agency sanitary sewer overflows. Laboratory analyses increased from the 22,148 analyses conducted in 2019, due to secondary system SVI improvement project and the Pilot Digester Study.
- Environmental compliance staff performed 643 field inspections of businesses for compliance under our pretreatment, pollution prevention, mercury reduction, and FOG programs. With environmental compliance staff vacancies filled, inspections increased in 2019, but decreased slightly in 2020 due to COVID SIP public health orders.

	2020	2019	2018	2017	2016	2015	2014	2013
Source Control Inspections	643	783	311	321	982	1,031	971	874

- Our public education activities reached 2,631 people – elementary school students at our Schools Program presentations, students and stakeholder groups that tour the Agency, and members of the public who visit the public education booth at environmentally focused events throughout the county. The decrease from 2017 to 2018 was due to the lower outreach booth attendance at county wide events and a reduction in the request for school events. 2020 saw a significant reduction in events after March as COVID SIP orders closed schools and prohibited indoor and outdoor events.

	2020	2019	2018	2017	2016	2015	2014	2013
Public Outreach – # of people	2,631	8,800	6,024	8,939	7,766	6,950	10,036	9,381

- Staff posted 38 odor alerts to our website, and the Agency did not receive any odor complaints.

2019/2021 Organizational and Staff Awards: CMSA and its staff continue to receive recognition from regional, state, and national industry associations.

National Association of Clean Water Agencies (NACWA) Gold Peak Performance Award - for meeting all final effluent NPDES permit requirements in 2019.

GFOA Certificate of Achievement for Excellence in Financial Reporting - for our FY19 Comprehensive Annual Financial Report. CMSA has received this award for *eighteen* consecutive years.

GFOA Popular Annual Financial Reporting Award – for our FY19 Popular Annual Financial Report. This is *ten* consecutive years the Agency has received this award.

GFOA Distinguished Budget Presentation Award – for our FY 20/21 Adopted Budget. This is the *seventh* consecutive year the Agency has received this award.

2020 CWEA Redwood Empire Section Awards: As of the date of this staff report, the CWEA award committee had not announced the 2020 award recipients.

Attachment:

- 2020 Performance Metric Report

CY 2020 ANNUAL PERFORMANCE METRICS

TABLE I - TREATMENT/PROCESS METRICS

Metric	Definition	Measurement	Target/Goal
1) Wastewater Treated	Volume of wastewater influent treated and disposed; in billion gallons (Bg)	3.48 Bg	1.98 – 9.84 Bg
2) Biosolids Production	Reused as Alternate Daily Cover at the Redwood Landfill, in wet tons (wt) Reused at Land Application sites, in wet tons (wt) Delivered to Lystek's bio-fertilizer production facility (wt)	2,520 wt 1,540 wt 1,768 wt	4,320 – 7,980 wt
3) Conventional Pollutant Removal	Removal of the conventional NPDES pollutants - Total Suspended Solids (TSS) and Biological Oxygen Demand (BOD) a. tons of TSS removed; % TSS removal (annual average) b. tons of BOD removed; % BOD removal (annual average)	7,027 tons; 98.7 % 4,471 tons; 97.9 %	> 85% > 85%
4) Priority Pollutants Removal	Diversion of priority NPDES permit metals from discharge to the S.F. Bay: a. % Mercury (annual average) b. % Copper (annual average)	97.5 % 89.6 %	88 – 99 84 – 98
5) Biogas Production	Biogas generated in our anaerobic digesters - in million cubic feet (Mft ³) Natural gas equivalent of the biogas - in million cubic feet (Mft ³)	98.9 Mft ³ 63.3 Mft ³	72 to 114 Mft ³ 45.6 to 73.2 Mft ³
6) Power Produced	Energy produced from cogeneration of biogas and purchased natural gas - in megawatt hours (MWh) Power produced from cogeneration of biogas and delivered to the grid Cogeneration system runtime on biogas – <i>in hours (hrs)</i> Biogas value (natural gas cost equivalent)	5,417 MWh 512.9 MWh 7,459 hr \$310,743	4,560 to 5,760 MWh 0.42MWh – 0.78MWh 6,696 hr \$300,000 to \$540,000
7) Efficiency	The cost to operate and maintain the treatment facilities per million gallons of wastewater treated - in dollars per million gallons Energy used at CMSA, kilowatt hours, per million gallons treated	\$3,123/Mg 1,620 kWh/Mg	\$3,500-\$5,500/Mg (wet - dry) 670 - 2,400 kWh/Mg

Table II – EMPLOYEE METRICS

1) Employee Training	Hours of internal training – safety, web-based, project, vender, etc. Hours of external training – employment law, technical, regulatory, etc.	Internal = 1,427 hrs External = 265 hrs	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)	12,405 hrs. 5,315 hrs. (88.0%) 1,056 hrs. (8.0%) 1.95	3,600 – 6,000 hrs. ≥ 70% total CM hrs. ≤ 30% total hours. ≥ 0.45
3) Overtime Worked	Overtime hours worked % of regular work hours	1,304 hrs 1.4%	< 5%

CY 2020 ANNUAL PERFORMANCE METRICS

Table III - ENVIRONMENTAL AND REGULATORY COMPLIANCE METRICS

Metric	Definition	Measurement	Target/Goal
1) Permit Exceedances	# of NPDES permit exceedances	0	0
2) Regulatory Analyses	# of samples analyses by the CMSA laboratory for NPDES, stormwater, and biosolids regulatory compliance monitoring and reporting	4,253	1,800 – 9,000
3) Process Analyses	# of analyses by the CMSA laboratory for process control monitoring	18,581	4,800 – 15,000
4) Contract Laboratory Analyses	# of analyses by contract laboratories for regulatory compliance reporting	646	0-600
5) Quality Control Testing	# of CMSA performed laboratory analyses for QA/QC purposes.	7,106	1,200 – 3,600
6) Water Quality Sample Analyses	# of ammonia, total and fecal coliform, enterococcus, and/or sulfide analyses performed for the CMSA member agencies	1,660	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 – 293 businesses regulated	172	variable
8) FOG Program Inspections	Inspections of food service establishments (FSEs) in the Almonte, TCSD, SD2, RVSD, SRSD, and LGVSD service areas – approx. 311 FSEs are regulated and 25 FSEs have waivers	471	240 – 600
9) Permits Issued/Renewed	Permits issued for the pretreatment, pollution prevention, and FOG source control programs, and for groundwater discharge	102	variable

Table IV - PUBLIC OUTREACH

Metric	Definition	Measurement	Target/Goal
1) Public Education Events	Attendance at public education outreach events; # of booth visitors	170	3,000/year
2) School Events	Participation or sponsorship in school outreach events; # of attendees	2,386	variable
3) Agency Tours	Tours given to students and the public; # of people	75	variable
3) Odor Notifications	Number of odor alerts posted to the Agency website	38	12-120
4) Odor Complaints	Number of odor complaints received from the public	0	0



BOARD MEMORANDUM

January 7, 2021

To: CMSA Commissioners and Alternates

From: Jason Dow, General Manager

Subject: Proposed Revisions to the CMSA Fats, Oils, and Grease (FOG) Ordinance

Recommendation: Accept the proposed FOG Ordinance revisions, and schedule the Public Hearing for the revised Ordinance at the February 9, 2021 Board meeting.

Summary: Administration of the Agency's Fats, Oils, and Grease (FOG) Ordinance for the JPA member agencies' FOG source control programs has been going well, and the programs have reduced the number of FOG related sanitary sewer overflows in the CMSA service area. Since the last revised FOG Ordinance was adopted by the Board in 2014, Technical Services staff have identified several revisions to the Ordinance to further improve its administration. Staff recommends the Board review the proposed revisions, provide comments and/or other suggested changes, and set the Public Hearing for the passage of the Ordinance for the February Board meeting.

Discussion: FOG Ordinance 2021-1 is attached to this staff report and some changes and new provisions are shown in red text, and a redline/strike out version can be provided upon request. A summary of the notable changes is presented below.

- 1) Ordinance title changed from "An Ordinance Regulating the Acceptance of FOG into the Water Pollution Control System of CMSA" to ".....Regulating the Control of FOG into the Wastewater Collection System."
- 2) Throughout the Ordinance the "term grease removal device" is changed to "grease interceptor", and "water pollution control system" is changed to "wastewater collection system."
- 3) Ordinance background section expanded to include a summary of the changes made by the 2014 Ordinance.
- 4) References to specific sections in the CMSA Sewer Use Ordinance (SUO) are removed as these may change overtime when the SUO is updated.
- 5) Thirteen new definitions were added and several revised.

- 6) Grease Interceptor Installation Requirements (Section 6) reorganized, revised, and edited to improve readability, and the installation requirement table from the 2014 Ordinance Appendix is inserted into the section.
- 7) When an FSE changes ownership, CMSA has the discretion to determine if the FSE must install a grease interceptor based on the FSE location and use.
- 8) Prohibitions from various sections in the 2014 Ordinance has been moved to the new Ordinance Section 7 and the list expanded.
- 9) Food service establishment best management practices added to Section 7 to align with those that are used at many other agencies in the SF Bay Area region.
- 10) Grease interceptor maintenance and self-cleaning requirements expanded and better defined, and a new 25% rule with a variance added.
- 11) FSE permit fee provisions moved from Section 7 to Section 9.

Staff reviewed the draft Ordinance 2021-1 with the JPA managers' group at a recent meeting, and they had no comments or suggested changes, and supported the proposed revisions.

Background: In 2006, the Board adopted the Agency's FOG Ordinance, entitled "An Ordinance Regulating the Acceptance of Fats, Oils, and Grease (FOG) into the Water Pollution Control System of the Central Marin Sanitation Agency", and in 2007, the Board adopted an Ordinance to clarify and complement the 2006 FOG Ordinance. Both Ordinances established the Agency's legal authority to regulate Food Service Establishments (FSEs) in the CMSA service area, and since their passage, staff has developed and is administering the FOG Source Control Programs for the San Rafael Sanitation District, Ross Valley Sanitary District, Sanitary District #2, Las Gallinas Valley Sanitary District, Almonte Sanitary District, and Tamalpais Community Services District.

In 2014, the Board adopted a new FOG Ordinance that replaced the 2006 and 2007 FOG Ordinances and made other revisions and changes such as improving its format to improve readability, updating references to the Agency's Sewer Use Ordinance and Universal Plumbing Code, required all kitchen remodels and change of business ownership to install a grease removal device, and allowing self-cleaning of larger grease removal devices at the discretion of the Agency.

Attachment:

- Draft FOG Ordinance No. 2021-1



CENTRAL MARIN SANITATION AGENCY

**AN ORDINANCE REGULATING THE CONTROL OF
FATS, OILS, AND GREASE (FOG)
INTO THE WASTEWATER COLLECTION SYSTEM**

Ordinance No. 2021-1

January 2021

CENTRAL MARIN SANITATION AGENCY

ORDINANCE NO. 2021-1

AN ORDINANCE REGULATING THE **CONTROL OF FATS, OILS, AND GREASE (FOG)
INTO THE WASTEWATER COLLECTION SYSTEM**

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CENTRAL MARIN SANITATION AGENCY

ORDINANCE NO. 2021-1

AN ORDINANCE REGULATING THE CONTROL OF FATS, OILS, AND GREASE (FOG) INTO THE WASTEWATER COLLECTION SYSTEM

SECTION 1 – INTRODUCTION

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

This Ordinance shall be known as the “Fats, Oils, and Grease (FOG) Ordinance of the Central Marin Sanitation Agency” and may be so cited and pleaded.

This Ordinance is adopted pursuant to provisions of Section 6400 *et. seq.* of the Health and Safety Code of the State of California.

SECTION 2 – ORDINANCE BACKGROUND

The Central Marin Sanitation Agency (CMSA) adopted Ordinance No. 2014-1 (FOG Ordinance) on February 6, 2014, combining FOG Ordinances 2006-2 and 2007-1, aligning the CMSA Sewer Use Ordinance (SUO) and Uniform Plumbing Code reference, clarifying the installation of Grease Interceptors, and updating implementation procedures. This Ordinance replaces **Ordinance No. 2014-1, and updates definitions, interceptor types, interceptor maintenance requirements, and best management practices.**

SECTION 3 – PURPOSE AND POLICY

- A. Sanitary sewer overflows (SSOs) are a major concern to wastewater agencies throughout the state of California. A frequent cause of SSOs is the blockage of sewer lines due to discharge of FOG from food preparation and clean-up operations. To prevent SSOs in the **Wastewater Collection System**, CMSA developed and implemented a program to reduce the discharge of FOG from restaurants and other food service establishments to levels that will not cause blockage in sewer lines. This program enables the San Rafael Sanitation District, the Ross Valley Sanitary District, and the Sanitary District No. 2 of Marin County (Member Agencies) to comply with requirements of the California State Water Resources Control Board and the San Francisco Bay Regional Water Quality Control Board.
- B. CMSA Ordinance No. 2018-2 (Sewer Use Ordinance, SUO), adopted by the CMSA Board of Commissioners in 2018, regulates the discharge of wastes into the **Wastewater Collection System**. The SUO prohibits the discharge of viscous wastes in amounts which will cause obstruction to the flow in the Wastewater Collection System. The SUO gives CMSA authority to require sewer users to install pretreatment equipment as necessary to bring their discharges into compliance with the SUO. The SUO also provides CMSA staff the authority to perform inspections on the premises of sewer users and to review user records relevant to sewer discharges.
- C. All food service establishments (FSEs) subject to this Ordinance, shall be designated as “Class III Users,” as defined in the SUO. This designation is based on the discharge of FOG as discussed herein.

SECTION 4 – JURISDICTION

- A. CMSA has authority to regulate discharges into the Wastewater Collection System in the jurisdictions of all Member Agencies. However, the provisions of this Ordinance, and the responsibility for implementation and enforcement of this Ordinance, shall only be applicable to the service area which encompasses the jurisdictional area of any Member Agency of CMSA which has complied with the following:
- 1) Such Member Agency enters into an agreement with CMSA for cost reimbursement and implementation of this Ordinance within its jurisdictional boundaries.
 - 2) Such Member Agency adopts by resolution the provisions of this Ordinance as being in force and applicable within its jurisdictional boundaries.
- B. This Ordinance is currently applicable to the service area encompassing the jurisdictional boundaries of the San Rafael Sanitation District, and the Ross Valley Sanitary District, and Sanitary District No. 2 of Marin County. The resolutions making this Ordinance effective in the Member Agencies' service areas are listed below:
- 1) Resolution No. 06-930 of the Board of Directors of the San Rafael Sanitation District, adopted October 4, 2006.
 - 2) Resolution No. 1284 of the Board of Directors of the Ross Valley Sanitary District, adopted April 3, 2007.
 - 3) Resolution No. 2009-4 of the Board of Directors of the Sanitary District No. 2 of Marin County, adopted December 15, 2009.

SECTION 5 – DEFINITIONS

Automatic Grease Interceptor – A type of Grease Interceptor with an automatic or active mechanism for removing grease from the collection tank and isolating it in a container.

Best Management Practices (BMPs) – Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the requirements of this Ordinance.

Brown Grease – Oil collected from grease interceptors installed in FSE facilities to separate grease and oil from wastewater.

California Plumbing Code (CPC) – “California Plumbing Code” (California Code of Regulations, Title 24, Part 5). If there are future revisions that relate to sizing of Grease Interceptors, CMSA reserves the right to use either the present or revised code.

Change of Ownership – When ownership of an FSE changes, as determined by Marin County Environmental Health Services, requiring a change of ownership form or restaurant plan check.

CMSA - Central Marin Sanitation Agency.

Drainage Fixture Unit (DFU) – A unit of measure for the load-producing effects on a plumbing system from different kinds of plumbing fixtures.

Existing Food Service Establishment – Any Food Service Establishment (FSE) that is not a new FSE as of the effective date of this Ordinance.

Fats, Oils, and Grease (FOG) – Any substance, such as an animal- or vegetable-product, that is used in, or is a byproduct of food preparation, food service, or kitchen clean-up that turns or may turn viscous or solidifies with a change in temperature or other conditions.

Food Grinder (Garbage Disposal) – A device installed underneath a sink drain to grind and/or shred food waste into smaller particles.

Food Service Establishment (FSE) – Includes, but is not limited to, any facility preparing and/or serving food for commercial use or sale. This includes restaurants, cafes, lunch counters, cafeterias, hotels, hospitals, convalescent homes, factory or school kitchens, coffee houses/shops, catering kitchens, bakeries, grocery stores with food preparation (excluding stores with only food warming operations), meat cutting and preparation, and other food handling facilities not listed above where FOG may be introduced into the Wastewater Collection System.

Gravity Grease Interceptor (GGI) – A type of Grease Interceptor that is installed in a Wastewater Collection System to intercept FOG from wastewater discharge and is identified by volume, 30-minute retention time, baffle(s), not less than two-compartments, a total volume of not less than 300 gallons, and gravity separation.

Grease Interceptor (GI) – A device used to remove FOG from kitchen wastes discharged to the Wastewater Collection System, i.e., a Gravity Grease Interceptor, Hydromechanical Grease Interceptor, High-Capacity Hydromechanical Grease Interceptor, or other mechanical device.

Hydromechanical Grease Interceptor (HGI) – A type of Grease Interceptor that is installed in a Wastewater Collection System to intercept FOG from a wastewater discharge and is identified by flow rate, separation, and retention efficiency. The design incorporates air entrainment, hydromechanical separation, interior baffling, and/or barriers in combination or separately, and one of the following: (a) external flow control, with air intake (vent), directly connected; (b) external flow control, without air intake (vent), directly connected; (c) without external flow control, directly vented; or (d) without external flow control, indirectly connected.

High-Capacity Hydromechanical Grease Interceptor – A type of Hydromechanical Grease Interceptor (HGI) designed for the storage of FOG and solid food waste in excess of the 25% rule, the actual storage capacity of FOG and solid food waste being that specified by the device manufacturer.

Hot Spot – A location in the Wastewater Collection System where one or more FOG-related Sanitary Sewer Overflows (SSOs) have occurred, or requires significantly increased maintenance to prevent FOG-related line blockages, and/or where a significant potential exists for FOG-related line blockages to occur. The designation of a “hot spot” will be solely at the discretion of the Member Agency, based on the history and characteristics of the location.

Kitchen Remodel – An FSE kitchen remodel that involves significant changes to the kitchen, as determined by CMSA, such as removal or addition of walls or changes to drain lines that involve invasive work to walls or floors, or any other modifications to an existing FSE requiring a restaurant plan check from Marin County Environmental Health Services.

Member Agency – The cumulative service area of the Member Agencies (Ross Valley Sanitary District, San Rafael Sanitation District, and Sanitary District No. 2 of Marin County) which comprise the CMSA service area.

New Food Service Establishment – (a) A new building which will contain a Food Service Establishment (FSE); or (b) The installation of an FSE in an existing building which has not previously contained an FSE requiring a restaurant plan check from Marin County Environmental Health Services.

Ross Valley Sanitary District (RVSD) Service Area – Previously known as Sanitary District No. 1 of Marin County. This includes Fairfax, San Anselmo, Larkspur, Ross, Greenbrae, and Kentfield.

San Rafael Sanitation District (SRSD) Service Area – This includes all parts of the City of San Rafael south of the Puerto Suello ridge. (Terra Linda and Civic Center are not in the SRSD service area).

Sanitary District No.2 of Marin County (SD2) Service Area – This includes the Town of Corte Madera, portions of the Tiburon peninsula, the Greenbrae boardwalk, portions of Larkspur, and portions of unincorporated areas of Marin County.

Sanitary Sewer Overflow (SSO) – A release of untreated or partially treated sewage from a Wastewater Collection System into the environment.

Twenty-Five Percent (25%) Rule – The total depth of the floating grease layer plus the settleable solids layer cannot exceed 25% of the design hydraulic depth in any location of the grease interceptor.

Wastewater Collection System – The collection system, all sewers and other facilities, owned or operated by the Member Agencies for carrying, collecting, storing, and delivering of sewage to the CMSA wastewater treatment facility.

Working Capacity – The total volume of solids, water, and grease that a grease interceptor contains under normal operating conditions.

Yellow Grease – Spent cooking oil and other fats and oils collected from commercial or industrial cooking operations.

SECTION 6 – GREASE INTERCEPTOR INSTALLATION REQUIREMENTS

This Ordinance governs all FSEs within the jurisdiction of this Ordinance. All new FSEs, all existing FSEs undergoing a kitchen remodel, and all existing FSEs upstream of a “sewer line hot spot” (hot spot) shall have at least one Grease Interceptor (GI), as specified below. The following table summarizes these requirements.

Grease Interceptor Installation Requirements Summary

	NOT Upstream of Hot Spot	Upstream of Hot Spot
New FSE	GI required (see Section 6.A)	GI required (see Section 6.A)
Kitchen Remodel	GI required (see Section 6.B)	GI required* (see Section 6.B)
Change of Ownership	GI required (see Section 6.E)	GI required (see Section 6.E)
Existing FSE	No requirement (see Section 6.D)	GI required (see Section 6.C)

* For remodels, the GI may not need to be connected to all kitchen drains, at the discretion of CMSA.

All GI installations shall comply with the California Plumbing Code (CPC) and installation criteria requirements (including but not limited to flow control devices, vents, etc.) and the FSE criteria provided below.

A. New Food Service Establishments

All new FSEs shall install a GI sized in accordance with the current version of the CPC. The sizing determination is based on Drainage Fixture Units (DFUs) as specified in the CPC. A business will not be considered a “new FSE” solely on the basis of a changed menu, name, and/or ownership.

All fixtures and equipment in the establishment which may receive FOG, including but not limited to utensil sinks, food preparation sinks, hand washing sinks in kitchen areas, mop sinks, and floor drains and floor sinks in kitchen and washing areas shall drain to a GI. The dishwashing machine shall be plumbed to the GI, unless specified otherwise by CMSA. Any discharge to the Wastewater Collection System from routine cleaning of exhaust hoods and ducts shall be plumbed to the GI. No drains from toilets, showers, or other domestic discharges shall be connected to the GI. **For any kitchen drain not connected to the GI, the FSE shall maintain employee training and/or signage adequate to prevent discharge of FOG to the drain.**

Outside refuse areas and/or washing areas must be covered and bermed to prevent discharge to storm drainage, and plumbed to the Wastewater Collection System, in accordance with the requirements of the municipality. These areas shall drain to a properly sized GI.

B. Kitchen Remodel

Any FSE which is undergoing a kitchen remodel, shall install a GI(s). The requirements shall be the same as for a new FSE, except for the following:

- 1) A remodeled FSE may be allowed to not connect some minor kitchen drains, such as hand washing sinks or floor drains, where connection of these drains to the GI would require excessive re-plumbing. The determination shall be solely at the discretion of CMSA, on a case-by-case basis. For any drain exempted from connection to the GI, the FSE shall maintain employee training and/or signage to prevent discharge of FOG to the drain.
- 2) At CMSA discretion and on a case-by-case basis, a remodeled FSE may be exempt from complying with some of the requirements specified in this Ordinance regarding outside refuse areas and/or washing areas. At a minimum, facilities and operating practices must be adequate at all times to prevent illegal discharges to stormwater drainage.

C. Existing Food Service Establishments – Upstream of Hot Spot

A current list of hot spot locations should be defined by each Member Agency. The list shall reference the evidence supporting each designation. Such evidence may include, but is not limited to, maintenance records, SSO reports, or video. The designation of a hot spot shall be solely at the discretion of the Member Agency.

The minimum GI requirement for any FSE upstream of a designated hot spot shall be one or more GI(s) draining the food preparation sinks, utensil sinks, and dishwasher pre-rinse sink (scrap sink). This minimum GI requirement shall include installation of a GI on any device, including a wok stove or a soup kettle that has as a drain installed to remove rinse or wash water from cooking surfaces. Alternatively, the drain may be taken out of service and disconnected from the Wastewater Collection System if such action is acceptable to Marin County Environmental Health Services. For any kitchen drain not connected to the GI, the FSE shall maintain employee training and/or signage adequate to prevent discharge of FOG to the drain.

The sizing of the GI(s) shall be as follows:

- 1) Existing FSEs with one or more GI(s) currently installed shall not be required to install a larger GI if the size of the GI is at least 70% of the size specified by the most current version of the CPC. Those FSEs with installed GI(s) sized at less than 70% of the CPC requirement shall be required to install larger or additional GI(s) to meet the appropriate sizing requirement of the CPC.
- 2) CMSA reserves the right to require installation of a GI if such installation is appropriate due to the size, menu, or location of the FSE.

D. Existing Food Service Establishments – NOT Upstream of Hot Spot

Existing FSEs that are not upstream of a hot spot do not have permit or GI requirements under this Ordinance. However, owners and operators of such establishments should consider that if the FSE should discharge sufficient FOG to cause an obstruction in the Wastewater Collection System, they would be in violation of this Ordinance and the SUO. Such discharge would also be likely to plug the FSE's drain lines, causing sewage back-ups into the kitchen.

Upon request, CMSA personnel will provide FSEs with information regarding employee training and GI information to minimize FOG discharge to the sewer.

E. Change of Ownership

When an FSE changes ownership, new ownership shall provide new use information to CMSA. An evaluation of the facility's new use shall be completed to determine GI installation and/or upgrade requirements. Installation of a GI is required in accordance with Section 6.A, as shown in the summary table above.

F. Variance Procedure

A new or remodeled FSE may be allowed to install one or more smaller GI(s), instead of a single large GI, if one or both of the following conditions occur:

- 1) Adequate slope cannot be provided for gravity flow between kitchen plumbing fixtures and the proposed location of the GI or from the GI to the Wastewater Collection System.
- 2) Adequate space cannot be provided at the site for installation and/or maintenance of a GI.

Granting the variance for smaller GI(s) or which kitchen fixtures are connected shall be at the discretion of the CMSA General Manager or designee. The FSE shall provide CMSA with documentation adequate to verify at least one of the above conditions.

Installation of Automatic GI(s) of proprietary design, such as the “Big Dipper,” will be considered by CMSA on a case-by-case basis. Approval shall be contingent upon demonstration that the device will reliably perform at least as well as a conventional GI meeting the requirements of the CPC.

SECTION 7 – REQUIREMENTS AND BEST MANAGEMENT PRACTICES

All new FSEs and existing FSEs upstream of a hot spot are subject to this Ordinance and shall have a current permit issued by CMSA and at least one GI, as described in this Ordinance. The sole exception is any FSE granted a permit waiver. All FSEs that are subject to this Ordinance shall comply with requirements below unless they are granted a permit waiver.

A. Prohibitions

- 1) No FSE shall install, maintain, or use a food grinder (garbage disposal). All food waste from preparation and service items must be disposed of appropriately by physically removing the food waste into the appropriate legal receptacle prior to rinsing.
- 2) Automatic grease interceptors are prohibited unless a variance is provided. At the discretion of CMSA, on a case-by-case basis, an FSE may be allowed to install and operate an automatic GI when circumstances preclude installation of an appropriately sized GGI or HGI.
- 3) Addition of enzymes, micro-organisms, solvents, or emulsifiers to grease interceptors or to drains leading to GI(s) is prohibited.
- 4) Disposal of waste cooking oil into drainage pipes is prohibited. All waste cooking oils must be collected and stored properly in labeled receptacles such as barrels or drums for recycling.
- 5) Discharge of any waste including FOG and solid materials removed from the GI to the Wastewater Collection System is prohibited.
- 6) In no case shall an FSE operate a GI where FOG and solids accumulation exceeds the GI maintenance requirements outlined within this Ordinance.
- 7) Discharge of FOG and other wastes to stormwater drainage systems is prohibited. Discharges to stormwater drainage systems from an FSE will be referred to the appropriate authorities for enforcement action.

B. Best Management Practices (BMPs)

All FSEs, at a minimum, must comply with the following BMPs:

- 1) Drain screens must be installed in all sinks, drains, floor drains, floor sinks, dishwashers, etc. The screens must be frequently inspected and cleaned by disposing waste into the appropriate receptacle to prevent FOG and food buildup.

- 2) All FSEs must have an appropriate labeled receptacle for collecting yellow grease. The labeled receptacle must have a secondary containment to prevent spillage or leaks. The labeled receptacle must be serviced (emptied or exchanged) and recycled in a legal manner at an appropriate frequency. The FSE must maintain adequate employee training and/or kitchen signage to assure that the container is used and maintained in an appropriate manner.
- 3) FOG and solids (brown grease) cleaned out of GI must be disposed in a legal manner. The FSE shall maintain adequate employee training and/or kitchen signage to assure compliance. Brown grease removed must be disposed in one of the two following methods.
 - a) All brown grease removed from the GI shall be combined in a labeled receptacle with adequate amounts of absorbent to prevent spillage or leakage, and discarded into the appropriate solid waste legal receptacle; or
 - b) All brown grease removed from the GI shall be placed in a labeled receptacle with secondary containment and recycled in a legal manner. Receipts or other documentation of such service shall be retained at the FSE and presented to CMSA staff upon request.
- 4) All food waste must be disposed of directly into the appropriate legal solid waste container, and not in sinks.
- 5) FSE employees must be trained upon hiring and annually thereafter on the following:
 - a) How to “dry wipe” pots, pans, dishware, and work areas before washing to remove grease.
 - b) How to properly dispose of food waste and solids into the appropriate legal solid waste receptacle to prevent leaking and odors.
 - c) The location and use of absorption products to clean under fryer baskets and other locations where grease may be spilled or dripped.
 - d) How to properly dispose of grease or oils from cooking equipment into a grease receptacle such as a barrel or drum without spilling.

Training should be documented and retained indicating each employee's attendance and understanding of the practices reviewed.

- 6) Kitchen exhaust filters must be cleaned as frequently as necessary to be maintained in good operating condition. The wastewater generated from cleaning the exhaust filter must be discharged to the GI. Solids generated in this maintenance shall be discarded in accordance with brown grease requirements in this Ordinance.
- 7) Best management and waste minimization practices must be posted conspicuously in the food preparation and dishwashing areas at all times.

SECTION 8 – GREASE INTERCEPTOR MAINTENANCE REQUIREMENTS

The permit issued to an FSE will specify the required minimum frequency for maintaining (pumping or hand cleaning) the GI(s) and how the FSE shall verify this maintenance. These requirements are described below.

A. Large GI(s)

FSEs with a GI flow rating greater than or equal to 100-gpm must have the GI serviced (i.e., all compartments pumped empty) and the contents legally disposed of at a minimum once every three months. CMSA may require more frequent servicing if inspections by CMSA staff indicate that pumping every three months is not adequate. At the discretion of CMSA, the required frequency may be reduced if the FSE provides documentation (e.g., hauler certifications) adequate to establish that less frequent pumping would suffice. Such documentation shall be based on a minimum of one year of quarterly pumping and shall be verified by CMSA inspections.

B. Small GI(s)

FSEs with a HGI flow rating less than 100-gpm must have the GI serviced and the contents legally disposed of at a minimum once per month. CMSA may require more frequent servicing if inspections by CMSA staff indicate that monthly pumping is not adequate. At the discretion of CMSA, the required frequency may be reduced if the FSE provides documentation (e.g., hauler certifications) adequate to establish that less frequent pumping would suffice. Such documentation shall be based on a minimum of one year of monthly pumping and shall be verified by CMSA inspections.

C. Pumping and Reporting Requirements

All pumping must be performed by persons who are certified by the California Department of Food and Agriculture (DFA) as a “registered transporter of inedible kitchen grease.” The pumper shall transport the collected waste to an “authorized receiving facility,” as defined by the DFA. DFA regulations require the pumper to provide the FSE with a “waste removal receipt” which includes the name of the FSE, the service date, the “working capacity” of the interceptor pumped, and the total amount of waste pumped from the GI. Copies of each waste removal receipt for any calendar month shall be submitted (mail, fax, or email) to CMSA by the date specified within the FSEs permit.

D. Self-Clean Procedure

FSEs with a GI flow rating less than or equal to 50-gpm may opt to comply with the following GI self-cleaning procedure in lieu of the monthly service requirement specified in this Ordinance.

- 1) The GI must be serviced by FSE staff and/or a contractor at a minimum once every 15 days. CMSA may require more frequent servicing if CMSA inspections determine the GI servicing inadequate.
- 2) Persons cleaning the GI must assure that all grease and sediment is removed from the GI and appropriately disposed. They must also inspect and assure that all baffles, flow control devices, and other equipment are properly reinstalled after cleaning.
- 3) Cleaning of the GI must be documented on a log sheet maintained by the FSE. The log sheet must include, at a minimum, the date of the cleaning event, the name of the person(s) performing the cleaning, their signature, the quantity of waste removed from the GI, and any other relevant observations. Copies of each log sheet for any calendar month shall be submitted (mail, fax, or email) to CMSA by the date specified within the FSEs permit.

E. Twenty-Five Percent (25%) Rule

Regardless of the maintenance frequency of a GI as established in an FSE's permit, in no case shall an FSE operate a GI where FOG and solids accumulation exceeds the 25% rule in any chamber of the device, with exception to the following:

- 1) When an FSE has installed and maintains a High-Capacity HGI designed to accumulate FOG and solids in excess of the 25% rule, the FSE may be allowed to operate the HGI with FOG and solids accumulation in excess of the 25% rule up to the manufacturer's design capacity specifications.

SECTION 9 – PERMIT REQUIREMENTS, FEES, AND ENFORCEMENT

CMSA staff will monitor FSE compliance with this Ordinance and their permit. Below is an outline of the routine monitoring and enforcement procedures. CMSA reserves the right to modify these procedures, as appropriate.

A. Permits

As specified in this Ordinance, all new FSEs and FSEs upstream of a hot spot must have a CMSA permit or a permit waiver. CMSA staff will not issue a permit until they have verified that the FSE is in compliance with the GI requirements specified in this Ordinance. If an FSE has an existing GI that must be replaced due to inadequate sizing or not being in satisfactory working condition, an interim permit may be issued to specify maintenance of the existing GI until it can be replaced.

The permit issued to an FSE shall specify the required maintenance (pumping or cleaning) frequency for the GI, and the requirements for verifying maintenance, in accordance with this Ordinance.

B. Permit Waiver

All FSEs shall have a current permit issued by the CMSA, unless the CMSA grants a permit waiver. Waivers will be granted only to those FSEs that can demonstrate to the satisfaction of CMSA that they are not a significant source of FOG. This will normally be the case only if there is no cooking or clean-up taking place at the facility.

C. Permit Inspections

CMSA staff will perform on-site inspections of FSEs to verify compliance with the permit. These inspections may be unannounced or scheduled as needed. CMSA staff will attempt to conduct inspections so as to minimize the impact on the operation of the FSE (e.g., no visiting during the lunch period). However, the FSE shall provide CMSA staff, at all times that the FSE is open and/or in operation, with access to the FSE in order to inspect the premises, GIs, and maintenance records. This specifically includes access to the GI. If the device is inaccessible to CMSA staff due to placement of vehicles, mats, utensils, etc., FSE staff shall remove such obstacles in a timely fashion. If CMSA staff must re-visit an FSE in order to complete an inspection, as a result of adequate access not being provided, a re-inspection fee shall be assessed. The re-inspection fee will not be assessed only in those cases where the CMSA inspector documents adequate extenuating circumstances.

D. Permit Fees

The SUO and CMSA Fee Ordinance provide CMSA the authority to assess and collect fees from users of the Wastewater Collection System, in order to recover costs incurred by CMSA when regulating discharges into the Wastewater Collection System. The fees specified therein are applicable to FSEs as “Class III Users” of the Wastewater Collection System.

At CMSA discretion, the Permit Fee and/or other fees specified in the current CMSA Fee Ordinance may be waived to the extent that the Member Agency reimburses CMSA for the costs of implementing the FOG requirements set forth in this Ordinance. Nothing herein is intended to alter or limit such fees as a Member Agency may impose on users that are regulated under this Ordinance.

As discussed in this Ordinance, if an inspection by CMSA staff determines that a permittee is in violation of one or more requirements of this Ordinance, the permittee shall be assessed a fee to reimburse the CMSA for the cost of a re-inspection to determine that the violation has been corrected. Additional fees may be assessed if an enforcement order is issued to the permittee, as discussed in this Ordinance.

As specified in the CMSA Fee Ordinance, all fees assessed by the CMSA are due and payable upon receipt of such notice.

E. Permit Violations

The following conditions are violations of an FSE permit and shall result in enforcement. Enforcement procedures are outlined within the CMSA Enforcement Response Plan (ERP). Egregious and/or repeated violations may result in escalated enforcement action. A Notice of Violation (NOV) shall state the violation(s), the corrective action(s) required, and the date the corrective action(s) must be completed.

- 1) GI not maintained – The permit shall specify the minimum maintenance frequency required, in accordance this Ordinance. If documentation of adequate maintenance is not provided to CMSA staff, the FSE shall be in violation. Regardless of the frequency of maintenance, any GI with a combined level of floating FOG and settled solids in any compartment which exceeds GI required liquid depth of that compartment shall be considered to be in violation.
- 2) GI not in working condition – All vents, baffles, inlet and outlet devices, and flow control devices necessary for proper operation of the GI and compliance with this Ordinance must be in place and in working condition at all times.

- 3) *Grease recycling receptacle not in use* – Unless exempted in the permit, the FSE shall comply with this Ordinance.
- 4) *Prohibited compounds discharged to the GI* – Unless specific compounds are authorized in the permit, the FSE shall comply with this Ordinance.
- 5) *FOG discharged to drain not connected to the GI* – See Sections 6 of this Ordinance. Repeated incidents may result in requirement to connect the drain to a GI.
- 6) *Access denied to CMSA staff* – failure to provide CMSA staff reasonable access to the FSE to inspect the premises, GI(s), and maintenance records.

F. Re-inspection

If a NOV is issued for violation of an FSE permit, the FSE shall be assessed an inspection fee. The fee shall reimburse CMSA for the cost of inspecting the FSE to verify the corrective action required by the NOV.

Normally the re-inspection fee shall be a standard charge equal to 1.5 times the weighted hourly salary for the CMSA staff normally performing FSE inspections, plus 60% overhead. In exceptional cases, requiring substantially more than 1.5 hours staff time for all follow-up to the NOV, the re-inspection fee shall be based on actual staff time documented.

G. Escalated Enforcement

Where deemed necessary to achieve compliance with this Ordinance, CMSA will take escalated enforcement action beyond or in addition to the NOV. The normal intermediate enforcement action is an Administrative Order (AO), as described in the SUO and ERP. Fees may be assessed as part of an AO in order to recover CMSA costs for the enforcement action.

SECTION 10 – HEARINGS AND APPEALS

Applicable sections of the SUO are hereby incorporated by reference into this Ordinance (No. 2021-1). Any person wishing to appeal a decision, action, or determination of CMSA pursuant to this Ordinance shall comply with all relevant provisions of the SUO.

SECTION 11 – SEVERABILITY

If any provision, paragraph, word, section, or article of this Ordinance is invalidated by any court of competent jurisdiction, the remaining provisions, words, sections, articles, and chapters shall not be affected and shall continue in full force and effect.

SECTION 12 – REVISION

The CMSA Board of Commissioners reserve the right to update, change, or modify this Ordinance when deemed advisable and necessary.

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 CMSA boundaries.

PASSED AND ADOPTED this 9th day of February 2021, by the following vote:

AYES:

NOES:

ABSENT:

Attest:

Dean DiGiovanni, Secretary

Michael Boorstein, Chairperson



BOARD MEMORANDUM

January 7, 2021

To: CMSA Commissioners and Alternates

From: Joyce Cheung, Associate Engineer

Approved: Jason Dow, General Manager

Subject: Procurement of Six Return Activated Sludge Pumps

Recommendation: Authorize the General Manager to purchase six Fairbanks Morse return activated sludge pumps and spare parts for \$250,000.

Summary: The Return Activated Sludge (RAS) Pumps Replacement Project is currently in the design phase, and construction is scheduled for Summer 2021. The purpose of this project is to replace the six RAS pumps that have heavy corrosion and wear, and replace the aging check valves, plug valves, and associated piping and electrical wiring necessary to configure the new RAS pumping system. Due to a 24-26 week lead time associated with the manufacture and delivery of the pumps, advanced procurement is necessary to facilitate the timely construction of the RAS Pumps Replacement Project during the 2021 dry season.

Project Budget: The Agency's 10-year Capital Improvement Program has \$877,300 allocated for the design and construction of the RAS Pumps Replacement Project. The budget allocated for FY21 is \$383,000, of which \$50,597 has been awarded to date for the engineering design services, leaving \$332,403 for the remainder of this fiscal year to prepurchase materials and equipment that require a long lead time, such as the RAS pumps. The construction phase is anticipated to begin in July 2021.

Background: CMSA utilizes six RAS pumps in its secondary treatment process to continuously recirculate activated sludge from the secondary clarifiers back to the aeration tanks to maintain an optimum population of microorganisms for proper treatment and settling. The RAS pumps were installed during the original facility construction and start-up in 1985. The number of RAS pumps online corresponds to the number of secondary clarifiers online, and at most four RAS pumps can operate simultaneously to handle wet weather flows. There are two additional swing pumps for redundancy. The existing pumps are 6" vertical non-clog sewage pumps manufactured by Fairbanks Morse.

In 2016, the RAS pumps were examined after a failed mechanical seal on one of the pumps was leaking sludge into the gallery. Staff observed heavy corrosion and wear on the pump shaft and volute casing, and upon further investigation, all six pumps were found to have considerable wear and are now at the end of their useful service life. Recently, CMSA retained an engineering

consultant, West Yost, to assess the secondary system's hydraulic conditions to determine if the performance and efficiency of the pumps can be improved. Based on pump drawdown tests and historical flow data, West Yost recommended upsizing these pumps to 8" to better fit our operating conditions.

Discussion: West Yost identified and received firm quotes from three pump manufacturers that can satisfy the RAS pumping system operating conditions. A summary of the pumps considered during this selection process is provided in the following table:

	Vaughan	Fairbanks Morse	Flygt
Best Efficiency Point (gpm)	1750	1650	1750
Efficiency at Best Efficiency Point	70%	78%	80%
Size	10" Suction, 8" Discharge	8"	8"
Motor HP	20	15	15
Lead Time (weeks)	20-24	24-26	24-26
Cost of Pumps	\$201,200	\$215,113	\$230,870
Sales Tax	\$18,108	\$19,360	\$20,778
Shipping	\$6,000	\$4,180	\$4,180
Start-up & Testing	Incl.	\$2,800	Incl.
Total Capital Cost	\$225,308	\$241,453	\$255,828
Spare Parts (2 sets)	\$12,168	\$8,045	\$10,000

Due to cost and size constraints, the Flygt pumps were eliminated from further evaluation. Although the Vaughan pumps are the least expensive in terms of capital costs, they have lower efficiency and require a larger motor than the Fairbanks Morse pumps. A net present value (NPV) analysis was completed to evaluate savings due to energy costs. Based on a 3% return on investment over a 20-year period, the Fairbanks Morse pumps have the lowest NPV, with a breakeven point at 10 years of service.

Manufacturer	Efficiency *	kWh per year for 3 pumps *	Cost per year, \$ **	Total cost of 3 pumps over 20-yr life cycle
Vaughan	66%	159,330	\$15,933	\$480,209
Fairbanks Morse	76%	141,863	\$14,186	\$468,411

* For conservative calculations, efficiency and energy usage were based on historic average flow of 1,400 gpm, 24 hrs/day, with 3 pumps and clarifiers in operation.

** Lost revenue from not exporting renewable power to the grid, at \$0.10/kWh.

Based on pump performance, size constraints, efficiency and life-cycle costs, staff selected the 8" Fairbanks Morse pumps. Due to the long lead time, staff recommends pre-purchasing the RAS pumps in advance of construction, along with two sets of spare parts for the pumps. If the Board approves the procurement recommendation, the six RAS pumps will be delivered by July 2021.

Attachment:

- Fairbanks Morse Pumps Quote by JM Squared Associates, Inc., dated 11/20/2020



JM SQUARED ASSOCIATES, INC.

PUMPING, PROCESS AND FLOW CONTROL PRODUCTS
FOR THE WATER AND WASTEWATER INDUSTRY

P. O. Box 317, CONCORD, CA 94522-8534

TEL: (925) 798-2500 * FAX: (925) 798-7737

November 20, 2020

Mr. Dmitriy Shimberg, PE
West Yost
1001 Galaxy Way, Suite 310
Concord, CA 94520

Reference: Central Marin Sanitation Agency: RAS Pumps Replacement Project
Fairbanks Morse Pump Proposal
JM Squared Quote Number JMV20-1118-1

Dear Mr. Shimberg,

Per your request, JM Squared is pleased to provide the following proposal for Fairbanks Morse pumps for the Central Marin Sanitation Agency RAS Pumps Replacement Project. This proposal is based upon the details contained in your email dated November 17, 2020.

Four (4) Fairbanks Morse 8" Model B5444 vertical, close-coupled, dry pit, centrifugal, solids handling pumps.

- Sized for 2.75/3/2/1.5 MGD at 21/17/13/12 feet TDH.
- 4" diameter solids handling.
- Cast Iron construction.
- Cast Iron impeller, dynamically balanced.
- Stainless Steel impeller & case wear rings, hardened (300-350 BHN).
- Stainless Steel shaft sleeve (190-241 BHN).
- Standard double mechanical seal.
- 8" x 10" suction elbow.
- Vertical mounting base (pump).
- Variable speed high ring base (motor)..
- Flexible coupling.
- 15HP/890RPM/3Phase/60Hertz/460Volt/VSS/TEFC/Premium Efficiency/Inverter Duty flexible coupled electric motor.
- Non-witnessed factory hydraulic performance test (4 pumps, 4 speeds each, with curve approval prior to shipment).
- Certified, non-witnessed, standard factory hydrostatic test.
- Factory standard exterior paint (1 coat modified Alkyd Enamel, Pentair Blue).
- Seismic calculations (California PE), performed & submitted after pump approval.
- Factory critical speed calculations.
- Factory bearing life calculations.
- As-built O&M Manual (electronic copy only).

Two (2) Fairbanks Morse 8" Model B5434 vertical, "Builttogether", dry pit, centrifugal, solids handling pumps.

- Sized for 2.75/3/2/1.5 MGD at 21/17/13/12 feet TDH.
- 4" diameter solids handling.
- Cast Iron construction.
- Cast Iron impeller, dynamically balanced.
- Stainless Steel impeller & case wear rings, hardened (300-350 BHN).
- Stainless Steel shaft sleeve (190-241 BHN).
- Standard double mechanical seal.
- 8" x 10" suction elbow.
- Vertical mounting base.
- 15HP/890RPM/3Phase/60Hertz/460Volt/VSS/TEFC/Premium Efficiency/Inverter Duty direct-coupled electric motor.
- Non-witnessed factory hydraulic performance test (4 pumps, 4 speeds each, with curve approval prior to shipment).
- Certified, non-witnessed, standard factory hydrostatic test.
- Factory standard exterior paint (1 coat modified Alkyd Enamel, Pentair Blue).
- Seismic calculations (California PE), performed & submitted after pump approval.
- Factory critical speed calculations.
- Factory bearing life calculations.
- As-built O&M Manual (electronic copy only).

Price for above 6 pumps: **\$215,113.00**

Sales tax (San Rafael, 9.00%): **\$19,360.17**

Surface freight by commercial carrier: **\$4,180.00** (non-taxable).

FOB: Kansas City, Kansas.

Submittals: Approx. 6-8 weeks after acceptance of order.

Manufacture: Approx. 24-26 weeks after approval & release to manufacture (based on Stainless Steel impeller material).

Optional witnessed testing: Add approx. 3-4 weeks.

Quote validity: 90 days.

Payment terms: 100% net 30 days after shipment.

Optional Adders (sales tax not included):

- 316 Stainless Steel impellers: \$23,322.00 (for 6 pumps).
- Witnessing of factory hydraulic performance tests, 6 pumps: \$10,284.00 (witness costs not included).
- Spare parts for 8" B5444 flexible coupled pumps (1 gasket & o-ring; 1 set pump bearings; 1 set impeller mounting hardware; 1 impeller wear ring; 1 case wear ring; 1 shaft sleeve; 1 mechanical seal): **\$4,469.00**
- Spare parts for 8" B5434 "Builttogether" pumps (1 gasket & o-ring; 1 set impeller mounting hardware; 1 impeller wear ring; 1 case wear ring; 1 shaft sleeve; 1 mechanical seal): **\$3,576.00**
- Installation inspection & startup assistance by JM Squared personnel (2 trips, 2 days on site total): **\$2,800.00**

Attached is information on the proposed equipment. Please note that the predicted performance curves are based on Cast Iron Impellers, not Stainless Steel. The Engineering Department at the factory will have to generate predicted performance curves based on Stainless Steel impellers in the coming weeks.

We look forward to working with you on this project.

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Vesely', with a horizontal line drawn across the middle of the signature.

Martin Vesely
mvesely@jmsquared.com



BOARD MEMORANDUM

January 7, 2021

To: CMSA Commissioners and Alternates

From: Kate Brouillet, Administrative Specialist


Approved: Jason Dow, General Manager

Subject: January Informational Items

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

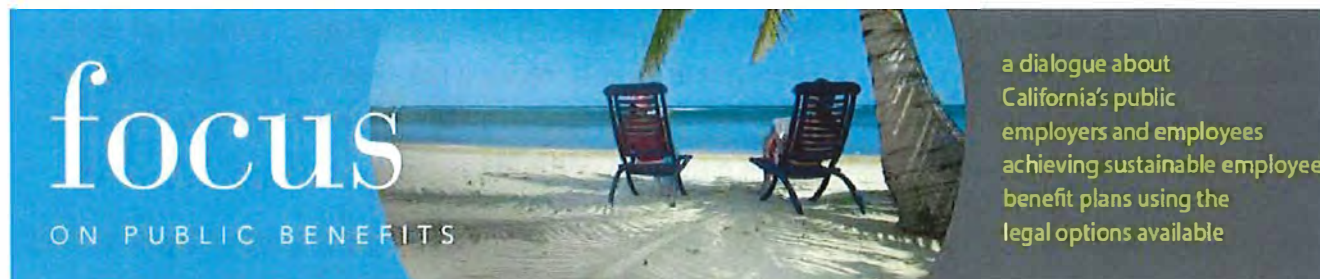
- A. Article dated July 22, 2019 by Jeff Chang, Focus on Public Benefits
Re: Public Agency Board Members' Worker Classification Matters for Tax Purposes
- B. Letter dated December 7, 2020 from James E. Dunbar, P.E., Lystek
Re: Lystek Fairfield OMRC Facility Update (2020)
- C. Letter dated December 8, 2020 from Andre Baghdasarian, AIG Property Casualty
Re: Impersonation Fraud Claim Assignment and Release
- D. Email dated December 9, 2020 to Mike Prinz, Las Gallinas Valley Sanitary District
Re: CMSA Interest in LGVSD Regional Biosolids Management Program
- E. Letter dated December 21, 2020 to the Honorable Joseph R. Biden, President-Elect
Re: CASA Support for Clean Water Priorities
- F. Letter dated December 22, 2020 to Anna Gallagher, California Regional Water Quality Control Board
Re: Monthly Self-Monitoring Report (SMR) – November 2020

Public Agency Board Members' Worker Classification Matters for Tax Purposes

 focusonpublicbenefits.com/public-agency-board-members-worker-classification-matters-for-tax-purposes/

By Jeff Chang

July 22, 2019



By Jeff Chang

Due to the IRS' different treatment of private sector and public agency boards of directors, it comes as little surprise that many California special districts and public agencies continue to classify their board members as independent contractors and report their compensation on Form 1099-MISC — despite the fact that the IRS takes a contrary position.

Most tax accountants and attorneys accept that private or for-profit board directors are treated as independent contractors. However, because of their status as “public officials,” the IRS considers elected or appointed public agency board members as employees for tax withholding purposes. From there, the rules for public agency board members, as one might expect, get even more complicated.

For income and payroll tax withholding rules, the IRS treats public agency board members as “public officials” who are considered *statutory* employees (i.e., their income should be reported on a W-2 with income and payroll taxes withheld accordingly). However, for Social Security, Medicare and eligibility for tax-favored employee benefits (e.g., tax-free health insurance coverage or participation in an employer-sponsored 401(a) plan), the IRS relies on the common-law control test.

Although a number of California public agencies treat their board members as independent contractors for all tax purposes, a large number are now treating their board members as employees for all tax purposes after an aggressive push by the IRS to reclassify special district board members as employees for all tax purposes. The IRS has, on a number of occasions, issued private letter rulings (which can only be relied on by the requesting taxpayer) confirming its position that board members of a public agency are employees under the common-law control test. Given its position on the tax withholding and payroll tax issue, the IRS will likely challenge the classification of a special district board member as an independent contractor if it audits the agency's payroll. If audited, an agency could become

liable for unpaid income taxes, payroll taxes, interest and penalties. While there are sound arguments for treating special district board members as independent contractors, the IRS is likely to challenge that position in the event of an audit.

We have also seen this “tax identity” problem arise because a number of special districts are providing tax-free health coverage to their board members while treating them as independent contractors for tax withholding purposes. As we’ve previously explained, only common-law employees of an employer are entitled to receive tax-free welfare benefits, such as health and life insurance coverage. An independent contractor, in most cases, will not be eligible to participate in another employer’s group health plan.

If your public agency still issues a Form 1099-MISC to its board members, you should revisit this treatment with your legal counsel and make sure you have a sound basis for doing so — one that is consistent with other tax and benefit treatment.

Jeff Chang is a partner at Best Best & Krieger LLP. He has four decades of experience skillfully evaluating benefit and retirement plan compliance to achieve maximum outcomes for public agency clients throughout California. He can be reached at jeff.chang@bbklaw.com or (916) 329-3685.

December 7, 2020

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

Subject: **LYSTEK FAIRFIELD OMRC FACILITY UPDATE (2020)**

Dear Jason Dow:

Lystek International is proud to be a continuing and essential service provider to the Central Marin Sanitary Agency for the acceptance, treatment, and beneficial use of biosolids material.

The Fairfield OMRC enacted proper and safe practices due to the Covid-19 situation throughout the year. With that being said, I want to take this opportunity to update you on our current year (2020) activities and accomplishments at the Lystek OMRC facility in Fairfield.

- Since opening in August 2016 (and through the end of 2020), Lystek has received and processed almost 180,000 wet tons of biosolids. In 2020, incoming volumes continued to increase from prior years, with over 50,000 wet tons received from 10 different wastewater treatment facilities. During this same period since opening, Lystek has land applied its Class A LysteGro biofertilizer product (more than 60 million gallons) to more than 15,000 acres in Solano and Yolo Counties. In 2020, we land applied more material than we had in previous years; demand for our biofertilizer still exceeds supply on a regular basis.
- In 2020, Lystek was successful in securing additional contracts from Bay Area wastewater treatment plant agencies for delivery of biosolids. Interest amongst other area agencies to participate with Lystek remains strong for the safe/secure diversion of biosolids due to forthcoming organics diversion requirements (i.e., SB-1383).



- In 2020, Lystek made operational improvements including the following:
 - Completion of a second end product (LysteGro biofertilizer) storage reservoir. This added facility brings the total storage capacity to over 16,000,000 gallons and will allow for plant operations to continue in the event of any protracted weather issues delaying seasonal land application.
 - In addition to the item above, a second land application injector was delivered to the Fairfield OMRC. This second unit will allow for multiple land application sites to receive LysteGro during the busiest times of the year, and provide redundancy in cases of any equipment downtime.
 - We modified our material acceptance practices to receive liquid organic feedstocks. We have received numerous requests to handle liquid feedstock and we accepted limited amounts to validate the success of this practice.
 - Lystek continues with its research and development of alternate end product uses. Our LysteMize program in partnership with Fairfield-Suisun Sewer District; by circulating hydrolyzed organic biomass to existing anaerobic digesters we are gathering data about increased biogas generation. Results to date have been positive and we will expand the program in the coming year.
 - Similar to the above item, Lystek is partnering with the Goleta Sanitary District (Santa Barbara area) on a food/organic waste to energy demonstration project. This project was partially funded by a grant from the California Energy Commission. The primary work has been completed, and the project has been expanded to a full-scale trial of the LysteMize technology. As mentioned above, hydrolyzed biomass is used in anaerobic digesters to generate more usable biogas and demonstrate the potential of a full-scale resource recovery facility. This activity will also continue in the next year.



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We are very pleased to have the Central Marin Sanitation Agency as a partner/customer in 2020 at the Lystek Fairfield plant. Your participation with Lystek is very much appreciated and your support allows us to offer quality service to the wastewater community across the San Francisco Bay Area.

If you have any questions or need additional information, please contact me at jdunbar@lystek.com or 707-419-0084.

Sincerely,

James E. Dunbar, P.E.
General Manager
California Operations



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Shawnee Mission, KS 66225

December 8, 2020

kspray@cmsa.us

Kenneth Spray, CPA
Administrative Services Manager
Central Marin Sanitation Agency
1301 Andersen Drive
San Rafael, CA 94901

RE: Insured: MEMBERS OF THE ACIP
Claimant: Central Marin Sanitation Agency
Policy No.: 01-606-08-20
Claim No.: 6425242801US

Dear Mr. Spray:

AIG Claims, Inc. ("AIG Claims") is the authorized representative of National Union Fire Insurance Company of Pittsburgh, Pa ("National Union"), the company which issued a Government Crime policy under policy 01-606-08-20 with dates of coverage July 1, 2017 to July 1, 2020 ("the Policy") to the Insured. AIG appreciates you as a customer.

The Claim

The Insured's Proof of Loss in the amount of \$96,433.00 states that the Insured paid invoices after someone impersonating legitimate vendors of the Insured, requested payment of outstanding invoices to new bank accounts via email.

The Policy

We have reviewed the Policy to determine under which insuring agreement(s) coverage may be provided.

IMPERSONATION FRAUD COVERAGE

1. Clause 1. **INSURING AGREEMENTS** is amended by adding the following to the end thereof:

IF. IMPERSONATION FRAUD COVERAGE

The **Insurer** will also pay for loss of **Funds** resulting directly from a **Fraudulently-Induced Instruction** directing a financial institution to transfer, pay or deliver

Funds from the Insured's Transfer Account.

2. Solely with respect to the **Impersonation Fraud Coverage** provided by this endorsement, Clause 2. **DEFINITIONS** is amended by adding the following at the end thereof:

"Fraudulently-Induced Instruction" means an electronic, telegraphic, cable, teletype, telefacsimile, telephone or written instruction communicated by the **Insured** or an **Employee** based upon an instruction received and relied upon by **Insured** or an **Employee** which was transmitted:

b. by a purported director, officer, partner, member, sole proprietor or employee of the **Insured's Vendor** or **Client**—or by an individual acting in collusion with such purported director, officer, partner, member, sole proprietor or employee—but which was in fact fraudulently transmitted by someone else without the **Insured's** or the **Employee's** knowledge; provided, however, **Fraudulently-Induced Instruction** shall not include any such instruction transmitted by an actual director, officer, partner, member, sole proprietor or employee of the **Insured's Vendor** or **Client** who was acting in collusion with any third party in submitting such instruction.

National Union has reviewed the information provided by the Insured and has confirmed the loss of \$96,433.00 under the Impersonation Fraud coverage of the policy. Attached is an Assignment and Release for \$96,433.00 less the \$25,000 deductible. Please let me know if you have any questions. Thank you.

Very truly yours,

Andre Baghdasarian

Andre Baghdasarian
Claims Analyst

CC: elaine.tizon@alliant.com

ASSIGNMENT AND RELEASE

INSURED: MEMBERS OF THE ALLIANT CRIME INSURANCE PROGRAM

CLAIM NO.: 6425242801US

POLICY NO.: 01-606-0820

Whereas, **Members of the Alliant Crime Insurance Program.** (hereinafter “the Insured”), purchased a Government Crime Policy from National Union Fire Insurance Company of Pittsburgh, PA (“the Company”), Policy number referenced above, (“the Policy”) to provide indemnity to the Insured against loss caused by Impersonation Fraud, among other things, all as per the terms and conditions of the Policy;

Whereas, Central Marin Sanitation Agency (“Central Marin”) is an additional named Insured by endorsement.

Whereas, Central Marin has submitted a Proof of Loss to the Company, alleging loss in the amount in excess of \$96,433.00, arising from an Impersonation Fraud discovered April 15, 2020 (“the Claim”);

Whereas, the Company has verified a loss in the amount of \$96,433.00 and Central Marin has agreed to a settlement of the verified loss, without setting precedent, less the deductible under the Policy;

Now, therefore, after application of the \$25,000.00 deductible under the Policy, the Company will, within 30 days of the Company’s receipt of the Assignment and Release executed by Central Marin, make a payment for \$71,433.00.

In consideration of the payment of \$71,433.00 by the Company, Central Marin does hereby release and forever discharge the Company from any and every right and cause of action, claim, demand of whatsoever kind, nature or description, and arising out of or resulting from the Claim, up to the payment amount; and

Central Marin does hereby sell, assign, transfer, convey and deliver unto the Company all rights, claims, title and interest which Central Marin now has or may hereafter have against whomever caused this loss to Central Marin, their associates, beneficiaries, and any other person or persons, corporation or corporations or other entities, as provided in the above policy and to the extent of the payment made hereunder. Assignee, the Company is entitled to but not obligated to pursue recovery under this agreement.

Central Marin agrees to provide the Company with reasonable assistance in the pursuit of any recovery, including the availability of documents in the control of the Central Marin and/or its counsel or other representative, in so far as Central Marin is able to compel such representative to make such documents available and to execute any and all additional documents in the furtherance of this assignment to the Company.

ASSIGNMENT AND RELEASE

INSURED: MEMBERS OF THE ALLIANT CRIME INSURANCE PROGRAM

CLAIM NO.: 6425242801US

POLICY NO.: 01-606-0820

By: _____

Date: _____

STATE OF: --)
) ss.:
COUNTY OF: ---)

On this day of , 2020, before me personally appeared , to
me known, who being duly sworn, did depose and say: that (he/she) resided in , that
(he/she) is the of the corporation described in this instrument as
the Insured and on behalf of which (he/she) has executed this instrument.

NOTARY PUBLIC

From: [Jason Dow](#)
To: [Kate Brouillet](#)
Subject: FW: CMSA Interest in LGVSD Regional Biosolids Management Program
Date: Wednesday, December 9, 2020 10:43:18 AM
Attachments: [CMSA Customer Base Information.docx](#)
[2019 EPA Biosolids Report submitted 2020-02-15.pdf](#)
[2020 Biosolids Annual Report.pdf](#)
[2020-01 Biosolids Analytical Report.pdf](#)
[2020-07 Biosolids Analytical Report.pdf](#)
[2019 Biosolids Annual Report.pdf](#)

For the January Board info packet.

From: Jason Dow
Sent: Wednesday, December 09, 2020 10:42 AM
To: Mike Prinz (MPrinz@lgvsd.org) <MPrinz@lgvsd.org>
Subject: CMSA Interest in LGVSD Regional Biosolids Management Program

Hi Mike,

Thanks for sending the LGVSD Biosolids Capacity email on November 9 in which you are soliciting interest from Marin County POTWs to participate in a potential biosolids management solution on LGVSD property.

I discussed your solicitation email and CMSA's biosolids management portfolio with the CMSA Board last night, and the Board members were fully supportive of me sending this email to express CMSA's interest. I appreciate LGVSD and you investigating the potential for the regional solution and taking the lead on this important topic.

Annually, CMSA produces approximately 1,600 dry tons (6,000 wet tons @ 26% solids) of Class B biosolids that are beneficially reused. During the wet weather season (mid Oct – early May) the biosolids are used as ADC at the Redwood Landfill, during the dry weather season they are land applied in Solano County, and year round, two loads per week are delivered to the Lystek biofertilizer facility in Fairfield. If LGVSD develops a land application site and/or builds a biosolids/green waste compost facility in the future, CMSA would be very interested in using either or both operations to diversify our biosolids management portfolio. CMSA would consider delivering any amount of biosolids to the LGVSD operation under a long-term contractual arrangement. Of course, the actual delivered amount would be dependent on the LGVSD site's available capacity as well as the tipping fee(s).

CMSA biosolids are anaerobically digested, conditioned with polymer and ferric chloride, and dewatered in high speed centrifuges. Our annual biosolids management

budget for the current year is \$443,000, where \$319K is for reuse site tipping fees and \$124K is for transportation to the sites.

Attached to this email are:

- A brief discussion on the customer base for CMSA,
- 2019 Biosolids EPA Report
- 2019 and partial 2020 Biosolids Annual Reports
- Biosolids Analytical Reports for January and July 2020 (providing semiannual TTLC, STLC and priority pollutant information).

Let me know if you need any additional CMSA biosolids information.

Thanks,
Jason - CMSA



1225 8th Street, Suite 595 • Sacramento, CA 95814 • TEL: (916) 446-0388 • www.CASAwab.org

December 21, 2020

The Honorable Joseph R. Biden
President-Elect
1401 Constitution Ave. NW
Washington, D.C. 20230

Dear President-Elect Biden:

The California Association of Sanitation Agencies (CASA) writes to congratulate you and Vice President-Elect Kamala Harris on your successful presidential campaign. CASA is delighted that the nation will have leadership that places a premium on rebuilding our water infrastructure, with a priority to ensure that all citizens will enjoy a safe and reliable water supply. CASA is also pleased that your administration intends to address climate change and the threat it presents to our ability to deliver water quality services to the citizens of California.

CASA represents more than 125 local public agencies engaged in the collection, treatment and recycling of wastewater to protect public health and the environment. Our mission is to provide trusted information and advocacy on behalf of California clean water agencies, and to be a leader in sustainability and utilization of renewable resources. As you begin the important transition to governance, CASA provides the following recommendations on improving the federal partnership with clean water agencies that will deliver an improved quality of life and a sustainable economy.

Restore and Expand Federal Assistance for Core Clean Water Infrastructure Needs

Since the 1980's, federal assistance under the Clean Water Act's State Revolving Loan Fund (SRF) has essentially remained flat. Federal support for clean water infrastructure has failed to account for inflation and increasing demands related to population growth. Moreover, the need for innovative treatment upgrades and rehabilitation of existing treatment systems have outstripped available resources. This imbalance between needs and resources is further compounded by climate change impacts. CASA urges that any national infrastructure initiative that your administration proposes include:

- A minimum of \$5 billion per year to support SRF capitalization grants to address traditional clean water treatment infrastructure needs;
- A minimum of \$100 million annually to support WIFIA that would leverage at least \$12 billion in construction activity;
- Direct grants assistance to support the water quality infrastructure needs of disadvantaged communities;

The Honorable Joseph R. Biden
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In addition, the administration should make efforts to address existing inequities in the SRF allocation formula. California has been particularly disadvantaged by the failure to update the federal grants allocation formula. This outdated formula penalizes states like California that have experienced dramatic population growth in recent decades. The current SRF allocation formula is based upon 1987 population data. In order to remedy this circumstance and ensure that we can continue to make progress in developing safe and reliable water supplies, CASA urges that your Administration encourage adoption of an updated SRF allocation formula that aligns with USEPA's May 2016 Report to Congress entitled [Review of the Allotment of the Clean Water State Revolving Fund \(CWSRF\)](#) to ensure the equitable allocation of SRF assistance to the States.

Promote Innovative Financing of Wastewater Infrastructure

While existing funding mechanisms such as the Clean Water SRF have been highly successful over the years, more federal support is needed to build upon the good work that is being done. The funding gap for water infrastructure across the nation continues to escalate. In California, demand for funding from the Clean Water SRF program alone for existing needs exceeds \$7 billion, yet California is providing less than \$700 million annually in project funding. CASA believes that an effective infrastructure funding policy must be innovative, diverse and robustly funded. While the Clean Water SRF program has been an unqualified success, and the WIFIA program has demonstrated that demand for capital through innovative funding is strong, additional tools are needed to supplement these core programs, including the restoration of Build America Bonds, unrestricted use of Private Activity Bonds, and the restoration of Advance Refunding Bonds.

Support Urgent COVID-19 Relief and WBE Efforts

Local clean water agencies and our ratepayers have been impacted by the COVID-19 pandemic in a myriad of ways. First, the anticipated financial shortfalls resulting from budget shortfalls and decreasing revenue will impact capital planning and operations at our agencies in the near future. That is why we ask that as part of any future COVID relief package, the Administration should support the creation of a grants program to assist clean water utilities offset revenue losses due to unpaid service bills from the COVID-19 crisis and help ratepayers who may still be economically struggling. We also support more direct federal assistance to agencies themselves to help offset costs incurred as a result of the pandemic. Finally, clean water agencies have found ways to play a more proactive role in addressing the pandemic, including the use of wastewater-based epidemiology (WBE) to help track the virus. We will continue to support and pursue partnerships with U.S. Health and Human Services and Centers for Disease Control and Prevention to utilize clean water utilities and wastewater-based epidemiology to identify and locate COVID-19 hotspots in communities and ask of the Administration's support in doing so.

Advance Approaches to Addressing PFAS Based on Sound Science

The need to address public health and environmental concerns associated with per- and polyfluoroalkyl substances (PFAS) contamination at the federal level continues to grow, particularly as it relates to PFAS contamination in our water resources. In recent years, increasing attention has been given to addressing PFAS at drinking water and clean water

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utilities whose responsibility is to ensure protection of public health the safety of our water resources. However, the development of any mandates and compliance responsibilities must recognize the reality of how such impacts occur.

Clean water utilities are not “producers” or users of PFAS and do not utilize PFAS chemicals in our treatment processes. Rather, we are “receivers” of these chemicals used by manufacturers and consumers, and merely convey or manage the traces of PFAS encountered in our daily life. The Administration should work to ensure that any liability for PFAS management and/or disposal of contaminated materials is imposed upon producers and manufacturers of these chemicals and/or products containing PFAS and related chemicals. In addition, the administration should provide federal assistance to publicly owned treatment works (POTWs) for pretreatment implementation issues related to PFAS, and also ensure that CERCLA liability does not extend to receivers of wastewater discharges for purposes of treatment and disposal of biosolids. Finally, any new requirements pertaining to monitoring and treatment of PFAS must be developed consistent with the Clean Water Act and Safe Drinking Water Act and not as standalone legislative mandates.

Support Addressing Plastics Pollution Through Source Control and Consumer Awareness

CASA supports legislation to address the sources of plastic pollution, specifically efforts that focus on source control and consumer awareness. CASA has worked with Congressional offices to introduce language to require clear labeling of wet wipes (many of which contain microfibers and microplastics) as “Do Not Flush” if they are intended for the trash and prohibiting wipes from being marketed as flushable if they contain synthetic or plastic content. We also generally support plastic pollution reduction and prevention legislation, including development of standardized monitoring methodologies for microplastics in a variety of environmental media.

Prepare the Next Generation of Essential Clean Water Professionals

The ability to deliver reliable clean water services depends upon an educated workforce. As technology advances and the challenge of treating a litany of new and ever-changing constituents becomes increasingly complex, it is vital that our nation invest in the next generation of clean water professionals, who will be responsible for providing improved public health services and the protection of our nation’s waters. CASA requests that, similar to other federal educational programs like the Department of Commerce’s Employment and Training Administration, designed to advance our nation’s ability to successfully meet complex problems, any water infrastructure initiative provides funding to help educate the next generation of water quality leaders.

Modernize the Clean Water Act Regulatory Framework

The Clean Water Act was enacted fifty years ago to address water quality impairments epitomized by the untreated release of sewage into the nation’s lakes, rivers, bays and coastal waters. Since the 1970’s, significant improvements have been made to wastewater treatment facilities that have made monumental improvements to public health and the environment. Today, water quality agencies focus on an increasingly complex array of treatment needs, ranging from a variety of industrial chemicals such as PFAS to nutrients and microplastics. By

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statute, point sources such as POTWs are frequently required to comply with permitting timelines that are costly, administratively inefficient and reflect the circumstances of the 1970's rather than today's needs. We urge that any water infrastructure initiative include Clean Water Act revisions to allow for permitting and compliance mandates that recognize the lifecycle of treatment technologies, extensive planning, and design and construction schedules that extend beyond five years, and compliance agreements that can extend beyond a decade. Specifically, we request that the Administration support extension of NPDES permit terms to up to 10 years for municipal wastewater agencies. The modernization of the CWA regulatory framework would promote administrative efficiency and address ratepayer affordability concerns without impeding progress in water quality improvements.

Support for Ratepayer Assistance

The novel Coronavirus (COVID-19) has served as a dramatic reminder of the essential role that clean water services provide to public health and the welfare of communities. At the same time, the financial impact of COVID-19 revealed the precarious circumstances that many ratepayers find themselves in when confronting economic disruptions. CASA believes that federal assistance to support ratepayers in dire economic circumstances, similar to the Low-Income Heat Energy Assistance Program, must be available to preserve this vital public health service and avoid service interruption.

Engage in Research and Development to Deliver Sustainable Energy and Resource Recovery

CASA believes the exceptional advances that clean water agencies have achieved since the 1970's are in large measure due to the creativity of our water leaders and a powerful funding commitment. The ever-increasing challenge from climate change that includes drought, floods, sea level rise and population migration will require even more creative solutions and a strong federal partnership. CASA agencies have made important progress in developing sustainable solutions to capture the embedded energy in the wastewater stream through anaerobic digestion and other mechanisms. These projects utilize renewable resources and reduce greenhouse gas emissions, helping address the impacts of climate change. However, much more could be achieved through a comprehensive federal partnership with clean water agencies that would deliver clean and sustainable energy and resource recovery. The creation of a water-focused Advanced Research Program Agency would provide the public sector with the ability to advance the development, demonstration, and implementation of novel approaches to achieve sustainable energy and reduce wastes from the wastewater treatment process.

Promote the Modernization of Wastewater Infrastructure through Smart Water Technologies

Any national infrastructure policy must promote and advance the use of innovative technologies to reduce lifecycle costs, improve the reliability of treatment and deliver affordability to ratepayers. The integration of smart water technologies that provide real-time monitoring, asset management, and data management to leverage the capacity of existing or new infrastructure, could deliver significant improvements in financial capability of clean water systems and help reduce long-term upward pressure on rates. CASA urges your administration to implement a direct grants assistance program to encourage clean water agency operators to adopt innovative smart water technologies. In the House-passed Moving Forward Act, Title IX

The Honorable Joseph R. Biden
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provides \$500 million in direct grants assistance to local clean water agencies to assist in the adoption of such technologies.

Conclusion

Taken together, the above referenced clean water priorities represent a package of actions the Administration can support that will help local agencies deliver clean water while protecting public health and the environment. CASA believes that taken together the implementation of these priorities will establish a national water infrastructure policy and program for our future that meets the challenges of environmental justice, improved public health, restoration and preservation of our natural resources and can serve as a catalyst for a robust economy. We look forward to working with your administration on these issues in the coming years.

Sincerely yours,

A handwritten signature in black ink, appearing to read "J.R. Dow", with a stylized flourish at the end.

Jason R. Dow
CASA President

cc: The Honorable Kamala Harris



CENTRAL MARIN SANITATION AGENCY

Jason R. Dow P.E.
General Manager

F

1301 Andersen Drive, San Rafael, CA 94901-5339

Phone (415) 459-1455

Fax (415) 459-3971

www.cmsa.us

December 22, 2020

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) – November 2020

The November 2020 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 Permit Order #R2-2016-0008, the Nutrient Watershed Permit Order #R2-2019-0017 and the Mercury and PCBs Permit Order #R2-2017-0041.

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 November 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

