

Catherine Benediktsson, President
Richard Snyder, Vice President
John Carapiet, Secretary

Omar Arias-Montez, Director
Tod Moody, Director

NOTICE AND AGENDA
Regular Board Meeting
at Sanitary District No. 5 of Marin County
Thursday September 17th, 2026

5:00 P.M. REGULAR BOARD MEETING

Teleconference Location:

Director Richard Snyder	Director Catherine Benediktsson
10 Pomander Walk	2352 Mar East Street
Belvedere CA 94920	Tiburon CA 94920

PURSUANT TO THE RALPH M. BROWN ACT, ALL VOTES SHALL BE BY ROLL CALL DUE TO DIRECTOR SNYDER TELECONFERENCE FROM 10 Pomander Walk Belvedere CA 94920 & DIRECTOR BENEDIKTSSON FROM 2352 Mar East Street Tiburon CA 94920

ROLL CALL:

PUBLIC COMMENTS: The public is invited to address the Board on items that do not appear on the agenda and are within the subject matter jurisdiction of the Board. The Brown Act does not allow the Board to take action on any public comment. Please limit public comments to no more than three minutes.

DIRECTORS' COMMENTS AND/OR AGENDA REQUESTS:

CONSENT CALENDAR:

1. Approval of August 20th, 2026 Regular Board Meeting Minutes
2. Review and receive all electronic fund transfers (EFTs) and approve warrants from August 14th, 2026, through September 10th, 2026, (JP Morgan Chase Bank, check no.12122 through check no. 12192, all transactions totaling \$1,736,448.72 and receive August 2026 payroll, in the sum of \$173,732.15 (Rubio)
3. Receipt of Financial Reports through September 10th, 2026 (Rubio)

MANAGEMENT REPORTS:

4. District Manager Summary Report (Rubio)

NEW BUSINESS:

5. Review and Consideration to adopt Resolution 2026-13 "A Resolution approving the completion of the 2024 Sewer Rehabilitation Project" and directing the District Manager to file a notice of completion with the County of Marin (Rubio) – Action

6. Review and accept Carollo Engineers “Odor Control System Upgrade Alternatives” technical memorandum dated June 2026 – Action (Rubio)

UNFINISHED BUSINESS:

COMMITTEE REPORTS:

7. Capital Improvement Program Committee (Moody/Carapiet)
8. Finance & Fiscal Oversight Committee (Benediktsson/Carapiet)
9. Governance Committee (No Meeting)
10. Personnel Committee (No Meeting)
11. Solar Ad-Hoc Meeting (No Meeting)

OTHER BUSINESS:

ENVIRONMENTAL:

CORRESPONDENCE:

INFORMATIONAL ITEMS:

ADJOURNMENT:

The Board will be asked to adjourn the meeting to a Regular Board Meeting on October 15, 2026, at 5:00 P.M.

At its discretion, the Board of Directors may consider the above-agenda items out of the order in which they appear currently. Accessible public meetings: Upon request, the District will provide written agenda materials in appropriate alternate formats, or disability-related modification or accommodation, including auxiliary aids or services to enable individual with disabilities to participate in public meetings. Please submit written requests to the District at P.O. Box 227, Tiburon, CA 94920 or hr@sani5.org at least two days prior to the meeting.

Catherine Benediktsson, President
Richard Snyder, Vice President
John Carapiet, Secretary

Omar Arias-Montez, Director
Tod Moody, Director

NOTICE AND AGENDA
Regular Board Meeting-Minutes
at Sanitary District No. 5 of Marin County
Thursday August 20th, 2026

5:00 P.M. REGULAR BOARD MEETING

Teleconference Location:

Director Richard Snyder	Director Catherine Benediktsson
10 Pomander Walk	2352 Mar East Street
Belvedere CA 94920	Tiburon CA 94920

PURSUANT TO THE RALPH M. BROWN ACT, ALL VOTES SHALL BE BY ROLL CALL DUE TO DIRECTOR SNYDER TELECONFERENCE FROM 10 Pomander Walk Belvedere CA 94920 & DIRECTOR BENEDIKTSSON FROM 2352 Mar East Street Tiburon CA 94920

ROLL CALL: Directors Snyder, Carapiet & Moody (absent Arias-Montez & Benediktsson)

PUBLIC COMMENTS: The public is invited to address the Board on items that do not appear on the agenda and are within the subject matter jurisdiction of the Board. The Brown Act does not allow the Board to take action on any public comment. Please limit public comments to no more than three minutes. -None

DIRECTORS' COMMENTS AND/OR AGENDA REQUESTS: Director Carapiet mentioned site visit to Tiburon PS #4 to see improvements made to forcemain and vault along with access to site- mentioned good relationship with new neighbor, also wanted to commend staff on proactive work to eliminate/reduce liability on back driveway of main plant and for El-Nino preparations at opposite end of plant.

CONSENT CALENDAR:

1. Approval of July 16th, 2026 Regular Board Meeting Minutes
2. Review and receive all electronic fund transfers (EFTs) and approve warrants from July 10th, 2026, through August 13th, 2026, (JP Morgan Chase Bank, check no.12065 through check no. 12121, all transactions totaling \$511,468.43 and receive July 2026 payroll, in the sum of \$190,402.47 (Rubio)
3. Receipt of Financial Reports through August 13th, 2026 (Rubio)

Motion to approve consent calendar items 1-3

(M/S Moody/Carapiet 3-0-2-0)

Ayes: Carapiet, Moody, Snyder

Nos: None

Absent: Arias-Montez, Benediktsson

Abstain: None

MANAGEMENT REPORTS:

4. District Manager Summary Report (Rubio)

NEW BUSINESS:

5. Review and Consideration to adopt Resolution 2026-11 “A Resolution Adopting Amended Conflict of Interest Code” (Rubio) – Action

Motion to adopt Resolution 2026-11 “A Resolution Adopting Amended Conflict of Interest Code”

(M/S Moody/Carapiet 3-0-2-0)

Ayes: Carapiet, Moody, Snyder

Nos: None

Absent: Arias-Montez, Benediktsson

Abstain: None

6. Review and Approval of District Response to the Marin County Civil Grand Jury Report titled, “Better Service at Lower Cost: Optimizing Essential Services for the Future of Marin”, dated June 11, 2026 and provide direction to the District Manager to submit the District final response to the Grand Jury prior to September 11, 2026 pursuant to Penal Section 933.05. (Rubio) – Action

Motion to Approve District Response to the Marin County Civil Grand Jury Report titled, “Better Service at Lower Cost: Optimizing Essential Services for the Future of Marin”, dated June 11, 2026 and provide direction to the District Manager to submit the District final response to the Grand Jury prior to September 11, 2026 pursuant to Penal Section 933.05

(M/S Moody/Carapiet 3-0-2-0)

Ayes: Carapiet, Moody, Snyder

Nos: None

Absent: Arias-Montez, Benediktsson

Abstain: None

7. Review and consideration to approve certain fund transfers between accounts pursuant to the Districts approved FY26-27 reserve policy targets and as approved by the FY26-27 budget and provide direction to the District Manager to coordinate the transfers with the approved signers on the account (Rubio) – Action

Motion to Approve certain fund transfers between accounts pursuant to the Districts approved FY26-27 reserve policy targets and as approved by the FY26-27 budget and provide direction to the District Manager to coordinate the transfers with the approved signers on the account

(M/S Moody/Carapiet 3-0-2-0)

Ayes: Carapiet, Moody, Snyder

Nos: None

Absent: Arias-Montez, Benediktsson

Abstain: None

8. Review and acceptance of Schaaf and Wheeler proposal for Design and Construction Management services for the Fiscal Year 26-27 Sewer Rehabilitation Project and providing direction to the District Manager to enter into a professional services agreement with Schaaf and Wheeler for an amount not to exceed \$110,440 (Rubio) – Action

Motion to accept and approve Schaaf and Wheeler proposal for Design and Construction Management services for the Fiscal Year 26-27 Sewer Rehabilitation Project and providing direction to the District Manager to enter into a professional services agreement with Schaaf and Wheeler for an amount not to exceed \$110,440

(M/S Moody/Carapiet 3-0-2-0)

Ayes: Carapiet, Moody, Snyder

Nos: None

Absent: Arias-Montez, Benediktsson

Abstain: None

9. Consideration to accept updated Special District Risk Management Authority “SDRMA” Memorandum of Understanding regarding SD5’s continued participation in the SDRMA health benefits program as reviewed by the Governance Committee and Adoption of Resolution 2026-12 “ A Resolution of the Board of Directors of Sanitary District No.5 of Marin County Approving the Form of and Authorizing the Execution of a Memorandum of Understanding and Authorizing the Special District Risk Management Authority’s Health Benefits Program (Rubio) – Action

Motion to accept updated Special District Risk Management Authority “SDRMA” Memorandum of Understanding regarding SD5’s continued participation in the SDRMA health benefits program as reviewed by the Governance Committee and Adoption of Resolution 2026-12 “ A Resolution of the Board of Directors of Sanitary District No.5 of Marin County Approving the Form of and Authorizing the Execution of a Memorandum of Understanding and Authorizing the Special District Risk Management Authority’s Health Benefits Program

(M/S Moody/Carapiet 3-0-2-0)

Ayes: Carapiet, Moody, Snyder

Nos: None

Absent: Arias-Montez, Benediktsson

Abstain: None

UNFINISHED BUSINESS:

COMMITTEE REPORTS:

10. Capital Improvement Program Committee (Moody/Carapiet)
11. Finance & Fiscal Oversight Committee (Benediktsson/Carapiet)
12. Governance Committee (Snyder/Benediktsson)
13. Personnel Committee (No Meeting)
14. Solar Ad-Hoc Meeting (No Meeting)

OTHER BUSINESS:

ENVIRONMENTAL:

CORRESPONDENCE:

INFORMATIONAL ITEMS:

15. Time Accrual Comparison Form

ADJOURNMENT: 5:42pm

The Board will be asked to adjourn the meeting to a Regular Board Meeting on September 17, 2026, at 5:00 P.M.

Approved:

Attest:

Richard Snyder
Vice President

John Carapiet
Board Secretary

At its discretion, the Board of Directors may consider the above-agenda items out of the order in which they appear currently. Accessible public meetings: Upon request, the District will provide written agenda materials in appropriate alternate formats, or disability-related modification or accommodation, including auxiliary aids or services to enable individual with disabilities to participate in public meetings. Please submit written requests to the District at P.O. Box 227, Tiburon, CA 94920 or hr@sani5.org at least two days prior to the meeting.

09/15/26

Sanitary District No.5 of Marin County
Warrant List Summary
August 14 through September 10, 2026

Date	Num	Name	Memo	Amount
JP Morgan Chase - Primary 7399				
08/21/20	EFT	CalPERS (Health Premium)	Health Insurance Premium - Sept 2026	-23,807.33
08/21/20	EFT	CalPERS (Pension)	Pension - July 2026	-27,755.50
08/21/20	EFT	CalPERS (457 Def Comp)	457 Contributions, semi-monthly, 8/15/26	-6,804.90
09/08/20	EFT	CalPERS (457 Def Comp)	457 Contributions, semi-monthly, 8/31/26	-6,384.90
09/08/20	EFT	CalPERS (Fin Rep & Acct Serv Div)	Old Age & Survivor's Insurance Program, Social Security Ad...	-70.00
08/25/20	EFT	Deluxe	Quickbooks check order, 1000 (2) copy checks	-1,055.38
09/10/20	12122	Access Answering Service	Answering Service - Sept 2026	-120.46
09/10/20	12123	Alvarez, Joel (v)	Employee Award Recognition-NACWA Peak Performance Plat...	-500.00
09/10/20	12124	Amazon Capital Services (Amazon B...	Stmt Date 8/31/26: garden hoses, pliers, tools	-482.93
09/10/20	12125	APB General Engineering	2024 Sewer Rehab Project, final retention payable	-44,255.65
09/10/20	12126	AT&T Calnet *4692 (Ops/Main Bldg &...	Phones: Operators Control Center & Paradise Cove - July 2026	-85.31
09/10/20	12127	Banshee Networks, Inc.	computer network services and Cisco Meraki computer hard...	-5,698.49
09/10/20	12128	Bilsborough, Sr., Chad E. (v)	Employee Award Recognition-NACWA Peak Performance Plat...	-500.00
09/10/20	12129	Brelje and Race Laboratories, Inc.	samples submitted - July 2026	-2,227.00
09/10/20	12130	Burke, Williams & Sorensen, LLP	District Counsel Services - July 2026	-2,216.00
09/10/20	12131	Caltest Analytical Laboratory	Lab Monitoring - July 2026	-5,318.10
09/10/20	12132	Cintas Corporation	weekly: scraper, towels, traffic mats - Aug 2026	-483.72
09/10/20	12133	Collodi, Pete (v)	Employee Award Recognition-NACWA Peak Performance Plat...	-500.00
09/10/20	12134	Comcast Bus (Internet/Voice/Cable) ...	Business Cable, Internet, Voice - Sept 2026	-746.11
09/10/20	12135	Comcast Business (VOIP) *9079	Business Voice Edge - Sept 2026	-467.29
09/10/20	12136	Cottrell III, Rulon K. (v)	Employee Award Recognition-NACWA Peak Performance Plat...	-500.00
09/10/20	12137	D&K Auto Service	Ops Chevy Silverado 1500 oil change, parts, service	-340.76
09/10/20	12138	DKF Solutions Group, LLC	TrainingLink monthly subscription - Sept 2026	-462.00
09/10/20	12139	Dotto Glass Inc	replace failed units in operable and fixed windows	-2,370.00
09/10/20	12140	Dutra, Tyler J. (v)	Employee Award Recognition-NACWA Peak Performance Plat...	-500.00
09/10/20	12141	Fastenal Company	latex disposable gloves and tools	-910.38
09/10/20	12142	FedEx Freight	check valve shipping	-207.00
09/10/20	12143	FlexTG, LLC	copiers: base rate & usage charges - June & Aug 2026	-450.28
09/10/20	12144	Fort Bragg Electric Inc	Cove Rd Pump Station Project, application 8, Aug 2026	-197,048.63
09/10/20	12145	Frank A. Olsen Company	check valve for digester recirculation line	-2,056.92
09/10/20	12146	Goodman Building Supply Co.	Stmt Date 8/25/26: pest control & groundskeeping supplies/to...	-139.58
09/10/20	12147	Gopher-It Trenchless	refund for Permit N26-184, 2 Buckeye Rd Belvedere, previousl...	-235.00
09/10/20	12148	Grainger	pH meter power cord & fittings, and chemical transfer pumps...	-883.31
09/10/20	12149	GSE Construction Company Inc	Digester Clean & Rehab, Progress Payment #12, June & July ...	-462,132.25
09/10/20	12150	Harrington Industrial Plastics LLC	Hypo room fitting leaks repair parts	-42.96
09/10/20	12151	HDR Engineering Inc	Digester Cleaning & Rehab Project - Aug 2026	-2,161.12
09/10/20	12152	Jill Kalehua, DMMS	Accounting Services - Aug 2026	-3,526.25
09/10/20	12153	Larry Walker Associates, Inc.	Paradise Cove WWTP NPDES Permit Reissuance, thru 1/31/26	-14,697.50
09/10/20	12154	LaTorre, Daniel P. (v)	Employee Award Recognition-NACWA Peak Performance Plat...	-500.00
09/10/20	12155	Linscott Engineering Contractors Inc.	removal/replacement of DWP splitter box valves, influent slid...	-25,656.40
09/10/20	12156	Lystek International Limited	biosolids delivery - July 2026	-578.45
09/10/20	12157	Marin Lock and Safe, Divisadero Lock	repair/re-key several doors throughout MP, Paradise Cove, an...	-7,996.64
09/10/20	12158	Marin Water	water service: 5 accounts, June & July 2026	-3,173.75
09/10/20	12159	Mark Thomas & Company Inc	Tiburon Main Plant Survey - July 2026	-1,128.00
09/10/20	12160	McCampbell Analytical, Inc.	chronic toxicity testing - July 2026	-2,945.92
09/10/20	12161	Mill Valley Refuse Serv (Garbage) *2...	garbage service - Sept 2026	-558.02
09/10/20	12162	Pacific Gas & Electric	Stmt Date 8/28/26, Aug 2026	-34,978.02
09/10/20	12163	Polydyne Inc	RDT polymer	-4,612.75
09/10/20	12164	Primo Brands	drinking water service - Aug 2026	-105.36
09/10/20	12165	Robert L Talavera LLC	SSGIS ArcView Applicaiton Support - Aug 2026	-510.00
09/10/20	12166	Rosser, John M. (v)	Employee Award Recognition-NACWA Peak Performance Plat...	-500.00
09/10/20	12167	Royal Wholesale Electric	electrical material for shop stock	-912.37
09/10/20	12168	Rubio, Antonio (v)	Employee Award Recognition-NACWA Peak Performance Plat...	-500.00
09/10/20	12169	Salazar, Ignacio G. (v)	Employee Award Recognition-NACWA Peak Performance Plat...	-500.00
09/10/20	12170	Southwest Valve & Equipment	AB valve bearing parts	-7,250.04
09/10/20	12171	Spex CertiPrep LLC	1.00 mg/LC12 ampules QCI-187	-1,196.04
09/10/20	12172	T-Mobile *1446 cell	cell phones - Aug 2026	-405.19
09/10/20	12173	T-Mobile *8704 SIM	(6) SIM cards for pump stations - Aug 2026	-60.00
09/10/20	12174	The Ark Newspaper	Legal #5146, advert for employee conflict of interest code am...	-360.00
09/10/20	12175	Thornton, Eric T. (v)	Employee Award Recognition-NACWA Peak Performance Plat...	-500.00
09/10/20	12176	Triola, Joseph (v)	Employee Award Recognition-NACWA Peak Performance Plat...	-500.00
09/10/20	12177	Univar Solutions	Sod Bisulfite bulk, for SD5 & SASM, and Sod Hypo	-19,866.08
09/10/20	12178	USA Blue Book	lab supplies, carrying case for portable DO probe protection	-440.26
09/10/20	12179	Waste Management, Redwood Landfill	garbage service - July 2026	-647.70
09/10/20	12180	Water Components & Building Supply	Screw Press floc tank drain plumbing parts	-77.99
09/10/20	12181	Weco Industries, LLC	new rod for Rodder truck	-3,992.62
09/10/20	12182	WorkSmart Automation, Inc.	W3331 FTV Development	-23,400.00

09/15/26

Sanitary District No.5 of Marin County
Warrant List Summary
August 14 through September 10, 2026

Date	Num	Name	Memo	Amount
09/10/2026	12183	Amazon Capital Services (Amazon B...	VOID: Stmt Date 8/31/26	0.00
09/10/2026	12184	Corodata Records Management Inc	standard record storage carton & digital services package - A...	-57.19
09/10/2026	12185	Grainger	pipe insulation for blowers to protect from heat in new PC blo...	-845.49
09/10/2026	12186	Mike Testa Plumbing, Inc.	testing of (5) backflow devices	-750.00
09/10/2026	12187	Nute Engineering Corp.	Cove Rd Pump Station Improvements, final expense only - Ju...	-151.75
09/10/2026	12188	Sewer Tech Inc	Paradise Cove blower room & Main Plant water repair	-54,000.00
09/10/2026	12189	Special Dist Risk Mgmt Authority (S...	Dental, Vision, Basic Life & ADD, LTD, STD, EAP - Oct 2026	-2,078.48
09/10/2026	12190	Telstar Instruments	Chlor-A-Vac repair evaluation shipping unit cost	-85.87
09/10/2026	12191	U.S. Bank cc *3611	Stmt Date 8/25/26: conferences travel, CI1 ampules for lab tes...	-9,046.40
09/10/2026	12192	California Bank and Trust	MP upgrade, principal & interest due 10/1/26	-706,956.00
Total JP Morgan Chase - Primary 7399				-1,735,965.79
TOTAL				-1,735,965.79

09/15/26

Sanitary District No.5 of Marin County
Warrant List Detail
 August 14 through September 10, 2026

Num	Type	Date	Name	Memo	Account	Paid Amo...
EFT	Check	08/21/2	CalPERS (Health...	Health Insurance Premium - Sept 2026	JP Morgan Chase - ...	
				Active Employee Health Insurance Premi...	8020.05 · Employee ...	-22,828.61
				Retiree Health Insurance Premium, plus ...	8022.05 · Retiree He...	-978.72
TOTAL						-23,807.33
EFT	Check	08/21/2	CalPERS (Pensio...	Pension - July 2026	JP Morgan Chase - ...	
				Pepra, July 2026	8019.05 · PERS Retir...	-11,237.23
				Classic, July 2026	8019.05 · PERS Retir...	-16,518.27
TOTAL						-27,755.50
EFT	Check	08/21/2	CalPERS (457 De...	457 Contributions, semi-monthly, 8/15/...	JP Morgan Chase - ...	
				457 Contributions, semi-monthly, 8/15/26	8008 · Deferred Com...	-6,804.90
TOTAL						-6,804.90
EFT	Check	09/08/2	CalPERS (457 De...	457 Contributions, semi-monthly, 8/31/...	JP Morgan Chase - ...	
				457 Contributions, semi-monthly, 8/31/26	8008 · Deferred Com...	-6,384.90
TOTAL						-6,384.90

09/15/26

Sanitary District No.5 of Marin County
Warrant List Detail
 August 14 through September 10, 2026

Num	Type	Date	Name	Memo	Account	Paid Amo...
EFT	Check	09/08/2	CalPERS (Fin Re...	Old Age & Survivor's Insurance Progra...	JP Morgan Chase - ...	
				Old Age & Survivor's Insurance Program, ...	8019 · PERS Retirem...	-70.00
TOTAL						-70.00
EFT	Check	08/25/2	Deluxe	Quickbooks check order, 1000 (2) copy...	JP Morgan Chase - ...	
				Quickbooks check order, 1000 (2) copy c...	6047 · Office Supplies	-1,055.38
TOTAL						-1,055.38
12122	Bill Pmt -...	09/10/2	Access Answeri...	Answering Service - Sept 2026	JP Morgan Chase - ...	
35867	Bill	09/05/2		Answering Service - Sept 2026	8510 · Data/Alarms/I...	-120.46
TOTAL						-120.46
12123	Bill Pmt -...	09/10/2	Alvarez, Joel (v)	Employee Award Recognition-NACWA ...	JP Morgan Chase - ...	
Note...	Bill	07/15/2		Employee Award Recognition-NACWA P...	8005 · Employee Inc...	-500.00
TOTAL						-500.00

09/15/26

Sanitary District No.5 of Marin County
Warrant List Detail
August 14 through September 10, 2026

Num	Type	Date	Name	Memo	Account	Paid Amo...
12124	Bill Pmt -...	09/10/2	Amazon Capital ...	Stmt Date 8/31/26: garden hoses, plier...	JP Morgan Chase - ...	
1JY...	Bill	08/31/2		Inv 1JYY-C6H7-4Y9J, garden hoses, plier...	7022 · Plant Maint. P...	-482.93
TOTAL						-482.93
12125	Bill Pmt -...	09/10/2	APB General En...	2024 Sewer Rehab Project, final retenti...	JP Morgan Chase - ...	
Ema...	Bill	08/20/2		2024 Sewer Rehab Project, final retention...	Retainage Payable	-44,255.65
TOTAL						-44,255.65
12126	Bill Pmt -...	09/10/2	AT&T Calnet *46...	Phones: Operators Control Center & P...	JP Morgan Chase - ...	
000...	Bill	08/12/2		Operators Control Center phones - 7/12/2...	8531 · Main Plant Tel...	-56.89
				Paradise Cove phones - 7/12/26-8/11/26, ...	8532 · Paradise Cov...	-28.42
TOTAL						-85.31
12127	Bill Pmt -...	09/10/2	Banshee Networ...	computer network services and Cisco ...	JP Morgan Chase - ...	
17063	Bill	08/18/2		computer network services - July 2026	8510 · Data/Alarms/I...	-2,916.00
17064	Bill	08/18/2		computer hardware, Cisco Meraki	8510 · Data/Alarms/I...	-1,924.49
				Cisco Meraki cloud license support, July ...	8510 · Data/Alarms/I...	-286.00

09/15/26

Sanitary District No.5 of Marin County
Warrant List Detail
August 14 through September 10, 2026

Num	Type	Date	Name	Memo	Account	Paid Amo...
				Cisco Meraki cloud license support, July ...	8510 · Data/Alarms/I...	-286.00
				Cisco Meraki cloud license support, July ...	8510 · Data/Alarms/I...	-286.00
TOTAL						-5,698.49
12128	Bill Pmt -...	09/10/2	Bilsborough, Sr.,...	Employee Award Recognition-NACWA ...	JP Morgan Chase - ...	
Note...	Bill	07/15/2		Employee Award Recognition-NACWA P...	8005 · Employee Inc...	-500.00
TOTAL						-500.00
12129	Bill Pmt -...	09/10/2	Brelje and Race ...	samples submitted - July 2026	JP Morgan Chase - ...	
172...	Bill	08/05/2		samples submitted - July 2026	7051 · Main Plant La...	-2,227.00
TOTAL						-2,227.00
12130	Bill Pmt -...	09/10/2	Burke, Williams ...	District Counsel Services - July 2026	JP Morgan Chase - ...	
374...	Bill	08/19/2		District Counsel Services - July 2026	6039 · Legal	-2,216.00
TOTAL						-2,216.00
12131	Bill Pmt -...	09/10/2	Caltest Analytica...	Lab Monitoring - July 2026	JP Morgan Chase - ...	
742...	Bill	08/13/2		Main Plant Lab Monitoring - July 2026	7051 · Main Plant La...	-3,292.70

09/15/26

Sanitary District No.5 of Marin County
Warrant List Detail
August 14 through September 10, 2026

<u>Num</u>	<u>Type</u>	<u>Date</u>	<u>Name</u>	<u>Memo</u>	<u>Account</u>	<u>Paid Amo...</u>
				Paradise Cove Monitoring - July 2026	7052 · Paradise Cov...	-2,025.40
TOTAL						-5,318.10
12132	Bill Pmt -...	09/10/2	Cintas Corporati...	weekly: scraper, towels, traffic mats - ...	JP Morgan Chase - ...	
Stmnt...	Bill	08/31/2		weekly: scraper, towels, traffic mats - Inv ...	7023 · Janitorial Sup...	-120.93
				weekly: scraper, towels, traffic mats - Inv ...	7023 · Janitorial Sup...	-120.93
				weekly: scraper, towels, traffic mats - Inv ...	7023 · Janitorial Sup...	-120.93
				weekly: scraper, towels, traffic mats - Inv ...	7023 · Janitorial Sup...	-120.93
TOTAL						-483.72
12133	Bill Pmt -...	09/10/2	Collodi, Pete (v)	Employee Award Recognition-NACWA ...	JP Morgan Chase - ...	
Note...	Bill	07/15/2		Employee Award Recognition-NACWA P...	8005 · Employee Inc...	-500.00
TOTAL						-500.00
12134	Bill Pmt -...	09/10/2	Comcast Bus (In...	Business Cable, Internet, Voice - Sept ...	JP Morgan Chase - ...	
Bill ...	Bill	08/26/2		Business Cable, Internet, Voice - Sept 2026	8531 · Main Plant Tel...	-746.11
TOTAL						-746.11

09/15/26

Sanitary District No.5 of Marin County
Warrant List Detail
 August 14 through September 10, 2026

Num	Type	Date	Name	Memo	Account	Paid Amo...
12135	Bill Pmt -...	09/10/2	Comcast Busine...	Business Voice Edge - Sept 2026	JP Morgan Chase - ...	
001...	Bill	09/01/2		Business Voice Edge - Sept 2026	8531 · Main Plant Tel...	-467.29
TOTAL						-467.29
12136	Bill Pmt -...	09/10/2	Cottrell III, Rulon...	Employee Award Recognition-NACWA ...	JP Morgan Chase - ...	
Note...	Bill	07/15/2		Employee Award Recognition-NACWA P...	8005 · Employee Inc...	-500.00
TOTAL						-500.00
12137	Bill Pmt -...	09/10/2	D&K Auto Service	Ops Chevy Silverado 1500 oil change, ...	JP Morgan Chase - ...	
84804	Bill	08/20/2		Ops Chevy Silverado 1500 oil change, pa...	7072 · Maintenance	-340.76
TOTAL						-340.76
12138	Bill Pmt -...	09/10/2	DKF Solutions G...	TrainingLink monthly subscription - Se...	JP Morgan Chase - ...	
23665	Bill	09/01/2		TrainingLink monthly subscription - Sept ...	8515 · Safety	-462.00
TOTAL						-462.00

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Sanitary District No.5 of Marin County
Warrant List Detail
August 14 through September 10, 2026

Num	Type	Date	Name	Memo	Account	Paid Amo...
12139	Bill Pmt -...	09/10/2	Dotto Glass Inc	replace failed units in operable and fix...	JP Morgan Chase - ...	
244...	Bill	08/25/2		replace failed units in operable and fixed ...	7022 · Plant Maint. P...	-2,370.00
TOTAL						-2,370.00
12140	Bill Pmt -...	09/10/2	Dutra, Tyler J. (v)	Employee Award Recognition-NACWA ...	JP Morgan Chase - ...	
Note...	Bill	07/15/2		Employee Award Recognition-NACWA P...	8005 · Employee Inc...	-500.00
TOTAL						-500.00
12141	Bill Pmt -...	09/10/2	Fastenal Company	latex disposable gloves and tools	JP Morgan Chase - ...	
CAP...	Bill	08/28/2		latex disposable gloves, tools, PO O-26-1...	7022 · Plant Maint. P...	-910.38
TOTAL						-910.38
12142	Bill Pmt -...	09/10/2	FedEx Freight	check valve shipping	JP Morgan Chase - ...	
300...	Bill	08/25/2		check valve shipping. PO O-26-056A	7022 · Plant Maint. P...	-207.00
TOTAL						-207.00

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Sanitary District No.5 of Marin County
Warrant List Detail
August 14 through September 10, 2026

Num	Type	Date	Name	Memo	Account	Paid Amo...
12143	Bill Pmt -...	09/10/2	FlexTG, LLC	copiers: base rate & usage charges - J...	JP Morgan Chase - ...	
INV...	Bill	07/14/2		KON-C280 copier usage charge - June 2...	6047 · Office Supplies	-0.67
				KON-C308, office copier usage charge - J...	6047 · Office Supplies	-98.93
				2 copiers, base rate charge, plus tax - Ju...	6047 · Office Supplies	-140.77
INV...	Bill	09/02/2		Ops copier: KON-C308 base rate & usag...	6047 · Office Supplies	-209.91
TOTAL						-450.28
12144	Bill Pmt -...	09/10/2	Fort Bragg Electr...	Cove Rd Pump Station Project, applica...	JP Morgan Chase - ...	
J001...	Bill	08/24/2		Cove Rd Pump Station Project, applicatio...	9109.2 · Bel PS#1 R...	-197,048.63
TOTAL						-197,048.63
12145	Bill Pmt -...	09/10/2	Frank A. Olsen C...	check valve for digester recirculation li...	JP Morgan Chase - ...	
258...	Bill	08/07/2		check valve for digester recirculation line ...	7022 · Plant Maint. P...	-2,056.92
TOTAL						-2,056.92
12146	Bill Pmt -...	09/10/2	Goodman Buildi...	Stmt Date 8/25/26: pest control & grou...	JP Morgan Chase - ...	
Clos...	Bill	08/25/2		chemcical spray for pest control, grounds...	7022 · Plant Maint. P...	-83.71
				material to fabricate part for Rodder truck,...	7021 · Plant Mainten...	-55.87
TOTAL						-139.58

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Warrant List Detail
August 14 through September 10, 2026

Num	Type	Date	Name	Memo	Account	Paid Amo...
12147	Bill Pmt -...	09/10/2	Gopher-It Trench...	refund for Permit N26-184, 2 Buckeye ...	JP Morgan Chase - ...	
Per...	Bill	09/03/2		refund for Permit N26-184, 2 Buckeye Rd...	5900.4 · Permit Inspe...	-235.00
TOTAL						-235.00
12148	Bill Pmt -...	09/10/2	Grainger	pH meter power cord & fittings, and ch...	JP Morgan Chase - ...	
902...	Bill	07/29/2		pH meter power cord, fittings, PO O-26-1...	7025 · Lab Supplies ...	-40.34
902...	Bill	07/29/2		ph meter power cord, fittings, PO O-26-12...	7025 · Lab Supplies ...	-176.77
903...	Bill	08/11/2		chemical transfer pumps, plus 1 spare. P...	7025 · Lab Supplies ...	-537.53
904...	Bill	08/17/2		pH meter power cord, fittings. PO O-26-1...	7025 · Lab Supplies ...	-128.67
TOTAL						-883.31
12149	Bill Pmt -...	09/10/2	GSE Constructio...	Digester Clean & Rehab, Progress Pay...	JP Morgan Chase - ...	
Inv 12	Bill	07/30/2		Digester Clean & Rehab, Progress Paym...	9308.12 · Digester R...	-462,132.25
TOTAL						-462,132.25
12150	Bill Pmt -...	09/10/2	Harrington Indus...	Hypo room fitting leaks repair parts	JP Morgan Chase - ...	
006...	Bill	08/20/2		Hypo room fitting leaks repair parts. PO O...	7022 · Plant Maint. P...	-42.96
TOTAL						-42.96

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Warrant List Detail
August 14 through September 10, 2026

Num	Type	Date	Name	Memo	Account	Paid Amo...
12151	Bill Pmt -...	09/10/2	HDR Engineerin...	Digester Cleaning & Rehab Project - A...	JP Morgan Chase - ...	
120...	Bill	08/31/2		Digester Cleaning & Rehab Project - 7/26...	9308.12 · Digester R...	<u>-2,161.12</u>
TOTAL						-2,161.12
12152	Bill Pmt -...	09/10/2	Jill Kalehua, DM...	Accounting Services - Aug 2026	JP Morgan Chase - ...	
Aug ...	Bill	09/01/2		Accounting Services - Aug 2026	6008 · Audit & Accou...	<u>-3,526.25</u>
TOTAL						-3,526.25
12153	Bill Pmt -...	09/10/2	Larry Walker Ass...	Paradise Cove WWTP NPDES Permit R...	JP Morgan Chase - ...	
001...	Bill	02/13/2		Paradise Cove WWTP NPDES Permit Re...	7064 · Paradise Cov...	<u>-14,697.50</u>
TOTAL						-14,697.50
12154	Bill Pmt -...	09/10/2	LaTorre, Daniel ...	Employee Award Recognition-NACWA ...	JP Morgan Chase - ...	
Note...	Bill	07/15/2		Employee Award Recognition-NACWA P...	8005 · Employee Inc...	<u>-500.00</u>
TOTAL						-500.00

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Sanitary District No.5 of Marin County
Warrant List Detail
August 14 through September 10, 2026

Num	Type	Date	Name	Memo	Account	Paid Amo...
12155	Bill Pmt -...	09/10/2	Linscott Enginee...	removal/replacement of DWP splitter b...	JP Morgan Chase - ...	
4641	Bill	08/31/2		removal/replacement of DWP splitter box ...	7022 · Plant Maint. P...	-25,656.40
TOTAL						-25,656.40
12156	Bill Pmt -...	09/10/2	Lystek Internatio...	biosolids delivery - July 2026	JP Morgan Chase - ...	
915...	Bill	08/14/2		biosolids delivery - July 2026	7029 · Main Plant Slu...	-578.45
TOTAL						-578.45
12157	Bill Pmt -...	09/10/2	Marin Lock and ...	repair/re-key several doors throughout...	JP Morgan Chase - ...	
26501	Bill	08/03/2		repair/re-key several doors throughout M...	7022 · Plant Maint. P...	-7,996.64
TOTAL						-7,996.64
12158	Bill Pmt -...	09/10/2	Marin Water	water service: 5 accounts, June & July...	JP Morgan Chase - ...	
Bill ...	Bill	08/10/2		2001 Paradise Dr, Customer #100098, 6/...	8541 · Water	-2,725.77
				late fee from prev invoice	8541 · Water	-34.06
				Mar West St, Customer #138856, 6/4/26-...	8541 · Water	-87.69
				late fee from previous invoice	8541 · Water	-3.88
				Cove Rd, Customer #424791, 6/4/26-8/5/26	8541 · Water	-135.21
				late fee from previous invoice	8541 · Water	-3.88
				Golden Gate Av, Customer #424793, 6/4/...	8541 · Water	-87.69
				late fee from previous invoice	8541 · Water	-4.00

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Warrant List Detail
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Num	Type	Date	Name	Memo	Account	Paid Amo...
				San Rafael Av, Customer #558095, 6/4/2...	8541 · Water	-87.69
				late fee from previous invoice	8541 · Water	-3.88
TOTAL						-3,173.75
12159	Bill Pmt -...	09/10/2	Mark Thomas & ...	Tiburon Main Plant Survey - July 2026	JP Morgan Chase - ...	
61077	Bill	08/12/2		Tiburon Main Plant Survey - July 2026	6017 · Consulting Fees	-1,128.00
TOTAL						-1,128.00
12160	Bill Pmt -...	09/10/2	McC Campbell Ana...	chronic toxicity testing - July 2026	JP Morgan Chase - ...	
260...	Bill	07/28/2		chronic toxicity testing - July 2026. PO O-...	7053 · Chronic Toxicity	-2,945.92
TOTAL						-2,945.92
12161	Bill Pmt -...	09/10/2	Mill Valley Refus...	garbage service - Sept 2026	JP Morgan Chase - ...	
000...	Bill	09/01/2		Garbage service - Sept 2026	7028 · Grounds Main...	-558.02
TOTAL						-558.02
12162	Bill Pmt -...	09/10/2	Pacific Gas & Ele...	Stmt Date 8/28/26, Aug 2026	JP Morgan Chase - ...	
Stmt...	Bill	08/28/2		Stmt Date 8/28/26: 7/17/26-8/18/26, Aug ...	8542 · Main Plant Util...	-27,284.05

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Warrant List Detail
August 14 through September 10, 2026

<u>Num</u>	<u>Type</u>	<u>Date</u>	<u>Name</u>	<u>Memo</u>	<u>Account</u>	<u>Paid Amo...</u>
				Stmnt Date 8/28/26: 7/17/26-8/18/26, Aug ...	8543 · Paradise Cov...	-2,726.03
				Stmnt Date 8/28/26: 7/17/26-8/18/26, Aug ...	8544 · Pump Station ...	-4,967.94
TOTAL						-34,978.02
12163	Bill Pmt -...	09/10/2	Polydyne Inc	RDT polymer	JP Morgan Chase - ...	
205...	Bill	08/20/2		RDT polymer. PO O-26-138	7024 · Main Plant Ch...	-4,612.75
TOTAL						-4,612.75
12164	Bill Pmt -...	09/10/2	Primo Brands	drinking water service - Aug 2026	JP Morgan Chase - ...	
06H...	Bill	08/26/2		drinking water: 7/25/26-8/24/26, Aug 2026	7023 · Janitorial Sup...	-105.36
TOTAL						-105.36
12165	Bill Pmt -...	09/10/2	Robert L Talaver...	SSGIS ArcView Applicaiton Support - ...	JP Morgan Chase - ...	
RLT...	Bill	08/31/2		SSGIS ArcView Applicaiton Support - Aug...	8510 · Data/Alarms/I...	-510.00
TOTAL						-510.00
12166	Bill Pmt -...	09/10/2	Rosser, John M. ...	Employee Award Recognition-NACWA ...	JP Morgan Chase - ...	
Note...	Bill	07/15/2		Employee Award Recognition-NACWA P...	8005 · Employee Inc...	-500.00
TOTAL						-500.00

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Warrant List Detail
August 14 through September 10, 2026

Num	Type	Date	Name	Memo	Account	Paid Amo...
12167	Bill Pmt -...	09/10/2	Royal Wholesale...	electrical material for shop stock	JP Morgan Chase - ...	
Reg ...	Bill	08/26/2		electrical material for shop stock. PO M-2...	7027 · Electrical & In...	-912.37
TOTAL						-912.37
12168	Bill Pmt -...	09/10/2	Rubio, Antonio (v)	Employee Award Recognition-NACWA ...	JP Morgan Chase - ...	
Note...	Bill	07/15/2		Employee Award Recognition-NACWA P...	8005 · Employee Inc...	-500.00
TOTAL						-500.00
12169	Bill Pmt -...	09/10/2	Salazar, Ignacio ...	Employee Award Recognition-NACWA ...	JP Morgan Chase - ...	
Note...	Bill	07/15/2		Employee Award Recognition-NACWA P...	8005 · Employee Inc...	-500.00
TOTAL						-500.00
12170	Bill Pmt -...	09/10/2	Southwest Valve...	AB valve bearing parts	JP Morgan Chase - ...	
679...	Bill	08/01/2		AB valve bearing parts. PO O-26-079	7022 · Plant Maint. P...	-7,250.04
TOTAL						-7,250.04

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Sanitary District No.5 of Marin County
Warrant List Detail
August 14 through September 10, 2026

Num	Type	Date	Name	Memo	Account	Paid Amo...
12171	Bill Pmt -...	09/10/2	Spex CertiPrep L...	1.00 mg/LC12 ampules QCI-187	JP Morgan Chase - ...	
577...	Bill	08/12/2		1.00 mg/LC12 ampules QCI-187. PO O-2...	7025 · Lab Supplies ...	-1,196.04
TOTAL						-1,196.04
12172	Bill Pmt -...	09/10/2	T-Mobile *1446 cell	cell phones - Aug 2026	JP Morgan Chase - ...	
204...	Bill	08/20/2		cell phones: Bill period 7/21/26-8/20/26. A...	8530 · Telephone	-405.19
TOTAL						-405.19
12173	Bill Pmt -...	09/10/2	T-Mobile *8704 S...	(6) SIM cards for pump stations - Aug ...	JP Morgan Chase - ...	
2022	Bill	08/20/2		(6) SIM cards for pump stations - Bill peri...	8533 · Pumps & Line...	-60.00
TOTAL						-60.00
12174	Bill Pmt -...	09/10/2	The Ark Newspa...	Legal #5146, advert for employee confl...	JP Morgan Chase - ...	
Inv ...	Bill	08/21/2		Legal #5146, advert for employee conflict ...	6001 · Advertising	-360.00
TOTAL						-360.00

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Warrant List Detail
August 14 through September 10, 2026

Num	Type	Date	Name	Memo	Account	Paid Amo...
12175	Bill Pmt -...	09/10/2	Thornton, Eric T....	Employee Award Recognition-NACWA ...	JP Morgan Chase - ...	
Note...	Bill	07/15/2		Employee Award Recognition-NACWA P...	8005 · Employee Inc...	-500.00
TOTAL						-500.00
12176	Bill Pmt -...	09/10/2	Triola, Joseph (v)	Employee Award Recognition-NACWA ...	JP Morgan Chase - ...	
Note...	Bill	07/15/2		Employee Award Recognition-NACWA P...	8005 · Employee Inc...	-500.00
TOTAL						-500.00
12177	Bill Pmt -...	09/10/2	Univar Solutions	Sod Bisulfite bulk, for SD5 & SASM, an...	JP Morgan Chase - ...	
540...	Bill	08/13/2		Sod Bicarb bags. PO 0-24-040	7024 · Main Plant Ch...	-8,667.51
541...	Bill	08/18/2		Sod Hypo. PO O-26-128	7024 · Main Plant Ch...	-11,198.57
TOTAL						-19,866.08
12178	Bill Pmt -...	09/10/2	USA Blue Book	lab supplies, carrying case for portabl...	JP Morgan Chase - ...	
INV...	Bill	08/10/2		lab supplies, carrying case for portable D...	7025 · Lab Supplies ...	-440.26
TOTAL						-440.26

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Sanitary District No.5 of Marin County
Warrant List Detail
August 14 through September 10, 2026

Num	Type	Date	Name	Memo	Account	Paid Amo...
12179	Bill Pmt -...	09/10/2	Waste Managem...	garbage service - July 2026	JP Morgan Chase - ...	
011...	Bill	08/01/2		Garbage service - July 2026	7029 · Main Plant Slu...	-647.70
TOTAL						-647.70
12180	Bill Pmt -...	09/10/2	Water Compone...	Screw Press floc tank drain plumbing ...	JP Morgan Chase - ...	
306...	Bill	08/18/2		Screw Press floc tank drain plumbing part...	7022 · Plant Maint. P...	-77.99
TOTAL						-77.99
12181	Bill Pmt -...	09/10/2	Weco Industries,...	new rod for Rodder truck	JP Morgan Chase - ...	
005...	Bill	09/02/2		new rod for Rodder truck. PO M-26-071	7072 · Maintenance	-3,992.62
TOTAL						-3,992.62
12182	Bill Pmt -...	09/10/2	WorkSmart Auto...	W3331 FTV Development	JP Morgan Chase - ...	
5665	Bill	09/01/2		W3331 FTV Development, Tony	9313.2 · SCADA Ser...	-23,400.00
TOTAL						-23,400.00

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Sanitary District No.5 of Marin County
Warrant List Detail
August 14 through September 10, 2026

Num	Type	Date	Name	Memo	Account	Paid Amo...
12183	Bill Pmt -...	09/10/2	Amazon Capital ...	VOID: Stmt Date 8/31/26	JP Morgan Chase - ...	
TOTAL						0.00
12184	Bill Pmt -...	09/10/2	Corodata Record...	standard record storage carton & digit...	JP Morgan Chase - ...	
RS3...	Bill	08/31/2		standard record storage carton & digital s...	6017 · Consulting Fees	-57.19
TOTAL						-57.19
12185	Bill Pmt -...	09/10/2	Grainger	pipe insulation for blowers to protect f...	JP Morgan Chase - ...	
996...	Bill	07/01/2		pipe insulation for blowers to protect from ...	7041 · Paradise Part...	-182.03
996...	Bill	07/01/2		pipe insulation for blowers to protect from ...	7041 · Paradise Part...	-188.85
996...	Bill	07/01/2		pipe insulation for blowers to protect from ...	7041 · Paradise Part...	-274.59
996...	Bill	07/01/2		pipe insulation for blowers to protect from ...	7041 · Paradise Part...	-95.69
905...	Bill	08/25/2		pipe insulation for blowers to protect from ...	7041 · Paradise Part...	-104.33
TOTAL						-845.49
12186	Bill Pmt -...	09/10/2	Mike Testa Plum...	testing of (5) backflow devices	JP Morgan Chase - ...	
77607	Bill	09/08/2		testing of (5) backflow devices, PO M-26-...	7022 · Plant Maint. P...	-750.00
TOTAL						-750.00

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Sanitary District No.5 of Marin County
Warrant List Detail
August 14 through September 10, 2026

Num	Type	Date	Name	Memo	Account	Paid Amo...
12187	Bill Pmt -...	09/10/2	Nute Engineerin...	Cove Rd Pump Station Improvements, ...	JP Morgan Chase - ...	
284...	Bill	09/06/2		Cove Rd Pump Station Improvements, fin...	9109.2 · Bel PS#1 R...	-151.75
TOTAL						-151.75
12188	Bill Pmt -...	09/10/2	Sewer Tech Inc	Paradise Cove blower room & Main Pla...	JP Morgan Chase - ...	
202...	Bill	09/07/2		Paradise Cove blower room & Main Plant ...	9208 · PC Building R...	-54,000.00
TOTAL						-54,000.00
12189	Bill Pmt -...	09/10/2	Special Dist Risk...	Dental, Vision, Basic Life & ADD, LTD, ...	JP Morgan Chase - ...	
H50...	Bill	09/05/2		Dental, Vision, Basic Life & ADD, LTD, S...	8020.05 · Employee ...	-2,078.48
TOTAL						-2,078.48
12190	Bill Pmt -...	09/10/2	Telstar Instrume...	Chlor-A-Vac repair evaluation shipping...	JP Morgan Chase - ...	
133...	Bill	07/17/2		Chlor-A-Vac repair evaluation shipping un...	7022 · Plant Maint. P...	-85.87
TOTAL						-85.87

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Sanitary District No.5 of Marin County
Warrant List Detail
August 14 through September 10, 2026

Num	Type	Date	Name	Memo	Account	Paid Amo...
12191	Bill Pmt -...	09/10/2	U.S. Bank cc *3611	Stmt Date 8/25/26: conferences travel, ...	JP Morgan Chase - ...	
Stmt...	Bill	08/25/2		JRL Machine & Driveline Inc, SS city wat...	7022 · Plant Maint. P...	-2,915.85
				CWEA, regular job listing, 8/13/26	6001 · Advertising	-335.00
				Fastrak reload, 5/14/26	6018.1 · Meetings & ...	-25.00
				USPS, 5 rolls stamps, 8/21/26	6056 · Postage	-410.00
				USPS, 1 roll stamps, 8/21/26	6056 · Postage	-82.00
				Enterprise Rent-A-Car Las Vegas, TriStat...	6018.1 · Meetings & ...	-513.27
				Golden Nugget Hotel, hotel bill balance, T...	6018.1 · Meetings & ...	-437.31
				Interstate Assembly Systems, new control...	7072 · Maintenance	-2,501.01
				TriState conference, R. Cottrell enrollmen...	6018.1 · Meetings & ...	-249.00
				Alaska Airlines, checked luggage for R. C...	6018.1 · Meetings & ...	-45.00
				Frontier Airlines, checked luggage, TriSta...	6018.1 · Meetings & ...	-79.00
				Golden Nugget Hotel, hotel bill balance, T...	6018.1 · Meetings & ...	-257.92
				Zeptomatrix, CI2 ampules for lab analysis...	7025 · Lab Supplies ...	-1,196.04
TOTAL						-9,046.40
12192	Bill Pmt -...	09/10/2	California Bank a...	MP upgrade, principal & interest due 1...	JP Morgan Chase - ...	
Stmt...	Bill	09/02/2		principal due 10/1/26	9730.01 · Zion Loan -...	-655,000.00
				interest due 10/1/26	9730.02 · Zion Loan -...	-51,956.00
TOTAL						-706,956.00

Sanitary District No.5 of Marin County
Annual Budget vs Actual Expenses
 July 1 through September 10, 2026

	Jul 1 - Sep 10, 26	Budget	\$ Over Budget	% of Budget
Ordinary Income/Expense				
Income				
5000 · Property Taxes / AD VALOREM				
5001.2 · TEETER	7,287.35	1,050,000.00	-1,042,712.65	0.7%
5002 · UNSEC	0.00	16,000.00	-16,000.00	0.0%
5003 · PRIOR UNSECURED	0.00	100.00	-100.00	0.0%
5004 · DLNQ / REDEMPTIONS	72.39	500.00	-427.61	14.5%
5006 · SPLU	0.00	1,000.00	-1,000.00	0.0%
5041 · SUPSEC	1,055.73	100.00	955.73	1,055.7%
5043 · SECU / UNSECU	0.00	14,000.00	-14,000.00	0.0%
5046 · EXCESS ERAF	44,526.97	350,000.00	-305,473.03	12.7%
5280 · HOPTR	0.00	2,000.00	-2,000.00	0.0%
5483 · Other tax	6.13	100.00	-93.87	6.1%
5000 · Property Taxes / AD VALOREM - Other	0.00	0.00	0.00	0.0%
Total 5000 · Property Taxes / AD VALOREM	52,948.57	1,433,800.00	-1,380,851.43	3.7%
5007 · Sewer Service Charge				
5007.1 · Sewer Service - Ops	106,680.21	5,860,602.00	-5,753,921.79	1.8%
5007.2 · Sewer Service - Cap	0.00	2,099,774.00	-2,099,774.00	0.0%
5007 · Sewer Service Charge - Other	0.00	0.00	0.00	0.0%
Total 5007 · Sewer Service Charge	106,680.21	7,960,376.00	-7,853,695.79	1.3%
5201 · Interest				
5201.1 · Interest - County of Marin	2,554.57	2,000.00	554.57	127.7%
5201.2 · Interest - LAIF	158,223.84	500,000.00	-341,776.16	31.6%
5201.5 · Income Dividend Reinvest-CLASS	10,451.48	40,000.00	-29,548.52	26.1%
5201 · Interest - Other	0.00	0.00	0.00	0.0%
Total 5201 · Interest	171,229.89	542,000.00	-370,770.11	31.6%
5900.10 · Paradise Sewer Line Ext. Fees				
5900.10 · Paradise Sewer Line Ext. Fees	0.00	0.00	0.00	0.0%
5900.3 · Connection Fees				
5900.3 · Connection Fees	152,873.00	300,000.00	-147,127.00	51.0%
5900.4 · Permit Inspection & Admin Fees				
5900.4 · Permit Inspection & Admin Fees	9,400.00	50,000.00	-40,600.00	18.8%
5900.5 · SASM Expense Reimb.				
5900.5 · SASM Expense Reimb.	0.00	50,000.00	-50,000.00	0.0%
5900.9 · Other Income				
5900.9 · Other Income	283.37	0.00	283.37	100.0%
Total Income	493,415.04	10,336,176.00	-9,842,760.96	4.8%
Gross Profit	493,415.04	10,336,176.00	-9,842,760.96	4.8%
Expense				
6000 · Administrative Expenses				
6001 · Advertising	695.00	5,000.00	-4,305.00	13.9%
6008 · Audit & Accounting	6,375.85	90,000.00	-83,624.15	7.1%
6017 · Consulting Fees	1,242.38	100,000.00	-98,757.62	1.2%
6018 · Travel & Meetings				
6018.1 · Meetings & Travel	6,694.62	0.00	6,694.62	100.0%
6018.2 · Standby Mileage Expense Reimb	332.05	0.00	332.05	100.0%
6018 · Travel & Meetings - Other	50.00	26,000.00	-25,950.00	0.2%
Total 6018 · Travel & Meetings	7,076.67	26,000.00	-18,923.33	27.2%
6020 · Continuing Education				
6020 · Continuing Education	1,836.00	10,000.00	-8,164.00	18.4%
6021 · County Fees	0.00	20,000.00	-20,000.00	0.0%
6024 · Director Fees	0.00	10,000.00	-10,000.00	0.0%
6025 · Dues & Subscriptions	7,026.18	35,000.00	-27,973.82	20.1%
6026 · Elections	0.00	8,000.00	-8,000.00	0.0%
6033 · Insurance				
6033.1 · Insurance - SD5 Property	0.00	75,000.00	-75,000.00	0.0%
6033.2 · Insurance - SD5 Liability	61,846.53	100,000.00	-38,153.47	61.8%
6033.3 · Insurance - SD5 Auto	5,733.00	10,000.00	-4,267.00	57.3%
6033 · Insurance - Other	0.00	0.00	0.00	0.0%
Total 6033 · Insurance	67,579.53	185,000.00	-117,420.47	36.5%

Sanitary District No.5 of Marin County Annual Budget vs Actual Expenses

July 1 through September 10, 2026

	Jul 1 - Sep 10, 26	Budget	\$ Over Budget	% of Budget
6039 · Legal	7,281.00	45,000.00	-37,719.00	16.2%
6047 · Office Supplies	1,831.63	10,000.00	-8,168.37	18.3%
6056 · Postage	708.00	1,000.00	-292.00	70.8%
6059 · Pollution Prevention/Public Edu	1,366.00	6,000.00	-4,634.00	22.8%
6065 · Miscellaneous Expense	148.88	0.00	148.88	100.0%
6000 · Administrative Expenses - Other	0.00	0.00	0.00	0.0%
Total 6000 · Administrative Expenses	103,167.12	551,000.00	-447,832.88	18.7%
7000 · Ops & Maintenance Expenses				
7010 · Pumps & Lines Maintenance				
7011 · Pumps & Lines Maintenance	1,590.00	200,000.00	-198,410.00	0.8%
7013 · Emergency Line Repair	0.00	100,000.00	-100,000.00	0.0%
7010 · Pumps & Lines Maintenance - Other	0.00	0.00	0.00	0.0%
Total 7010 · Pumps & Lines Maintenance	1,590.00	300,000.00	-298,410.00	0.5%
7020 · Main Plant Maintenance				
7021 · Plant Maintenance Supplies	3,090.08	75,000.00	-71,909.92	4.1%
7022 · Plant Maint. Parts & Service	73,980.51	250,000.00	-176,019.49	29.6%
7023 · Janitorial Supplies & Service	1,656.85	10,000.00	-8,343.15	16.6%
7024 · Main Plant Chemicals	24,478.83	180,000.00	-155,521.17	13.6%
7025 · Lab Supplies & Chemicals	8,802.55	35,000.00	-26,197.45	25.2%
7026 · SASM Supplies & Chem	0.00	0.00	0.00	0.0%
7027 · Electrical & Instrument	7,703.02	25,000.00	-17,296.98	30.8%
7028 · Grounds Maintenance	1,674.06	15,000.00	-13,325.94	11.2%
7029 · Main Plant Sludge Disposal	2,726.15	60,000.00	-57,273.85	4.5%
7020 · Main Plant Maintenance - Other	0.00	0.00	0.00	0.0%
Total 7020 · Main Plant Maintenance	124,112.05	650,000.00	-525,887.95	19.1%
7040 · Paradise Cove Plant Maint				
7041 · Paradise Parts & Service	845.49	15,000.00	-14,154.51	5.6%
7042 · Paradise Supplies & Chemicals	2,052.82	10,000.00	-7,947.18	20.5%
7043 · Paradise Sludge Disposal	0.00	3,000.00	-3,000.00	0.0%
7040 · Paradise Cove Plant Maint - Other	0.00	0.00	0.00	0.0%
Total 7040 · Paradise Cove Plant Maint	2,898.31	28,000.00	-25,101.69	10.4%
7050 · Monitoring				
7051 · Main Plant Lab Monitoring	7,595.45	55,000.00	-47,404.55	13.8%
7052 · Paradise Cove Monitoring	2,025.40	10,000.00	-7,974.60	20.3%
7053 · Chronic Toxicity	5,645.92	5,000.00	645.92	112.9%
7050 · Monitoring - Other	0.00	0.00	0.00	0.0%
Total 7050 · Monitoring	15,266.77	70,000.00	-54,733.23	21.8%
7060 · Permits/Fees				
7062 · Permits/Fees - General	0.00	60,000.00	-60,000.00	0.0%
7063 · Paradise Cove Permits/Fees	0.00	10,000.00	-10,000.00	0.0%
7064 · Paradise Cove NPDES Renewal	0.00	0.00	0.00	0.0%
7060 · Permits/Fees - Other	0.00	0.00	0.00	0.0%
Total 7060 · Permits/Fees	0.00	70,000.00	-70,000.00	0.0%
7070 · Truck Maintenance				
7071 · Fuel	5,712.37	30,000.00	-24,287.63	19.0%
7072 · Maintenance	8,454.90	20,000.00	-11,545.10	42.3%
7070 · Truck Maintenance - Other	-4,100.00	0.00	-4,100.00	100.0%
Total 7070 · Truck Maintenance	10,067.27	50,000.00	-39,932.73	20.1%
7000 · Ops & Maintenance Expenses - Other	0.00	0.00	0.00	0.0%
Total 7000 · Ops & Maintenance Expenses	153,934.40	1,168,000.00	-1,014,065.60	13.2%

Sanitary District No.5 of Marin County
Annual Budget vs Actual Expenses
 July 1 through September 10, 2026

	Jul 1 - Sep 10, 26	Budget	\$ Over Budget	% of Budget
8000 · Salaries and Benefits Expenses				
8001 · Salaries	304,699.04	1,922,244.00	-1,617,544.96	15.9%
8003 · Overtime	18,953.24	75,000.00	-56,046.76	25.3%
8004 · Standby Pay	15,522.60	98,000.00	-82,477.40	15.8%
8005 · Employee Incentives	6,500.00	40,000.00	-33,500.00	16.3%
8006 · Vacation Buyout	23,036.40	80,000.00	-56,963.60	28.8%
8008 · Deferred Comp 457	30,885.78	140,000.00	-109,114.22	22.1%
8013 · Payroll Taxes	25,999.81	172,862.00	-146,862.19	15.0%
8015 · Payroll Service Processing Fees	1,972.35	10,000.00	-8,027.65	19.7%
8016 · Car Allowance	3,333.32	20,000.00	-16,666.68	16.7%
8019 · PERS Retirement				
8019.05 · PERS Retirement	64,690.97	369,320.00	-304,629.03	17.5%
8019.10 · PERS Retirement Trust	0.00	368,074.00	-368,074.00	0.0%
8019 · PERS Retirement - Other	70.00	0.00	70.00	100.0%
Total 8019 · PERS Retirement	64,760.97	737,394.00	-672,633.03	8.8%
8020 · Employee Health				
8020.05 · Employee Health	58,120.89	409,816.00	-351,695.11	14.2%
8021 · Employee Health Deductions	-165.00	0.00	-165.00	100.0%
8020 · Employee Health - Other	0.00	0.00	0.00	0.0%
Total 8020 · Employee Health	57,955.89	409,816.00	-351,860.11	14.1%
8022 · Retiree Health				
8022.05 · Retiree Health	1,957.44	88,284.00	-86,326.56	2.2%
8022.10 · CERBT/OPEB Annual Arc Contribtn	0.00	0.00	0.00	0.0%
8022 · Retiree Health - Other	0.00	0.00	0.00	0.0%
Total 8022 · Retiree Health	1,957.44	88,284.00	-86,326.56	2.2%
8023 · Workers Comp Insurance	41,488.00	64,381.00	-22,893.00	64.4%
8000 · Salaries and Benefits Expenses - Other	0.00	0.00	0.00	0.0%
Total 8000 · Salaries and Benefits Expenses	597,064.84	3,857,981.00	-3,260,916.16	15.5%
8500 · Other Operating Expenses				
8510 · Data/Alarms/IT Supp & Licensing	11,137.08	100,000.00	-88,862.92	11.1%
8515 · Safety	2,241.36	40,000.00	-37,758.64	5.6%
8520 · Personal Protection/Safety Wear				
8520.01 · Boot Allowance	855.99	0.00	855.99	100.0%
8520.02 · Eye Protection Allowance	0.00	0.00	0.00	0.0%
8520.03 · Uniform Allowance	0.00	0.00	0.00	0.0%
8520 · Personal Protection/Safety Wear - Other	152.93	15,000.00	-14,847.07	1.0%
Total 8520 · Personal Protection/Safety Wear	1,008.92	15,000.00	-13,991.08	6.7%
8530 · Telephone				
8531 · Main Plant Telephones	3,689.60	18,000.00	-14,310.40	20.5%
8532 · Paradise Cove Telephones	28.42	1,000.00	-971.58	2.8%
8533 · Pumps & Lines Telephones	120.00	6,000.00	-5,880.00	2.0%
8530 · Telephone - Other	810.38	0.00	810.38	100.0%
Total 8530 · Telephone	4,648.40	25,000.00	-20,351.60	18.6%
8540 · Utilities				
8541 · Water	3,173.75	20,000.00	-16,826.25	15.9%
8542 · Main Plant Utilities	61,739.35	275,000.00	-213,260.65	22.5%
8543 · Paradise Cove Utilities	5,602.74	35,000.00	-29,397.26	16.0%
8544 · Pump Station Utilities	10,441.46	70,000.00	-59,558.54	14.9%
8540 · Utilities - Other	0.00	0.00	0.00	0.0%
Total 8540 · Utilities	80,957.30	400,000.00	-319,042.70	20.2%

Sanitary District No.5 of Marin County
Annual Budget vs Actual Expenses
 July 1 through September 10, 2026

	Jul 1 - Sep 10, 26	Budget	\$ Over Budget	% of Budget
8500 · Other Operating Expenses - Other	0.00	0.00	0.00	0.0%
Total 8500 · Other Operating Expenses	99,993.06	580,000.00	-480,006.94	17.2%
Total Expense	954,159.42	6,156,981.00	-5,202,821.58	15.5%
Net Ordinary Income	-460,744.38	4,179,195.00	-4,639,939.38	-11.0%
Other Income/Expense				
Other Expense				
9000 · Capital Improvements CIP				
9100 · Collection System CIP				
9101 · Sewer Rehab Projects	0.00	1,250,000.00	-1,250,000.00	0.0%
9102 · Pump Replacement CIP	0.00	0.00	0.00	0.0%
9103 · Valve & Wet Well Improvements	0.00	0.00	0.00	0.0%
9104 · PS Generator Replacement CIP				
9104.11 · 30KW Portable Gen#1 Replacement	0.00	0.00	0.00	0.0%
9104 · PS Generator Replacement CIP - Other	0.00	0.00	0.00	0.0%
Total 9104 · PS Generator Replacement CIP	0.00	0.00	0.00	0.0%
9106 · Manhole Replacement Project	0.00	0.00	0.00	0.0%
9109 · Large PS CIP Projects				
9109.2 · Bel PS#1 Rehabilitation Project	469,013.26	2,000,000.00	-1,530,986.74	23.5%
Total 9109 · Large PS CIP Projects	469,013.26	2,000,000.00	-1,530,986.74	23.5%
9100 · Collection System CIP - Other	0.00	0.00	0.00	0.0%
Total 9100 · Collection System CIP	469,013.26	3,250,000.00	-2,780,986.74	14.4%
9200 · Paradise Cove CIP				
9204 · Control Panel Replacement	0.00	0.00	0.00	0.0%
9208 · PC Building Rehabilitation	54,000.00	60,000.00	-6,000.00	90.0%
9200 · Paradise Cove CIP - Other	0.00	0.00	0.00	0.0%
Total 9200 · Paradise Cove CIP	54,000.00	60,000.00	-6,000.00	90.0%
9300 · Main Plant Equipment Capital				
9304 · Chemical Feed System Projects				
9304.05 · CI2 Induction Mixer	0.00	0.00	0.00	0.0%
9304 · Chemical Feed System Projects - Other	0.00	0.00	0.00	0.0%
Total 9304 · Chemical Feed System Projects	0.00	0.00	0.00	0.0%
9308 · Digester Improvements				
9308.12 · Digester Rehab Project	489,531.04	0.00	489,531.04	100.0%
9308 · Digester Improvements - Other	0.00	0.00	0.00	0.0%
Total 9308 · Digester Improvements	489,531.04	0.00	489,531.04	100.0%
9309 · Solids Handling Improvements				
9309.11 · Sludge Box #1 Replacement	0.00	0.00	0.00	0.0%
9309 · Solids Handling Improvements - Other	0.00	0.00	0.00	0.0%
Total 9309 · Solids Handling Improvements	0.00	0.00	0.00	0.0%
9310 · Facility Support CIP				
9310.15 · Main Office HVAC Replacement	0.00	0.00	0.00	0.0%
9310 · Facility Support CIP - Other	0.00	0.00	0.00	0.0%
Total 9310 · Facility Support CIP	0.00	0.00	0.00	0.0%
9311 · HVAC/Supply Fan Improvements				
9311.05 · Lab Supply Fan Replacement	0.00	0.00	0.00	0.0%
9311.08 · New Lab Room Fan Replacement	0.00	0.00	0.00	0.0%
9311 · HVAC/Supply Fan Improvements - Other	0.00	0.00	0.00	0.0%
Total 9311 · HVAC/Supply Fan Improvements	0.00	0.00	0.00	0.0%

Sanitary District No.5 of Marin County
Annual Budget vs Actual Expenses
 July 1 through September 10, 2026

	Jul 1 - Sep 10, 26	Budget	\$ Over Budget	% of Budget
9312 · MP Vehicle Replacements				
9312.1 · Admin Emergency Response Truck	0.00	0.00	0.00	0.0%
9312 · MP Vehicle Replacements - Other	0.00	0.00	0.00	0.0%
Total 9312 · MP Vehicle Replacements	0.00	0.00	0.00	0.0%
9313 · Controls/Electrical Improvement				
9313.1 · Business Server Replacement	0.00	0.00	0.00	0.0%
9313.3 · MCC PLC Upgrade Project	0.00	0.00	0.00	0.0%
9313 · Controls/Electrical Improvement - Other	0.00	0.00	0.00	0.0%
Total 9313 · Controls/Electrical Improvement	0.00	0.00	0.00	0.0%
9314 · Building & Grounds Improvements				
9314.10 · M.P. Office/Bath/Break Imprvmnt	0.00	0.00	0.00	0.0%
9314 · Building & Grounds Improvements - Other	0.00	0.00	0.00	0.0%
Total 9314 · Building & Grounds Improvements	0.00	0.00	0.00	0.0%
Total 9300 · Main Plant Equipment Capital	489,531.04	0.00	489,531.04	100.0%
9500 · Undesignated Capital				
9510 · Undesignated Cap - M.P.	0.00	50,000.00	-50,000.00	0.0%
9520 · Undesignated Cap - P.C. Plant	0.00	25,000.00	-25,000.00	0.0%
9530 · Undesignated Cap - P & L	0.00	50,000.00	-50,000.00	0.0%
9500 · Undesignated Capital - Other	0.00	0.00	0.00	0.0%
Total 9500 · Undesignated Capital	0.00	125,000.00	-125,000.00	0.0%
9000 · Capital Improvements CIP - Other	0.00	0.00	0.00	0.0%
Total 9000 · Capital Improvements CIP	1,012,544.30	3,435,000.00	-2,422,455.70	29.5%
9700 · Debt Service				
9730 · Debt Service - MPR Project				
9730.01 · Zion Loan - Principal	655,000.00	655,000.00	0.00	100.0%
9730.02 · Zion Loan - Interest	51,956.00	103,912.00	-51,956.00	50.0%
9730 · Debt Service - MPR Project - Other	0.00	0.00	0.00	0.0%
Total 9730 · Debt Service - MPR Project	706,956.00	758,912.00	-51,956.00	93.2%
9700 · Debt Service - Other	0.00	0.00	0.00	0.0%
Total 9700 · Debt Service	706,956.00	758,912.00	-51,956.00	93.2%
Total Other Expense	1,719,500.30	4,193,912.00	-2,474,411.70	41.0%
Net Other Income	-1,719,500.30	-4,193,912.00	2,474,411.70	41.0%
Net Income	-2,180,244.68	-14,717.00	-2,165,527.68	14,814.5%

Sanitary District No.5 of Marin County
Comparative Balance Sheet
As of September 10, 2026

	Sep 10, 26	Aug 10, 26	\$ Change
ASSETS			
Current Assets			
Checking/Savings			
JP Morgan Chase - Escrow 5213	1.00	1.00	0.00
JP Morgan Chase - Primary 7399	-314,597.22	592,954.73	-907,551.95
JP Morgan Chase - Payroll 7506	124,387.59	49,100.59	75,287.00
JP Morgan Chase - Transfer 7522	62,413.38	115,271.81	-52,858.43
Local Agency Investment Fund			
SD5 Capital & CIP Reserve	9,909,384.99	9,909,384.99	0.00
SD5 Operating	3,173,224.37	3,698,224.37	-525,000.00
SD5 Operating Reserve	1,577,661.05	1,577,661.05	0.00
Total Local Agency Investment Fund	14,660,270.41	15,185,270.41	-525,000.00
California CLASS			
CalPERS UAL Fund	570,779.58	568,968.59	1,810.99
Emergency Replacement Fund	1,083,416.21	1,079,978.71	3,437.50
Total California CLASS	1,654,195.79	1,648,947.30	5,248.49
Total Checking/Savings	16,186,670.95	17,591,545.84	-1,404,874.89
Accounts Receivable			
Accounts Receivable	282,042.01	294,108.66	-12,066.65
Total Accounts Receivable	282,042.01	294,108.66	-12,066.65
Other Current Assets			
Petty Cash	200.00	200.00	0.00
Prepaid Expense	135,496.43	135,496.43	0.00
Salary Advance - Overtime	2,155.91	2,694.85	-538.94
Total Other Current Assets	137,852.34	138,391.28	-538.94
Total Current Assets	16,606,565.30	18,024,045.78	-1,417,480.48
Fixed Assets	19,257,162.30	19,257,162.30	0.00
Other Assets			
1955 · Net Pension Asset	390,724.00	390,724.00	0.00
1950 · Pension - Deferred Outflows	982,849.00	982,849.00	0.00
1951 · Deferred Outflows - OPEB	570,430.00	570,430.00	0.00
Total Other Assets	1,944,003.00	1,944,003.00	0.00
TOTAL ASSETS	37,807,730.60	39,225,211.08	-1,417,480.48
LIABILITIES & EQUITY	37,807,730.60	39,225,211.08	-1,417,480.48



State of California
Office of the
State Treasurer



LAIF Monthly Statements

LAIF Monthly Statement

MARIN COUNTY SANITARY DISTRICT #5
DISTRICT MANAGER
P.O. BOX 227
TIBURON, CA 94920

LAIF Account #: 70-21-007
August 2026 Statement

Effective Date	TXN Date	TXN Type	Confirm Number	Web Confirm Number	Authorized Caller	Amount
8/14/2026	8/13/2026	RW	1805867	N/A	JOHN CARAPIET	-525,000.00

Account Summary

Beginning Balance:	15,185,270.41
Total Deposit:	0.00
Total Withdrawal:	-525,000.00
Ending Balance:	14,660,270.41



**CALIFORNIA STATE TREASURER
FIONA MA, CPA**



PMIA Daily Effective Yield

Date	Daily	Quarter to Date	Average Maturity
08/30/26	3.87	3.85	271
08/29/26	3.87	3.85	272
08/28/26	3.87	3.85	273
08/27/26	3.87	3.85	274
08/26/26	3.87	3.85	271
08/25/26	3.87	3.85	272
08/24/26	3.87	3.85	274
08/23/26	3.87	3.85	276
08/22/26	3.87	3.85	277
08/21/26	3.87	3.85	278
08/20/26	3.87	3.85	279
08/19/26	3.87	3.85	279
08/18/26	3.87	3.85	280
08/17/26	3.87	3.85	282
08/16/26	3.85	3.85	285
08/15/26	3.85	3.85	286
08/14/26	3.87	3.85	285
08/13/26	3.87	3.85	283
08/12/26	3.86	3.85	278
08/11/26	3.86	3.84	280
08/10/26	3.86	3.84	278
08/09/26	3.86	3.84	280
08/08/26	3.86	3.84	280
08/07/26	3.86	3.84	280
08/06/26	3.86	3.84	280
08/05/26	3.86	3.84	280
08/04/26	3.86	3.84	281
08/03/26	3.86	3.84	281
08/02/26	3.85	3.84	281
08/01/26	3.85	3.84	281
07/31/26	3.85	3.84	281
07/30/26	3.85	3.84	277
07/29/26	3.85	3.84	279
07/28/26	3.85	3.84	279
07/27/26	3.85	3.84	282
07/26/26	3.85	3.84	281
07/25/26	3.85	3.84	282

*Daily yield does not reflect capital gains or losses

Updated: 9/2/2026



CALIFORNIA STATE TREASURER
FIONA MA, CPA



PMIA Daily Effective Yield

Date	Daily	Quarter to Date	Average Maturity
07/24/26	3.85	3.84	283
07/23/26	3.85	3.84	280
07/22/26	3.84	3.84	278
07/21/26	3.84	3.84	280
07/20/26	3.84	3.84	281
07/19/26	3.84	3.84	282
07/18/26	3.84	3.84	283
07/17/26	3.84	3.84	284
07/16/26	3.84	3.83	281
07/15/26	3.84	3.83	278
07/14/26	3.84	3.83	278
07/13/26	3.84	3.83	273
07/12/26	3.84	3.83	273
07/11/26	3.84	3.83	273
07/10/26	3.84	3.83	273
07/09/26	3.84	3.82	270
07/08/26	3.83	3.83	271
07/07/26	3.83	3.83	272
07/06/26	3.83	3.83	274
07/05/26	3.83	3.83	274
07/04/26	3.83	3.83	274
07/03/26	3.83	3.83	274
07/02/26	3.83	3.83	275
07/01/26	3.83	3.83	276

*Daily yield does not reflect capital gains or losses

Updated: 9/2/2026



Summary Statement

August 31, 2026

Page 1 of 4

Investor ID: CA-01-0195

0000184-0000842 PDF 221701

Sanitary District No. 5 of Marin County
PO Box 227
Tiburon, CA 94920

California CLASS

California CLASS

Average Monthly Yield: 3.7484%

		Beginning Balance	Contributions	Withdrawals	Income Earned	Income Earned YTD	Average Daily Balance	Month End Balance
CA-01-0195-0001	Emergency Replacement Fund	1,079,978.71	0.00	0.00	3,437.50	26,482.55	1,080,089.60	1,083,416.21
CA-01-0195-0002	CalPERS UAL Fund	568,968.59	0.00	0.00	1,810.99	13,951.88	569,027.01	570,779.58
TOTAL		1,648,947.30	0.00	0.00	5,248.49	40,434.43	1,649,116.61	1,654,195.79



Account Statement

August 31, 2026

Page 2 of 4

Account Number: CA-01-0195-0001

Emergency Replacement Fund

Account Summary

Average Monthly Yield: 3.7484%

	Beginning Balance	Contributions	Withdrawals	Income Earned	Income Earned YTD	Average Daily Balance	Month End Balance
California CLASS	1,079,978.71	0.00	0.00	3,437.50	26,482.55	1,080,089.60	1,083,416.21

Transaction Activity

Transaction Date	Transaction Description	Contributions	Withdrawals	Balance	Transaction Number
08/01/2026	Beginning Balance			1,079,978.71	
08/31/2026	Income Dividend Reinvestment	3,437.50			
08/31/2026	Ending Balance			1,083,416.21	



Account Statement

August 31, 2026

Page 3 of 4

Account Number: CA-01-0195-0002

CalPERS UAL Fund

Account Summary

Average Monthly Yield: 3.7484%

	Beginning Balance	Contributions	Withdrawals	Income Earned	Income Earned YTD	Average Daily Balance	Month End Balance
California CLASS	568,968.59	0.00	0.00	1,810.99	13,951.88	569,027.01	570,779.58

Transaction Activity

Transaction Date	Transaction Description	Contributions	Withdrawals	Balance	Transaction Number
08/01/2026	Beginning Balance			568,968.59	
08/31/2026	Income Dividend Reinvestment	1,810.99			
08/31/2026	Ending Balance			570,779.58	



California CLASS

California CLASS

Date	Dividend Rate	Daily Yield
08/01/2026	0.000000000	3.7567%
08/02/2026	0.000205844	3.7567%
08/03/2026	0.000102625	3.7458%
08/04/2026	0.000102533	3.7425%
08/05/2026	0.000102638	3.7463%
08/06/2026	0.000102606	3.7451%
08/07/2026	0.000307731	3.7441%
08/08/2026	0.000000000	3.7441%
08/09/2026	0.000000000	3.7441%
08/10/2026	0.000102355	3.7360%
08/11/2026	0.000102538	3.7426%
08/12/2026	0.000102505	3.7414%
08/13/2026	0.000102463	3.7399%
08/14/2026	0.000307629	3.7428%
08/15/2026	0.000000000	3.7428%
08/16/2026	0.000000000	3.7428%
08/17/2026	0.000102638	3.7463%
08/18/2026	0.000102926	3.7568%
08/19/2026	0.000102823	3.7530%
08/20/2026	0.000102446	3.7393%
08/21/2026	0.000307422	3.7403%
08/22/2026	0.000000000	3.7403%
08/23/2026	0.000000000	3.7403%
08/24/2026	0.000102825	3.7531%
08/25/2026	0.000102852	3.7541%
08/26/2026	0.000103055	3.7615%
08/27/2026	0.000102991	3.7592%
08/28/2026	0.000308967	3.7591%
08/29/2026	0.000000000	3.7591%
08/30/2026	0.000000000	3.7591%
08/31/2026	0.000103168	3.7656%

Performance results are shown net of all fees and expenses and reflect the reinvestment of dividends and other earnings. Many factors affect performance including changes in market conditions and interest rates and in response to other economic, political, or financial developments. Investment involves risk including the possible loss of principal. No assurance can be given that the performance objectives of a given strategy will be achieved. **Past performance is no guarantee of future results. Any financial and/or investment decision may incur losses.**

CASH REQUIREMENTS

CASH REQUIRED FOR NEGOTIABLE CHECKS &/OR ELECTRONIC FUNDS TRANSFERS (EFT) FOR CHECK DATE 08/14/26: \$89,888.97

TRANSACTION SUMMARY

SUMMARY BY TRANSACTION TYPE -	TOTAL ELECTRONIC FUNDS TRANSFER (EFT)	89,888.97
	CASH REQUIRED FOR NEGOTIABLE CHECKS &/OR EFT	89,888.97
	TOTAL REMAINING DEDUCTIONS / WITHHOLDINGS / LIABILITIES	10,038.98
	CASH REQUIRED FOR CHECK DATE 08/14/26	99,927.95

TRANSACTION DETAIL

ELECTRONIC FUNDS TRANSFER - Your financial institution will initiate transfer to Paychex at or after 12:01 A.M. on transaction date.

TRANS. DATE	BANK NAME	ACCOUNT NUMBER	PRODUCT	DESCRIPTION		BANK DRAFT AMOUNTS & OTHER TOTALS
08/13/26	CHASE BANK, NA	xxxxxxxxxxxxx506	Direct Deposit	Net Pay Allocations	58,632.55	58,632.55
08/13/26	CHASE BANK, NA	xxxxxxxxxxxxx506	Taxpay®	Employee Withholdings		
				Social Security	4,844.72	
				Medicare	1,346.88	
				Fed Income Tax	13,347.80	
				CA Income Tax	5,556.94	
				Total Withholdings	25,096.34	
				Employer Liabilities		
				Social Security	4,844.70	
				Medicare	1,315.38	
				Total Liabilities	6,160.08	31,256.42
				EFT FOR 08/13/26		89,888.97
				TOTAL EFT		89,888.97

REMAINING DEDUCTIONS / WITHHOLDINGS / LIABILITIES - Unless stated otherwise, Paychex does not remit these funds. You must ensure accurate and timely payment of applicable items.

TRANS. DATE	BANK NAME	ACCOUNT NUMBER	PRODUCT	DESCRIPTION		TOTAL
08/14/26	Refer to your records for account	Information	Payroll	Employee Deductions		
				401A Member Contribu	5,747.08	
				Calpers 457B Roth	1,151.24	
				Calpers 457B TRDL	1,901.21	
				Calpers457b Roth CU	350.00	
				Dep Care EE Pretax	55.00	
				Med FSA EE Pretax	564.98	

CASH REQUIREMENTS

CASH REQUIRED FOR NEGOTIABLE CHECKS &/OR ELECTRONIC FUNDS TRANSFERS (EFT) FOR CHECK DATE 08/14/26: \$89,888.97

REMAINING DEDUCTIONS / WITHHOLDINGS / LIABILITIES (cont.) - Unless stated otherwise, Paychex does not remit these funds.You must ensure accurate and timely payment of applicable items.

TRANS. DATE	BANK NAME	ACCOUNT NUMBER	PRODUCT	DESCRIPTION	TOTAL
08/14/26	Refer to your records for account	Information	Payroll	Employee Deductions (cont.)	
				WT OT Payback	269.47
				Total Deductions	10,038.98
TOTAL REMAINING DEDUCTIONS / WITHHOLDINGS / LIABILITIES					10,038.98

PAYCHEX WILL MAKE THESE TAX DEPOSIT(S) ON YOUR BEHALF - This information serves as a record of payment.

DUE DATE	PRODUCT	DESCRIPTION	
08/19/26	Taxpay®	FED IT PMT Group	25,699.48
08/19/26	Taxpay®	CA IT PMT Group	5,556.94

CASH REQUIREMENTS

CASH REQUIRED FOR NEGOTIABLE CHECKS &/OR ELECTRONIC FUNDS TRANSFERS (EFT) FOR CHECK DATE 08/31/26: \$83,843.18

TRANSACTION SUMMARY

SUMMARY BY TRANSACTION TYPE -	TOTAL ELECTRONIC FUNDS TRANSFER (EFT)	83,843.18
	CASH REQUIRED FOR NEGOTIABLE CHECKS &/OR EFT	83,843.18
	TOTAL REMAINING DEDUCTIONS / WITHHOLDINGS / LIABILITIES	9,334.29
	CASH REQUIRED FOR CHECK DATE 08/31/26	93,177.47

TRANSACTION DETAIL

ELECTRONIC FUNDS TRANSFER - Your financial institution will initiate transfer to Paychex at or after 12:01 A.M. on transaction date.

TRANS. DATE	BANK NAME	ACCOUNT NUMBER	PRODUCT	DESCRIPTION		BANK DRAFT AMOUNTS & OTHER TOTALS
08/28/26	CHASE BANK, NA	xxxxxxxxxxxxx506	Direct Deposit	Net Pay Allocations	54,609.48	54,609.48
08/28/26	CHASE BANK, NA	xxxxxxxxxxxxx506	Taxpay®	Employee Withholdings		
				Social Security	4,454.12	
				Medicare	1,337.21	
				Fed Income Tax	12,556.20	
				CA Income Tax	5,208.04	
				Total Withholdings	23,555.57	
				Employer Liabilities		
				Social Security	4,454.11	
				Medicare	1,224.02	
				Total Liabilities	5,678.13	29,233.70
				EFT FOR 08/28/26		83,843.18
				TOTAL EFT		83,843.18

REMAINING DEDUCTIONS / WITHHOLDINGS / LIABILITIES - Unless stated otherwise, Paychex does not remit these funds. You must ensure accurate and timely payment of applicable items.

TRANS. DATE	BANK NAME	ACCOUNT NUMBER	PRODUCT	DESCRIPTION		TOTAL
08/31/26	Refer to your records for account	Information	Payroll	Employee Deductions		
				401A Member Contribu	5,307.39	
				Calpers 457B Roth	941.24	
				Calpers 457B TRDL	1,901.21	
				Calpers457b Roth CU	350.00	
				Med FSA EE Pretax	564.98	

CASH REQUIREMENTS

CASH REQUIRED FOR NEGOTIABLE CHECKS &/OR ELECTRONIC FUNDS TRANSFERS (EFT) FOR CHECK DATE 08/31/26: \$83,843.18

REMAINING DEDUCTIONS / WITHHOLDINGS / LIABILITIES (cont.) - Unless stated otherwise, Paychex does not remit these funds.You must ensure accurate and timely payment of applicable items.

TRANS. DATE	BANK NAME	ACCOUNT NUMBER	PRODUCT	DESCRIPTION	TOTAL
08/31/26	Refer to your records for account	Information	Payroll	Employee Deductions (cont.)	
				WT OT Payback	269.47
				Total Deductions	9,334.29
TOTAL REMAINING DEDUCTIONS / WITHHOLDINGS / LIABILITIES					9,334.29

PAYCHEX WILL MAKE THESE TAX DEPOSIT(S) ON YOUR BEHALF - This information serves as a record of payment.

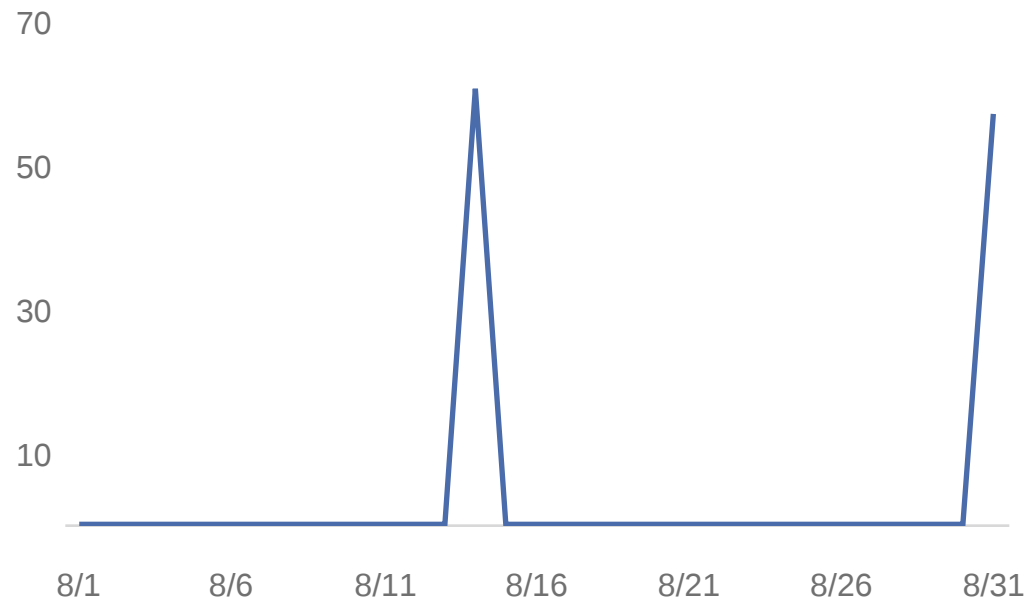
DUE DATE	PRODUCT	DESCRIPTION	
09/04/26	Taxpay®	FED IT PMT Group	24,025.66
09/04/26	Taxpay®	CA IT PMT Group	5,208.04

Full name	Overtime amounts	Overtime hours
Alvarez, Joel		
Bilsborough Sr., Chad E	4907.56	43.00
Collodi, Pete	1359.19	17.00
Cottrell III, Rulon K		
Dutra, Tyler J		
Farrington, Abigail V		
LaTorre, Daniel P		
Rosser, John M	1292.84	12.50
Rubio, Antonio		
Salazar, Ignacio G	1857.83	22.50
Thornton, Eric T	1830.90	22.50
Triola, Joseph		
	11248.32	117.50

Overtime hours



Check date



Aug 1, 2026 - Aug 31, 2026

● My Company

117.5 hrs

Overtime amounts



Check date

\$7k

\$5k

\$3k

\$1k

8/1

8/6

8/11

8/16

8/21

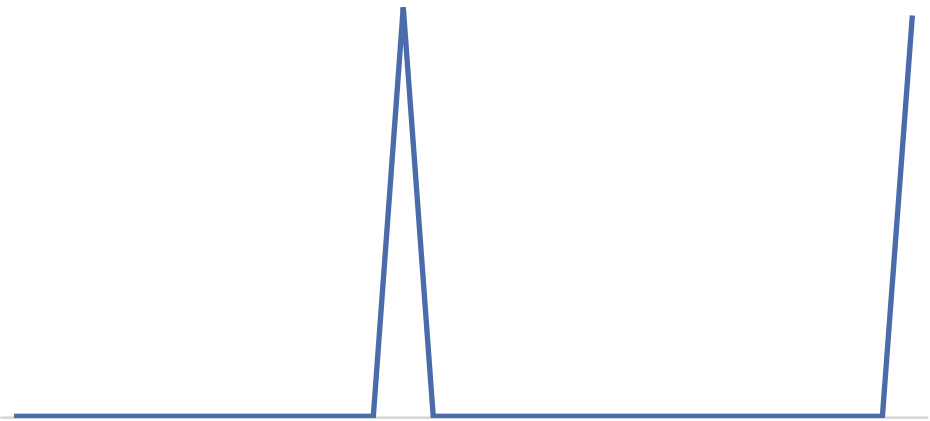
8/26

8/31

Aug 1, 2026 - Aug 31, 2026

● My Company

\$11,248.32



Labor cost ⓘ



Check date

\$100k

\$60k

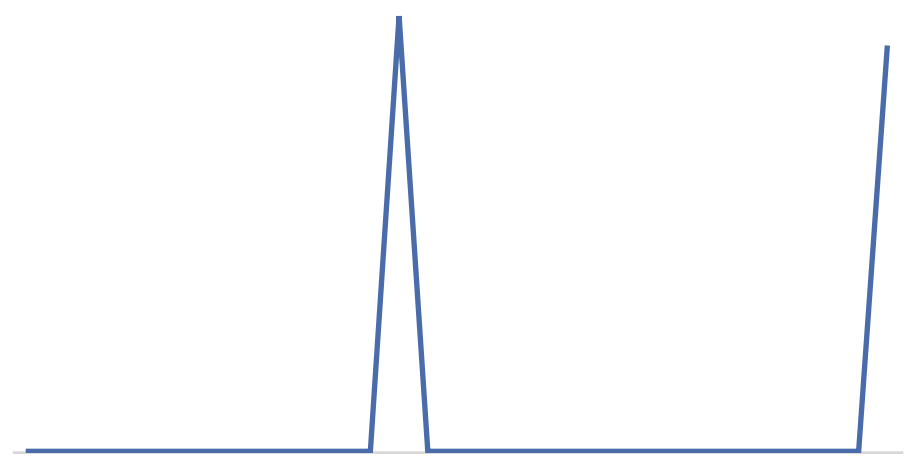
\$20k

8/1 8/6 8/11 8/16 8/21 8/26 8/31

Aug 1, 2026 - Aug 31, 2026

● My Company

\$193,105.42



Full name	Overtime amounts	Overtime hours
Alvarez, Joel		
Bilsborough Sr., Chad E	8028.92	70.50
Collodi, Pete	1359.19	17.00
Cottrell III, Rulon K		
Dutra, Tyler J		
Farrington, Abigail V		
LaTorre, Daniel P		
Rosser, John M	1587.41	15.50
Rubio, Antonio		
Salazar, Ignacio G	3096.38	37.50
Thornton, Eric T	4684.96	57.50
Triola, Joseph	196.38	2.00
	18953.24	200.00

Overtime hours



Check date

140

100

60

20

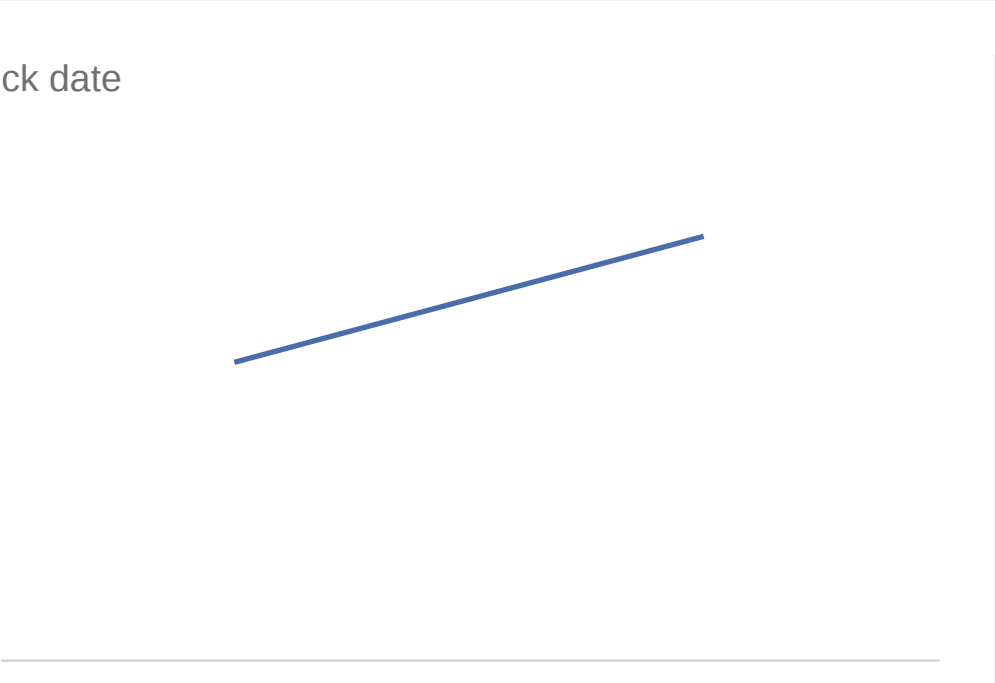
Jul

Aug

Jul 1, 2026 - Aug 31, 2026

● My Company

200 hrs



Overtime amounts



Check date

\$10k

\$6k

\$2k

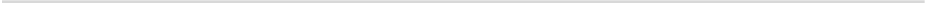
Jul

Aug

Jul 1, 2026 - Aug 31, 2026

● My Company

\$18,953.24



Labor cost ⓘ



Check date

\$215k

\$205k

\$195k

\$185k

Jul

Aug

Jul 1, 2026 - Aug 31, 2026

● My Company

\$403,375.85



September 2026

September 2026							October 2026						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5				1	2	3	
6	7	8	9	10	11	12	4	5	6	7	8	9	10
13	14	15	16	17	18	19	11	12	13	14	15	16	17
20	21	22	23	24	25	26	18	19	20	21	22	23	24
27	28	29	30				25	26	27	28	29	30	31

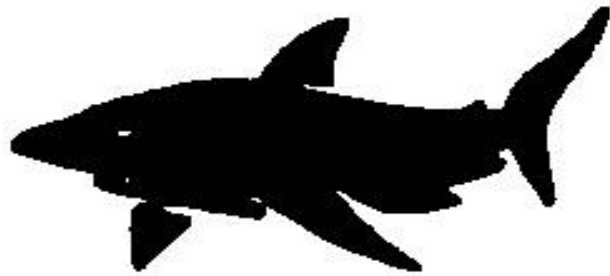
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Aug 30	31	Sep 1 Jill - Check Run Prep	2	3 Jill - Check Run Prep/Print	4	5
6	7	8 Jill - General Accounting	9	10 PR - Time Cards Due 9:30am CIP Committee Meeting (2001 Paradise Dr (2001 10:30am Finance Committee Meeting	11	12 TR Charlotte NC
13 TR Charlotte NC	14 TR off 10hrs admin Charlott NC	15 Jill - General Accounting	16	17 11:00am Monthly Managers Update & Board Recap (2001 5:00pm Regular Board Meeting (2001 Paradise Dr (2001	18 Jill - General Accounting	19
20	21	22 Jill - General Accounting	23	24 PR - Time Cards Due	25	26
27	28 8:00am 8:00am WEFTEC New Orleans (New Orleans) - HR Jill - Check Run Prep	29 Jill - Check Run Prep	30	Oct 1	2	3

October 2026

October 2026							November 2026						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3	1	2	3	4	5	6	7
4	5	6	7	8	9	10	8	9	10	11	12	13	14
11	12	13	14	15	16	17	15	16	17	18	19	20	21
18	19	20	21	22	23	24	22	23	24	25	26	27	28
25	26	27	28	29	30	31	29	30					

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Sep 27	28	29	30	Oct 1 WEFTEC New Orleans (New Orleans) - HR 8:30am Jill - Check Run Prep/Print	2	3
4	5	6 Jill - General Accounting	7	8 PR - Time Cards Due 9:30am CIP Committee Meeting (2001 Paradise Drive 10:30am Finance Committee Meeting	9	10
11	12	13 Jill - General Accounting	14	15 11:00am Monthly Managers Update & Board Recap (2001 5:00pm Regular Board Meeting (2001 Paradise Dr (2001	16 TR off Admin @ ATL Bears Game (Atlanta Falcons Mercedes Benz Arena)	17
18 TR off Admin @ ATL Bears Game (Atlanta Falcons Mercedes Benz Arena)	19	20 Jill - General Accounting	21	22	23	24
25	26	27 Jill - General Accounting PR - Time Cards Due	28	29	30	31

Sanitary District No. 5 of Marin County



District Management Report

August 2026

Contents:

- Transmittal Memo
- Financial/Budgetary
- HR & Personnel
- Business Administration
- Collection System Performance
- Treatment Plant Performance – Paradise Cove
- Treatment Plant Performance – Main Plant
- Pollution Prevention Activities
- Continuing Education & Safety Training
- Capital Improvement Projects

Transmittal Memo

Date: September 17, 2026
To: Board of Directors
From: Tony Rubio, District Manager
Subject: Management Report for August 2026

Fiscal Status

Period Covered: July 1, 2026 –September 17, 2026
Percent of Fiscal Year: 16.6%
Percent of Budgeted Income to Date: 4.8%
Percent of Budgeted Expenditures to Date: 15.6% (operating only)

Personnel

Separations: None
New Hires: None
Promotions: None
Recruitment Activities: 1

Regulatory Compliance

MP Collection System WDR Compliance: Full Compliance with all regulations
PC Collection System WDR Compliance: Full Compliance with all regulations
MP NPDES Permit Compliance: Full Compliance with all regulations
PC NPDES Permit Compliance: Full Compliance with all regulations
BAAQMD Compliance: Full Compliance with all regulations
Significant Comments: None

Summary of Operational Highlights are on the following pages.

Significant Events for the Month of August 2026 Include:

Financial/Budgetary/Business Administration

- Preparations for FY25-26 audit underway. Expectation of November 2026 final audit.
- Digester Rehabilitation Project- final work and invoicing under review for closing of project
- Filing of scanned permits in Ops Control room continues

HR and Personnel

- One recruitment underway in the maintenance department – Interviews conducted on 9/16
- Will begin recruitment for Maintenance/Collection system trainee upon completion of new hire replacement in Collections Department

Continuing Education, Safety Training, Pollution Prevention Activities

- Staff attended monthly Public Education Meeting.
- Staff continue completing monthly Training Link CBT's
- Monthly Manager/Staff Updates Continue
- Superintendents attended annual Tri State Conference (August)
- DM to attend annual WEFTEC Conference at end of month

Collection System Performance

Main Plant /Paradise Cove

- Rodder truck new rod installed for preparation of wet weather and spring cleaning activities
- No Spill Report Submitted for Main Plant & Paradise Cove Collection System
- Collection system SSMP review/audit is underway

Treatment Plant Performance

Paradise Cove WWTP:

- Preemptive retaining wall improvements taking place in preparation for anticipated wet weather season
- New motor control center panel is ready for installation this summer for improved process control and enhanced communications back to the main plant.

Tiburon Main WWTP:

- July 2026 Monthly SMR and DMR submitted to the RWQCB on CIWQS.
- Aeration Basin diffuser inspection on Street Side AB completed- Waiting on parts order for mud valve replacement along with other air-valves- bearings on slide gates replaced in house by maintenance department
- Electrical conduit upgrades ongoing- Electric forklift charging conduit being installed currently.
- Obtaining quotes for screw press and bio-solids storage room wall painting now that Digester rehab project is complete.
- Working with Climatec providing electrical data for phase I of feasibility of Energy Savings Project

Capital Improvement Projects

- 2024-25 Sewer Rehab – Completed – Notice of Completion
- 2026-2027 Sewer Rehab Project design underway.
- Cove Road MCC and Generator replacement project underway- motor control center building under construction with new controls scheduled for October delivery – also working with PG&E regarding easements for underground power line upgrade installation and transformer installation.
- Digester Cleaning and Rehab project completed
- Working on getting paving/sealing proposals for front parking area and rear driveway along with striping for designated parking

Glossary of Terms

- **B.O.D. (Biochemical Oxygen Demand):** Measurement of the effluent's capacity to consume dissolved oxygen to stabilize all remaining organic matter. The permit limits for our effluent for discharge into San Francisco bay require that we remove 85% influent B.O.D. and meet a weekly average of less than 45mg/l and a monthly average of less than 30 mg/l B.O.D.
- **TSS (Total Suspended Solids):** 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.
- **Chlorine Residual:** The plant effluent is disinfected with hypochlorite (chlorine "bleach") and then the residual chlorine is neutralized with sodium bisulfite to protect the bay. The effluent chlorine residual limit is 0.0 mg/l which we monitor continuously.
- **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 6.0-9.0, which we monitor continuously.
- **Coliform:** Coliform bacteria are the indicator organism for determination of the efficiency of the disinfection process. The lab culture samples of our effluent and the presence of coliform is an indication that pathogenic organisms may be present. This is reported as MPN/100 (number of coliform bacteria in 100 milliliters sample).
- **Flow Through Bioassay:** A 96 hour test in which we test the toxicity of our effluent to tiny fish (sticklebacks) in a flow through tank to determine the survivability under continuous exposure to our effluent. Our 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 some metals. The metals are stated as a daily max and a monthly average limit. The daily max limit is the number we cannot exceed on any sample and the monthly average applies to all samples collected in any month (although usually we are only required to take one).
- **F.O.G. (Fats, oils and grease):** Quarterly we are required to monitor our effluent for Fats, Oils and Grease.

Glossary of terms continued...

- **Headworks:** The point where all raw wastewater enters the treatment plant. In this building wastewater goes through 3 grinders to grind up all large objects that could possibly damage our influent and sludge pumps further down the treatment process.
- **Primary Sedimentation:** The next treatment process is a physical treatment process where solids that settle or float are removed and sent to the digesters for further processing.
- **Activated Sludge:** Next is the activate sludge process. This process is a biological wastewater treatment process that uses microorganisms to speed up the decomposition of wastes. When activated sludge is added to wastewater, the microorganisms feed and grow on waste particles in the wastewater. As the organisms grow and reproduce, more and more waste is removed, leaving the wastewater partially cleaned. To function efficiently, the mass of organisms needs a steady balance of food and oxygen. These tasks are closely monitored by the operations staff.
- **Secondary Clarification:** Next is secondary clarification, like primary sedimentation/clarification, this also is a physical treatment process where solids that settle or float are removed and sent to the next treatment process. The difference between Secondary Clarification and primary sedimentation is that the solids removed from the secondary clarifiers goes to 2 places. Some goes to waste to the DAFT and some goes back to the activated sludge process for further treatment. (*Microorganisms must be returned to the activated sludge process to keep an equal balance of food and microorganisms*).
- **DAFT (dissolved air floatation thickener):** Next is the DAFT. The dissolved air floatation thickening process uses air bubbles to thicken WAS(waste active sludge) solids removed from the secondary clarifier, by floating solids to the tank surface, where they are removed and sent to the digesters for final processing.
- **Sludge Digestion:** In the anaerobic digestion process, all the organic material removed from the primary sedimentation tanks and DAFT's are digested by anaerobic bacteria. The end products are methane, carbon dioxide, water and neutralized organic matter.
- **Solids Handling:** This is the process where all the neutralized sludge from the digester is finally treated. Sludge from the digester is pumped to the screw press where it is conditioned with a polymer (chemical that reacts with the sludge to remove the water from the sludge and bind the sludge particles together) in order to dewater the sludge and produce a dry cake for final disposal to the Redwood landfill.

Glossary of terms continued...

- **Disinfection:** This is the end point for the wastewater- at this point wastewater flows through the chlorine contact tank. This contact tank allows for enough contact time for chlorine solution to disinfect the wastewater. Sodium bisulfite is introduced at the end of the tank to neutralize any residual chlorine to protect the bay.
- **MLSS (mixed liquor suspended solids):** Suspended solids in the mixed liquor of an aeration tank measured in mg/l
- **MCRT (mean cell resident time):** An expression of the average time that a microorganism will spend in the activated sludge process.
- **SVI (sludge volume index):** This is a calculation used to indicate the settling ability of activated sludge in the secondary clarifier.
- **RAS (return activated sludge):** The purpose of returning activated sludge, is to maintain a sufficient concentration of activated sludge in the aeration tank.
- **WAS (waste activated sludge):** To maintain a stable process, the amount of solids added each day to the activated sludge process are removed as WAS. We track this by our MCRT which averages 3 days
- **TWAS (thickened waste activated sludge):** The WAS is thickened in the DAFT and the thickened sludge is then pumped to the digester.
- **MPN (most probable number):** Concentrations 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.
- **Bio-solids:** Anaerobic digested sludge is pumped to a screw press where excess water is removed to reduce the volume (and weight) thus producing an end result called bio-solids.
- **Polymer:** Organic polymers are added to digested sludge to bring out the formation of larger particles by bridging to improve processing.

Wastewater Acronyms

ACWA	Assoc of California Water Agencies	APWA	American Public Works Association
AWWA	American Water Works Association	BAAQMD	Bay Area Air Quality Management District
BACWA	Bay Area Clean Water Agencies	BAPPG:	Bay Area Pollution Prevention Group
CASA	California Association of Sanitation Agencies	CSDA	California Special Districts Association
CSRMA:	California Sanitation Risk Management Authority	CAAQS	California Ambient Air Quality Standard
CaIARP	California Accidental Release Prevention Program	CARB	California Air Resources Board
CDO	Cease and Desist Order	CECs	Constituents of Emerging Concern
CEQA	California Environmental Quality Act	CIWQS	California Integrated Water Quality System
CFR	Code of Federal Regulations	CMOM	Capacity, Management, Operation and Maintenance
CIWMB	California Integrated Waste Management Board		
CIWQS	California Integrated Water Quality System	CPUC	California Public Utilities Commission
CSO	Combined Sewer Overflow	CTR	California Toxics Rule
CWA	Clean Water Act	CWAP	Clean Water Action Plan
CWARA	Clean Water Authority Restoration Act	CWEA	California Water Environment Association
DHS	Dept. of Health Services	DTSC	Dept. of Toxic Substances Control
EBEP	Enclosed Bays and Estuaries Plan	EDW	Effluent Dominated Water body
EIS/EIR	Environmental Impact Statement/Report	EPA	Environmental Protection Agency
ERAF	Educational Reserve Augmentation Fund	ESMP	Electronic Self-Monitoring Report
FOG	Fats, Oils and Grease	GASB	Government Accounting Standards Board
ISWP	Inland Surface Waters Plan	JPA	Joint Powers Authority
LAFCO	Local Agency Formation Commission	LOCC	League of California Cities
MACT	Maximum Achievable Control Technology (air controls)	MCL	Maximum Contaminant Level
MMP	Mandatory Minimum Penalty	MOU	Memorandum of Understanding
MUN	Municipal Drinking Water Use	NACWA	National Association of Clean Water Agencies
NGOs	Non-Governmental Organizations	NOX	Nitrogen Oxides
NPDES	Nat'l Pollutant Discharge Elimination System	NRDC	Natural Resources Defense Council
NTR	National Toxics Rule	OWP:	Office of Water Programs
OSHA:	Occupational Safety and Health Administration	PCBs	Poly Chlorinated Biphenyls
POTWs	Publicly Owned Treatment Works	PPCPs	Pharmaceutical and personal Care Products
QA/QC	Quality Assurance / Quality Control	Region	IX Western Region of EPA (CA, AZ, NV & HI)
RFP	Request For Proposals	RMP	Risk Management Program
RFQ	Request For Qualifications	RWQCB	Regional Water Quality Control Board
SEP	Supplementary Environmental Projects	SIP	State Implementation Policy (CTR/NTR criteria)
SFEI:	San Francisco Estuary Institute	SRF	State Revolving Fund
SSO	Sanitary Sewer Overflow	SSMP	Sewer System Management Plan
SWRCB	State Water Resources Control Board	TMDL	Total Maximum Daily Load
WDR	Waste Discharge Requirements	WEF	Water Environment Federation
WERF	Water Environment Research Foundation	WET	Whole Effluent Toxicity or Waste Extraction Test
WMI	Watershed Management Initiative	WRFP	Water Recycling Funding Program
WRDA	Water Resource Development Act	WWTP	Wastewater Treatment Plant
WQBEL	Water Quality Based Effluent Limitation	WWWIFA	Water & Wastewater Infrastructure Financing Agency

RESOLUTION NO. 2026-13

SANITARY DISTRICT NO. 5 OF MARIN COUNTY

A RESOLUTION ACCEPTING COMPLETION AND DIRECTING
DISTRICT MANAGER TO FILE NOTICE OF COMPLETION FOR
THE 2024-2025 SEWER REHABILITATION PROJECT

WHEREAS, Antonio Rubio, District Manager, of said District, did file with the Secretary of said District, his Certificate of Completion as to the completion of all the work provided to be processed under and pursuant to the contract between said District and APB General Engineering., dated December 6, 2024; and

WHEREAS, it appears to the satisfaction of this Board that said work under said contract has been fully completed as provided for in said contract and the plans and specifications therein referred to;

NOW THEREFORE BE IT RESOLVED, by the Board of Directors of Sanitary District No. 5 of Marin County, California, the following:

1. That acceptance of completion of said work shall be, and it is hereby made and ordered.
2. That the District Manager is directed to execute and file for record with the County Recorder of the County of Marin, Notice of Completion thereof, pursuant to §3093 of the Civil Code of the State of California.

* * * * *

I hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly passed and adopted by the Board of Directors of Sanitary District No. 5 of Marin County, California, at a meeting thereof duly held on the 17th day of September 2026, by the following vote:

AYES, and in favor thereof, Directors:

NOES, Directors:

ABSENT, Directors:

ABSTAIN, Directors:

APPROVED:

ATTEST:

Catherine Benediktsson
President, Board of Directors

John Carapiet
Secretary, Board of Directors

RECORDING REQUESTED BY
Sanitary District No. 5 of Marin County
AND WHEN RECORDED MAIL TO

Name Sanitary District No. 5 of Marin County
Street 2001 Paradise Drive
Address P.O. Box 227
City & Tiburon, CA 94920
State

SPACE ABOVE THIS LINE FOR RECORDER'S USE
RECORD WITHOUT FEE Govt. Code § 27383

NOTICE OF COMPLETION

Notice is hereby given that:

1. The undersigned is the owner of the project.
2. The full name of the undersigned owner is:

NAME

ADDRESS

CITY AND STATE

Sanitary District No. 5 of Marin County

2001 Paradise Drive

Tiburon, CA 94920

3. On September 17, 2026, there was completed on the property described below the contract for the FY 2024 Sewer Rehabilitation Project – Tiburon & Belvedere. In general, the work consisted of pipe-bursting approximately 7,224 linear feet of sewer pipeline to replace existing deteriorating pipeline.

- 4.
5. The name of the contractor for the work is:

NAME

ADDRESS

CITY AND STATE

APB General Engineering

2721 Kevin Rd.

San Pablo CA 94806

6. The real property herein referred to is located throughout the Town of Tiburon and the City of Belvedere, County of Marin, California.

I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

SANITARY DISTRICT NO. 5 OF MARIN COUNTY

BY: _____
Antonio Rubio, District Manager

VERIFICATION

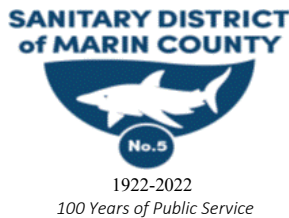
I, Antonio Rubio, declare that I am the District Manager of Sanitary District No. 5 of Marin County and am authorized to make this verification for that reason. I have read the Notice of Completion and know the contents thereof to be true and correct.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on Seotember 17, 2026 at 2001 Paradise Drive in Tiburon, CA 94920, California
(date) (place where signed)

By: _____
Antonio Rubio
District Manager

Management
Tony Rubio District Manager
Joel Alvarez Administrative Services Manager
2001 Paradise Drive
Tiburon CA 9420
415-435-1501 Tel
415-435-0221 fax
www.sani5.org



Board of Directors
Omar Arias-Montez President
John Carapiet Vice President
Richard Snyder Secretary
Catherine Benediktsson Director
Tod Moody Director

Date: September 17, 2026
To: Board of Directors – Regular Board Meeting
From: District Manager – Tony Rubio
Subject: Accept the Final Technical Memorandum by Carollo Engineers regarding
Odor Control System Upgrade Alternatives

STAFF REPORT:

The Tiburon Main WWTP currently has a small working conventional two stage wet Chemical Odor Control System that uses caustic and sodium hypochlorite for odor control purposes. The headworks and primary sedimentation tanks and solids handling facilities are ducted to capture all foul air and run through this two stage odor control system to eliminate odor discharges that are typical of a wastewater treatment facility.

In 2025 the District hired Carollo engineers to perform some initial odor control sampling and to provide some alternative odor control treatment units and estimated costs for each alternative, as the District will soon have to spend capital in order to replace some of the aging equipment on the current system or consider a total replacement which would include different types of systems. The current system in operation was installed in 2005.

The attached report provides different types of Odor Control Systems and the estimated costs along with there advantages and disadvantages for consideration and for future budgeting and planning in the Districts 10 year Capital Improvement Program.

The technical memorandum includes options ranging from \$1M- \$11M in potential upgrade costs.

FISCAL IMPACT:
None at the moment.

CEQA (California Environmental Quality Act)
Exempt

Recommendation:
To accept the Final Technical Memorandum and provide direction to the District Manager to work with the CIP committee on next steps for budgeting and implementation of rehabilitation of the current system.

ATTACHMENTS:
Odor Control System Upgrade Alternatives Technical Memorandum



Marin WWTP Odor Control Alternative Evaluation



TECHNICAL MEMORANDUM

Odor Control System Upgrade Alternatives

June 2026 / Final

**SANITARY DISTRICT
of MARIN COUNTY**



Marin WWTP Odor Control Alternative Evaluation

TECHNICAL MEMORANDUM

Odor Control System Upgrade Alternatives

June 2026 / FINAL



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Abbreviations

Carollo	Carollo Engineers
District	Sanitary District No. 5 of Marin County
EBRT	empty bed residence time
H ₂ S	hydrogen sulfide
O&M	operations and maintenance
ppm	parts per million
RSC	reduced sulfur compound
SASM	Sewerage Agency of Southern Marin
TM	technical memorandum
VOC	volatile organic compound
WWTP	wastewater treatment plant

SECTION 1 INTRODUCTION

The Sanitary District No. 5 of Marin County (District) retained Carollo Engineers (Carollo) to conduct an odor control study involving foul air sampling, testing, and analysis of the appropriate odor control alternatives that would replace the odor control system at the existing chemical scrubber foul air treatment system. The objectives of the odor study are:

- Investigate the potential of hydrogen sulfide (H₂S) levels, and identify H₂S concentrations at the aeration basins/thickener, headworks and dry weather primary clarifiers, and dewatering sources.
- Review the access/egress of the existing chemical scrubbing odor control facility, how it is currently operated by the owner, and develop technology that will reduce or eliminate operations and maintenance tasks and perform well within the available footprint.
- Develop a thorough and objective analysis of the technology alternatives, their conceptual capital and operating costs, and make recommendations for a path forward.

Carollo developed a scope of work that would accomplish the stated objectives shown previously. Specifically, the scope was developed to include:

- Meet with District staff to gather a full understanding of project goals and history of issues.
- Review available data, particularly in those process areas related to potential sources of odor.
- Develop and implement a sampling and testing program.
- Conduct H₂S monitoring at the locations of odor concerns for a period of two weeks.
- Develop and evaluate odor control alternatives.
- Prepare comparative conceptual cost estimates (capital and operating) for odor improvement alternatives.
- Prepare a Final technical memorandum (TM) of findings.
- Meet with District staff to present findings.
- Incorporate District comments and finalize the TM with recommendations for odor mitigation.

SECTION 2 BACKGROUND

2.1 Description of Sampling Locations

Carollo and the District staff at the wastewater treatment plant (WWTP) identified two locations within the plant for sampling and testing, where odor strength from those locations would make up the primary loading, which is critical to sizing and understanding the costs of a new odor control system. Sampling locations at the headworks and primary clarifiers had H₂S readings taken via a handheld meter during a routine site inspection on April 3, 2024. Sampling locations 5 through 8 were established at a later date, with no above-ground preliminary H₂S sampling taking place. All eight locations were subsequently monitored for H₂S concentrations via an inline datalogger. The following is a description and observations of their existing conditions.

Sampling Location 1: The location identified as the primary clarifier effluent channel was chosen for our study due to its known high odor levels and corrosion potential. An Acrulog H₂S logging device (0 to 200 parts per million [ppm] range) was installed below the cover at this facility for a period of two weeks where it was able to record H₂S levels continuously (10-minute intervals). Records show that this logger reached peaks of >190 ppm and an average of ~21 ppm.



Figure 1 Sampling Location 1 – Primary Clarifier Effluent Channel

Sampling Location 2: The location identified as the headworks operating room was chosen for our study as it was also known for its high contribution to the facility's odor profile, though due to ample flowing fresh air within the room, we did not necessarily find elevated odor loads within the location of the headworks operating room.



Figure 2 Sampling Location 2 – Headworks Inlet Room

SECTION 3 AIR SAMPLING AND TESTING ANALYSIS

3.1 Sampling and Testing Plan

Carollo developed a sampling and testing plan to characterize the odors at the above-described locations. The sampling and testing plan includes continuous monitoring of vapor-phase H_2S for a two-week period and liquid phase grab sampling analysis of the wastewater. Table 1 shows a summary of the plan showing sampling locations, the type of sample, parameters tested, and the frequency of testing.

Table 1 Sampling and Testing Plan

Sampling Location	Type of Sample	Parameters Tested - Vapor Phase
Sampling Location 1 – Primary Clarifier Effluent Channel	Continuous ⁽¹⁾	H_2S
Sampling Location 2 – Headworks Inlet Room	Continuous ⁽¹⁾	H_2S

Notes:

(1) Continuous sampling was conducted for two weeks using AcruLog H_2S ppm loggers.

3.1.1 Hydrogen Sulfide and Odor Generation

Odor-producing substances found in domestic wastewater and sludge are small, relatively volatile molecules. Most of these substances result from the anaerobic decomposition of organic matter containing sulfur and nitrogen. Inorganic gases produced from domestic wastewater decomposition commonly include H_2S , ammonia, and carbon dioxide. Often, other odor-producing substances such as indoles, skatoles, mercaptans, and nitrogen-bearing organics are generated.

H_2S is the most commonly known and prevalent odorous gas associated with domestic wastewater collection and treatment systems. It is frequently used as a surrogate compound for measuring and quantifying an odor problem within WWTP headworks and primary treatment areas. H_2S is primarily targeted for treatment by traditional odor control methods such as biological, carbon adsorption, or chemical scrubbing. H_2S has a characteristic rotten egg odor and is directly corrosive to metals and indirectly corrosive to concrete. H_2S has a very low odor threshold (0.0005 ppm) and is therefore readily detectable, even at low concentrations. H_2S is often naturally oxidized to sulfuric acid, which causes corrosion of concrete, metals, and other materials commonly present within wastewater collection systems. It's for this reason primarily that odor control collection equipment is made up of highly specialized acid-resistant materials like fiberglass reinforced plastic.

The presence of turbulent or splashing conditions in wastewater collection systems and treatment processes increases the release of volatile odorous molecules. On the other hand, if the wastewater is aerobic and such odorous compounds are not present, such turbulence is beneficial because it promotes reaeration and the addition of dissolved oxygen and thus prevents formation of odorous compounds associated with anaerobic conditions.

3.1.2 Vapor Phase Hydrogen Sulfide Sampling and Testing Procedures

H_2S is slightly heavier than air and moderately soluble in water. It can be measured in the field using H_2S analyzers. The H_2S readings are often used in wastewater situations as an odor and corrosion indicator. In many cases, if the H_2S is controlled, the odor and corrosion problem will be effectively mitigated. For this study, H_2S was recorded every 60 seconds in the field using Acrulog H_2S PPM loggers made by Detection Instruments, which provide instantaneous and continuous data logging. Instantaneous H_2S readings were taken at the time of site visit. The H_2S Acrulog loggers were placed in the manholes for a period of two weeks for continuous H_2S measurements. Recorded data from the Acrulog analyzers was plotted as 'ppm concentration' versus time at each corresponding location. The H_2S concentration measurements will help to quantify diurnal H_2S concentrations at locations within the collected foul air system to determine peak and average H_2S concentrations. Figure 3 shows a photo of a typical Acrulog ppm data logger.



Figure 3 Acrulog Data Logger 0 - 200 ppm

SECTION 4 SAMPLING AND TESTING RESULTS

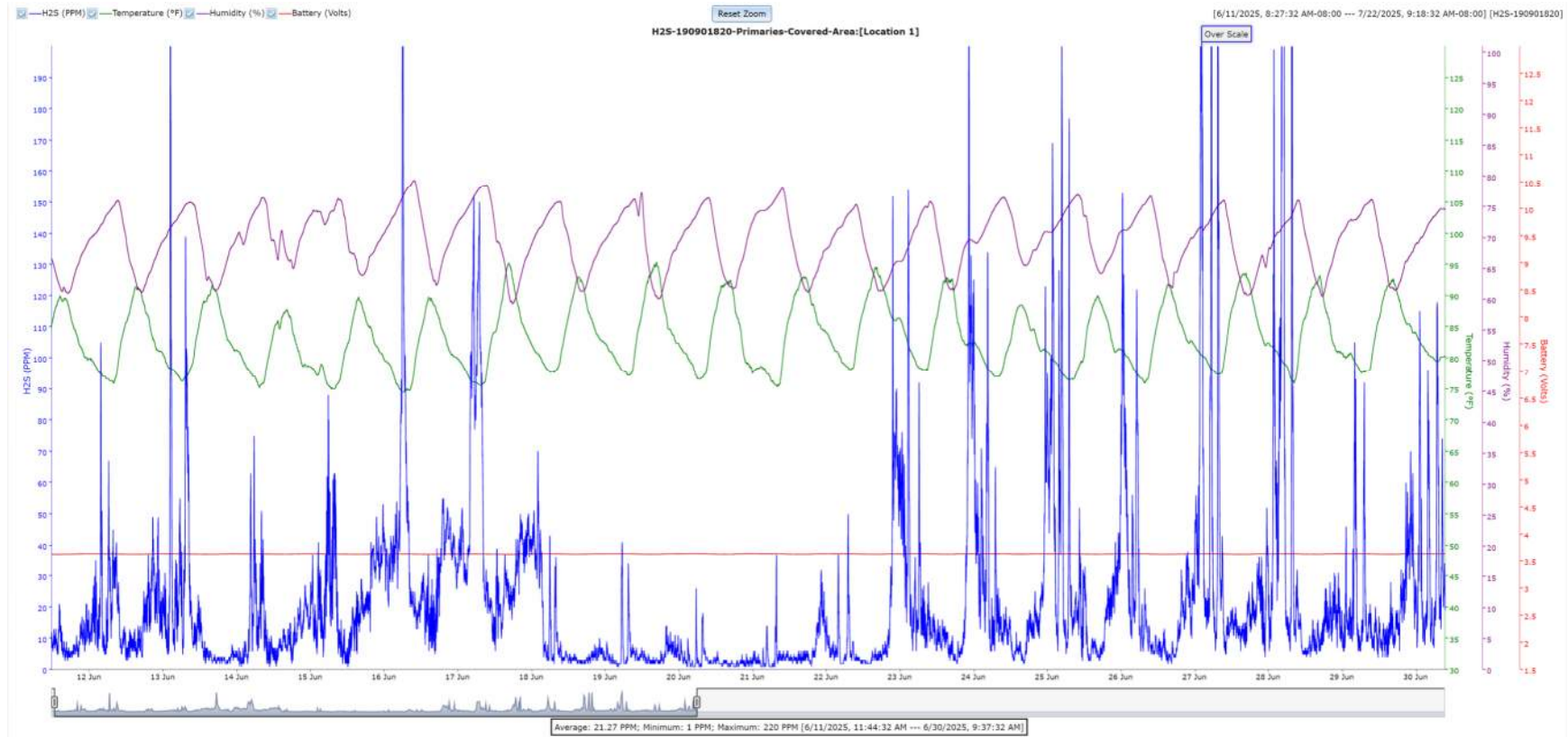
The following sections present results and discussions of the H₂S air sampling and testing, and the results of the liquid sampling and testing. The sampling and testing was conducted at the two locations described in Table 1.

4.1 Hydrogen Sulfide Air Sampling and Testing Results

Table 2 shows a summary of the air testing results for the locations tested. Figures 3 and 4 display H₂S concentrations recorded by Acrulog meters for sampling locations 1 and 2. These readings took place from June 13, 2025, to June 30, 2025.

Table 2 Summary of Air Testing Results

Sampling Location	Minimum H ₂ S (ppm)	Average H ₂ S (ppm)	Maximum H ₂ S (ppm)
Sampling Location 1 – Primary Clarifier Effluent Channel	0	21.27	>200
Sampling Location 2 – Headworks Inlet Room	0	0.06	1



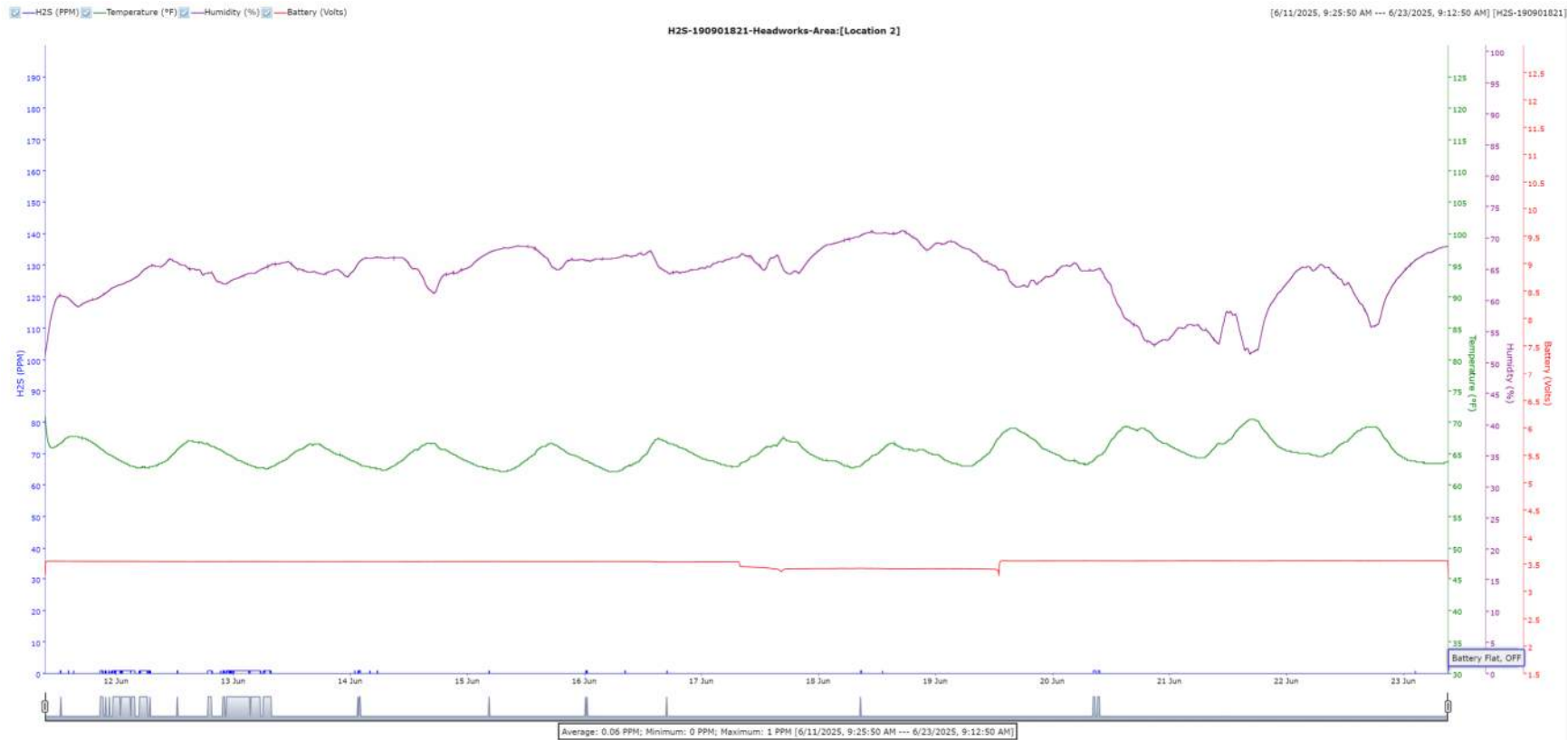


Figure 5 Sampling Location 2 – Headworks Inlet Room – H₂S Concentration Profile

SECTION 5 DISCUSSION OF RESULTS

The odor sampling results of the vapor phase H₂S concentration profiles for the areas tested are shown in Table 2, as well as Figures 4 and 5. The results indicate moderate levels of H₂S concentration during the two-week period. At the primaries, the H₂S concentration sometimes exceeded the logger's range capabilities. These high H₂S concentrations at the primary effluent channels indicate that there is also an equally strong source of foul air emanating from the headworks area, which can be conservatively assumed. Stagnant air and low ventilation velocities can promote the formation of higher concentrations as sludge detention time increases, oxygen depletion occurs, and the conditions favor sulfide production. The presence of turbulent or splashing conditions in wastewater collection systems and treatment processes also increases the release of volatile odorous molecules, leading to substantial generation of H₂S gases in the headspaces above the wastewater of the primaries.

When comparing the results from the headworks and primaries H₂S gas concentrations, it is important to note that our readings took place in the summer months, when temperatures are highest and biological conditions are at their most active. Typically, the wet weather and low temperatures typical of winter months have a dampening effect on odors at most WWTPs, where odor control equipment may see a small fraction of the odors or H₂S that they treat during summer months. This is evident from the site visits and testing performed at many WWTPs throughout the Bay Area, including the East Bay Municipal Utility District, San Francisco Public Utilities Commission Southeast Treatment Plant, Silicon Valley Clean Water, and others.

Considering the average of 21.3 ppm H₂S at the primaries and predictably similar concentrations at the headworks, we can confidently assume that year-round concentrations may be as much as 50 percent lower than the year-round average. Higher concentrations, higher than 15 ppm H₂S, are typically required to justify biotrickling filters as treatment options over carbon adsorption systems, both for minimum H₂S levels required for biological performance and for capital expenditure and operational expenditure costs of both alternatives to be similar. Notably, the Sewerage Agency of Southern Marin (SASM) biotrickling filters have performed very well in very dilute foul air concentrations, less than 5 ppm on average. Typically, higher concentrations of H₂S (>5 ppm), along with very few upsets or periods of 'non-detect' H₂S levels are integral to the proper function of biotrickling filters to perform at their most optimal. Carbon adsorption does not have this same minimum level requirement of H₂S concentrations, nor does it care if 'non-detect' levels persist, nor do they necessarily have a maximum concentration. Carbon is solely used for dilute airflows due to the expense of frequently changing carbon media.

The remaining sections of the TM will consider odor abatement equipment options based on biological and carbon adsorption treatment. These two options seem to be the most reasonable to produce reliable performance and reduce the operations and maintenance (O&M) efforts of the existing chemical scrubbing odor control treatment facility.

SECTION 6 ODOR AND CORROSION ALTERNATIVE TECHNOLOGY DESCRIPTIONS

Several gas-phase odor control alternatives were developed using the testing results discussed previously. A description of each of the technologies is provided in the following sections.

6.1 Vapor Phase Odor Control Technologies

The three most commonly used gas phase treatment technologies to treat foul air emissions from wastewater collection and treatment facilities are chemical scrubbing, biological treatment, and carbon adsorption. There are other treatment technologies that have been used, such as thermal oxidation, ozone, and ultraviolet ionization; however, these technologies have not proven to be effective relative to performance and O&M cost. All three of these technologies provide excellent odor and H₂S removal efficiencies and warrant consideration on any future design project. A brief description of the foul air treatment technologies follows.

6.1.1 Chemical Scrubbers (Existing System)

Chemical scrubbers are a common odor control technology, although they are less popular now than when the original District system was installed. Chemical scrubbers achieve odor removal by mass transfer absorption via contact of the air stream with aqueous solution on random packing material in a scrubbing chamber. The liquid is typically water, adjusted to the proper pH and oxidation potential by chemicals. The packing media must have a high active surface area for gas/liquid contact, promoting an even liquid and gas distribution for high mass transfer rates. The wastewater treatment industry has standardized the use of sodium hydroxide and sodium hypochlorite to control H₂S, and sulfuric acid to control ammonia odors. Maintaining the chemical conditions favorable for ultimate performance is critical. The desired oxygen reduction potential and pH chemistry is typically adjusted at the site based on the actual gas components present. Chemical scrubbing has been shown to be highly effective on H₂S and ammonia odors, which are the most predominant odorous compounds found in municipal wastewater treatment systems. Chemical scrubbers are commonly applicable to H₂S concentrations up to 1,000 ppm and can come in low-profile horizontal packaged system configurations or in vertical tower system configurations. Figure 6 shows typical process flow schematics for a packaged low-profile horizontal chemical odor scrubber system. Figure 7 shows a typical process flow schematic for a vertical tower chemical odor scrubber system. Figure 8 shows example installations of low-profile and vertical tower high-profile chemical scrubbers.

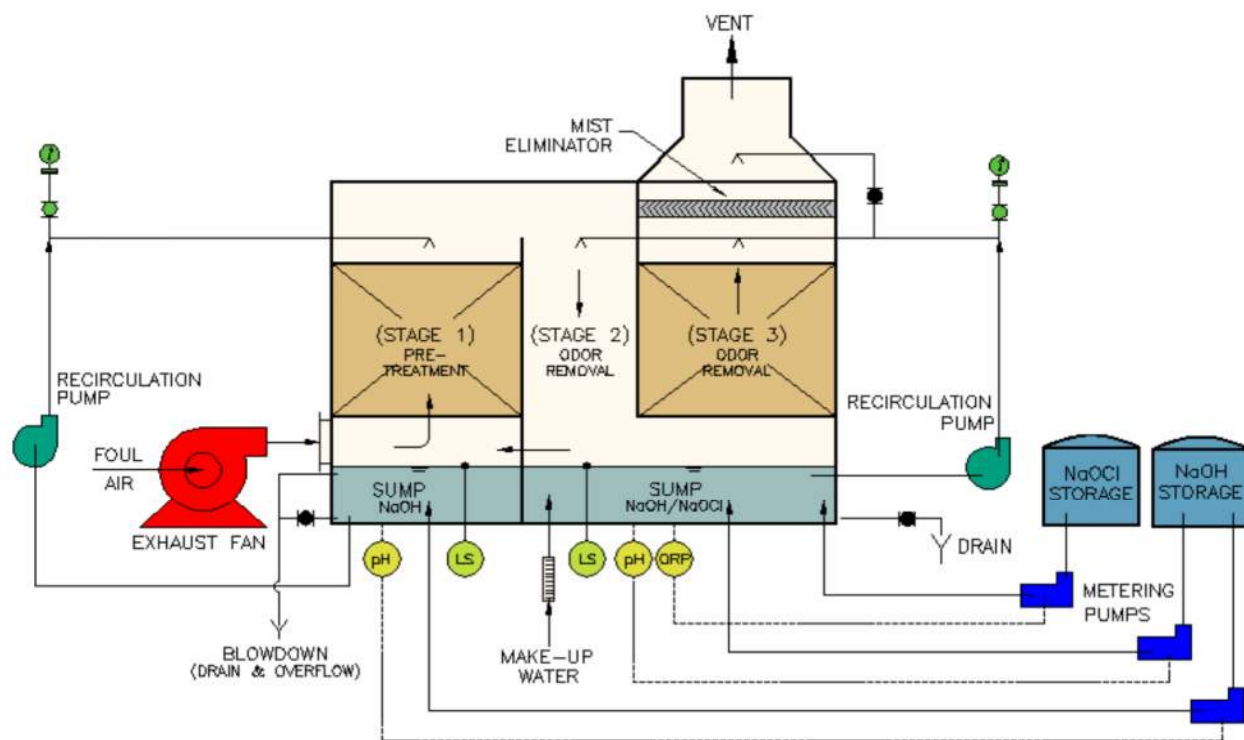


Figure 6 Typical Low Profile Chemical Scrubber System Process Schematic

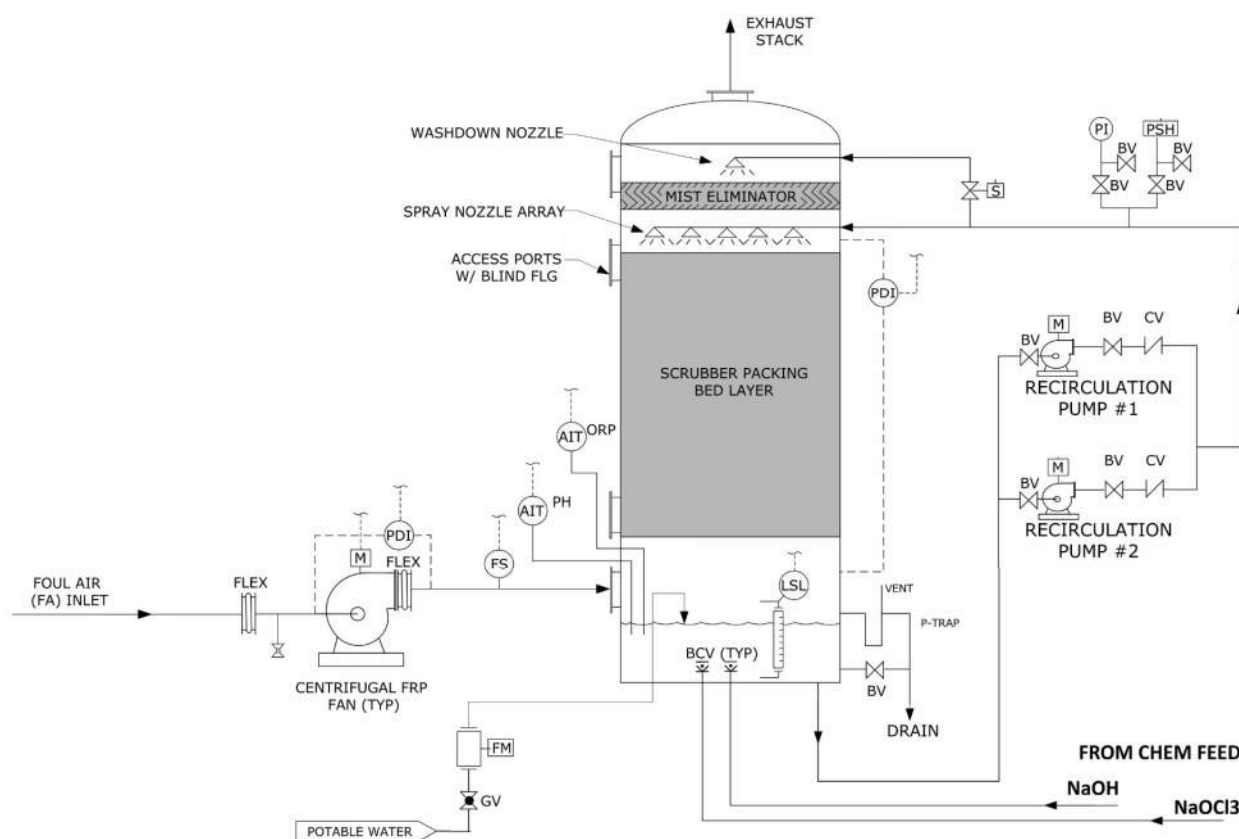


Figure 7 Typical Vertical Tower Chemical Scrubber System Process Schematic



Figure 8 Chemical Scrubber System (Low Profile and Vertical Tower) Installations

Chemical scrubbers are a proven odor control technology that can remove up to 99 percent of H_2S , even at high concentrations. They can fit in a relatively small footprint but require significant O&M attention, chemical handling and storage, and disposal of scrubber effluent wastewater. They are not considered to be effective for removal of volatile organic compounds (VOC) or the more odorous, reduced sulfur compounds, like the odorous compounds typically found in sludge storage and thickening treatment processes.

Chemical scrubbing is best suited for applications at the wastewater plant itself, as opposed to the collection system, as the high maintenance requirements of chemical scrubbers are best handled at permanently manned facilities.

Due to the special handling requirements of the chemicals involved, the required extensive training of operators in handling and operating these systems, safety concerns, and the high cost of purchasing chemicals, chemical scrubber use has decreased in the industry. Because of these issues, chemical scrubbers have been eliminated from further consideration in this analysis.

6.1.1.1 Biological Treatment – Biofilters and Bioscrubbers

Bioscrubbers and biofilters comprise a category of odor treatment technology that uses biological rather than chemical processes as the treatment mechanism. Biofilters and bioscrubbers use naturally occurring microorganisms that grow on media to oxidize odorous compounds to carbon dioxide, water, biomass, and other by-products such as chloride and sulfate. The byproducts are emitted in the outlet air or drain water or consumed by the microorganisms. Biofilters and bioscrubbers are similar in how they remove odorous compounds, but bioscrubbers typically use artificially engineered synthetic media and closed-vessel construction, while biofilters typically use natural media and open-bed construction.

One of the main differences between a bioscrubber and biofilter are the H_2S treatment range where the optimum H_2S treatment range is between 5 and 1,000 ppm of H_2S for bioscrubber and between 1 to 25 ppm for biofilter. The biofilters have significant limitations in handling levels of H_2S loadings above

25 ppm. The high levels of H₂S loading in biofilters will create an increase in the acidithiobacillis colony, causing an overproduction of biofilm and acidity, which may limit certain types of biodegrading microorganisms and fungi that feed on the more complex odor compounds that are not capable of surviving in a low pH environment. A loss of treatment efficiency, compaction, and channeling of the organic media can occur.

Another main difference between a bioscrubber and a biofilter is the footprint. A biofilter is typically low profile but requires a relatively large footprint, whereas a bioscrubber is typically housed in a vertical tower or horizontal vessels and requires a much smaller footprint. Both processes involve intermittent spraying or recirculating biologically active, nutrient-rich scrubbing solutions over a media bed while odorous air is forced upward through the media bed. The process is similar to that used in chemical scrubbers, except it employs biological treatment instead of chemical treatment. Within the aforementioned optimum range of 10 to 1,000 ppm, bioscrubbers should deliver a minimum of 98 percent removal capacity, and often the removal capacity is greater than 99 percent.

Biofilter media types include wood chips/bark media, soil/sand media, inorganic and structured engineered inorganic carbon-coated media. Typical media for bioscrubbers include organic and inorganic media such as lava rock, carbon-coated engineered recycled glass or clay, reticulated foam, and engineered structured media. Typical life for soil organic media ranges between 4 to 7 years, while the typical life for inorganic and engineered media ranges 10 to 20 years. Figure 9 shows some of the media used typically in bioscrubber and biofilter applications.



Figure 9 [Typical Media Used in Bioscrubber and Biofilter Systems](#)

Figure 10 shows typical flow process schematics for a bioscrubber and a biofilter. Figure 11 shows typical installations for bioscrubbers and biofilters.

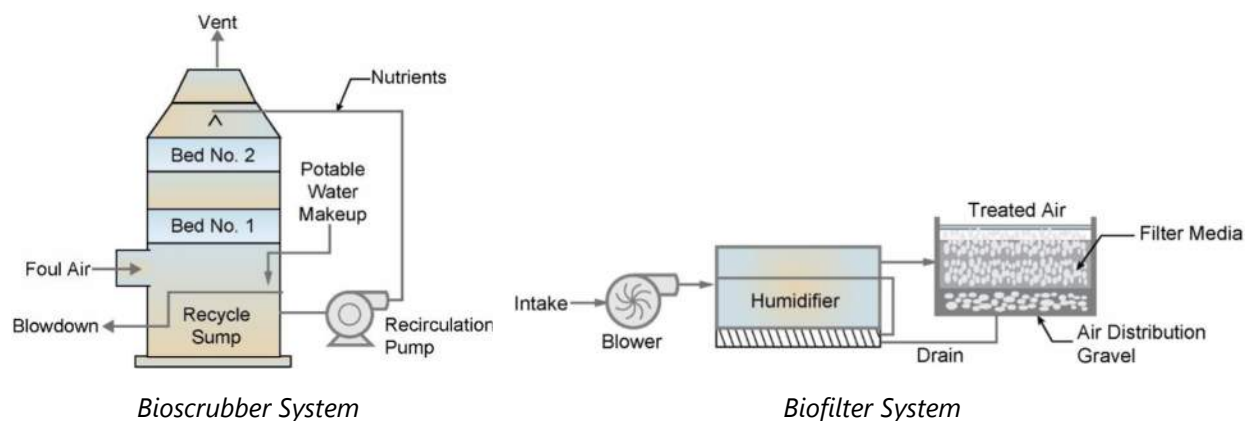


Figure 10 Typical Process Flow Schematic for a Bioscrubber and a Biofilter System



Biotrickling Filter/Bioscrubber



Below Ground Biofilter



Above Ground Biofilter



SASM Plant

Figure 11 Example Installations of Biological Treatment Systems

The advantages and disadvantages of biological treatment are summarized below.

- The primary advantages of biological treatment are:
 - » Proven effectiveness. H₂S removal efficiencies are typically greater than 99 percent.
 - » Can provide VOC and reduced sulfide treatment with higher empty bed residence times (EBRT).
 - » Lowest operating and maintenance costs compared to all other treatment technologies.
 - » Ease of O&M.
 - » No chemical costs, storage, or handling required.
 - » Long media life between replacements, depending on H₂S concentrations.
 - » Biological air treatment is more environmentally friendly and safer than chemical treatment.
- The primary disadvantages of biological treatment are:
 - » Difficulty in maintaining biological growth when inlet loadings are low or intermittent.
 - » Removal efficiencies may be reduced when inlet loadings are wide ranging, especially when base loadings are low.
 - » Larger footprint for biofilters.
 - » Requires biological acclimation period for effective treatment.

6.1.1.2 Carbon Adsorption

Activated carbon has a complex pore structure with a very large surface area. Odorous compounds are transferred from the air being treated to the surface of the carbon as the air is forced through the carbon bed. There is a physical attraction between the compound and the carbon once contact is made, which causes bonding. The compounds will continue to adsorb onto the surface of the carbon until all the pore space in the carbon is exhausted or used up. When that happens, odors will break through and the carbon must be replaced or regenerated.

Carbon adsorption is typically a viable, cost-effective option when the inlet H₂S concentrations are expected to be <5 ppm and there are no significant concentrations of other reduced sulfur compounds (RSC) such as methyl mercaptan. Carbon is not as effective at removing these other RSCs at high concentrations. One of the primary advantages of carbon adsorption is that it can easily handle loading fluctuations. One of the disadvantages of carbon is that it must be replaced after the carbon is spent, and this can be inconvenient and expensive, particularly if the inlet H₂S concentrations are high, >5 to 10 ppm. In those situations, the carbon would be exhausted quickly and would need to be replaced more frequently.

Carbon scrubbers have been used as a primary treatment technology for processes such as secondary treatment, sludge dewatering, and thickening treatment processes where H₂S and RSCs are low, and the VOCs are high. Carbon scrubbers typically remove around 99 percent of these odors. Furthermore, carbon scrubbers are used extensively as a polishing stage following a chemical scrubber or biological treatment system, particularly where neighboring odor receptors are in very close vicinities to WWTPs or sewage pump stations.

There are many types of carbon available, depending on the compounds to be removed. Coconut shell-based granular activated carbon is typically used in applications that require VOC removal and have low levels of H₂S. Bituminous coal-based catalytic carbon is specifically manufactured to have a high capacity for H₂S and is often used in wastewater treatment applications. Caustic impregnated carbon also

has a high capacity for H_2S , but this is now rarely used due to the hazards associated with the impregnation and the development of catalytic carbons.

The carbon scrubber configuration can come in different configurations, such as single bed, dual bed, and radial bed. Figure 12 shows example installations for the single bed, dual bed, and radial bed carbon scrubbers.



Single Bed Carbon Scrubber



Dual Bed Carbon Scrubber



Radial Bed Carbon Scrubber

Figure 12 Typical Installation of Carbon Adsorber

The advantages of carbon adsorbers include:

- Typically, low capital cost compared to alternatives.
- Easy to install and maintain. Requires almost no operator attention until carbon needs to be replaced.
- No chemical storage or handling.
- Relatively small footprint.
- Few moving parts.
- Typically provides hydrogen sulfide removal efficiencies greater than 99 percent.
- Provides excellent removal of volatile organic compounds.
- Carbon works well in remote locations where there is no water supply, such as pumping station wet wells.
- Works well as a polishing stage.

The disadvantages of carbon adsorption are:

- Carbon replacement costs can be high when inlet loadings are high, especially when inlet H_2S is high.
- Moisture and bio-growth on the carbon bed would convert mercaptans to dimethyl disulfide, which is also very odorous.
- Carbon disposal can also be an issue if it is contaminated by compounds in the air stream being treated or if it is impregnated. However, in most cases, the spent carbon can be taken to a standard landfill.
- Carbon works best when treating air with a moisture content of 50 percent or less. The moisture can be adsorbed into pore spaces, reducing the capacity of the carbon. Grease and water droplet filters typically precede carbon adsorbers to improve performance.

6.2 Vapor Phase Odor Control Technology Alternatives

The alternatives shown in Figures 13 to 16 are intended to show Carollo's standard approach to carbon adsorption systems and biological scrubbing systems within the site allocated (existing odor control pad).

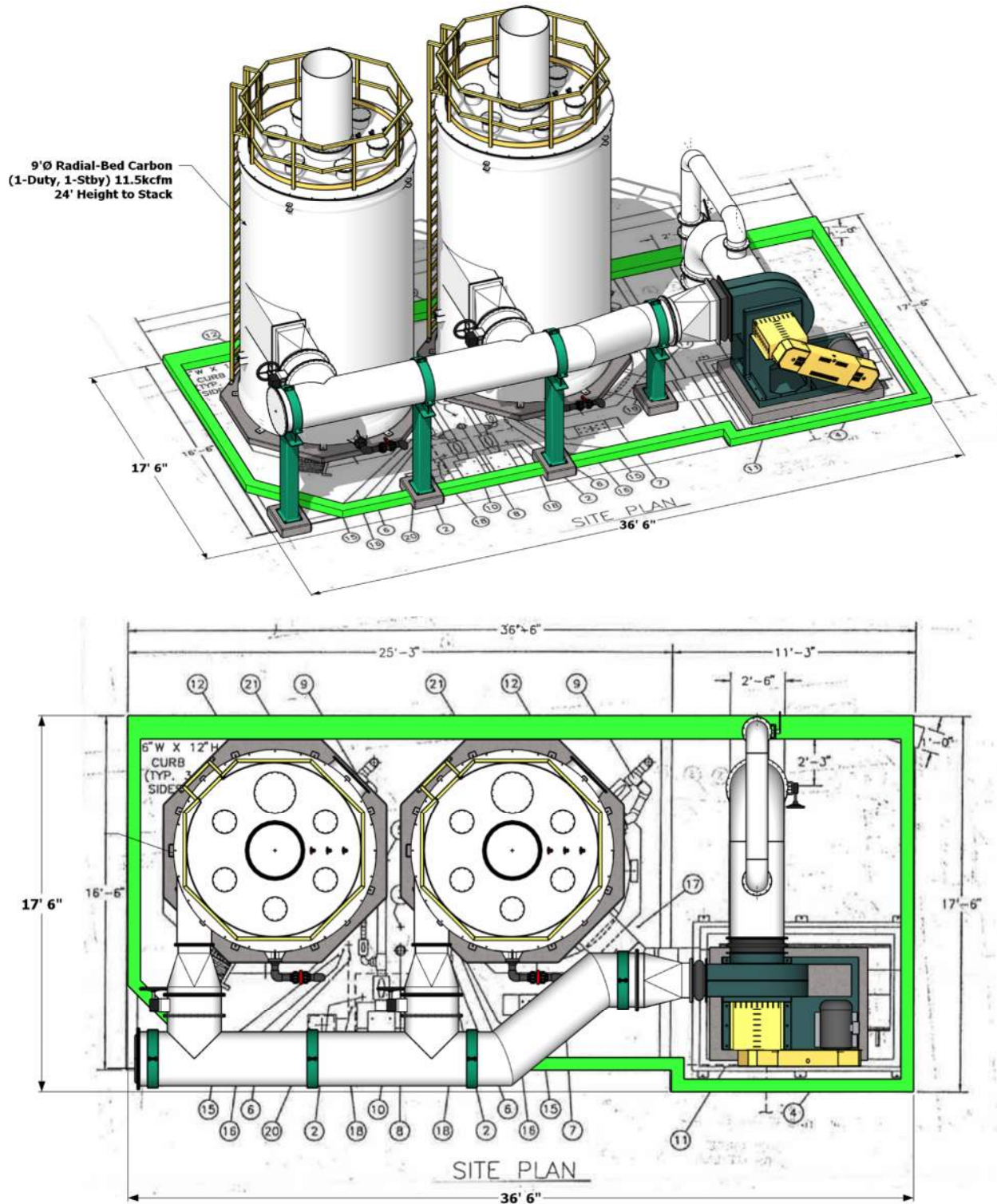


Figure 13 Alternative 1 – Radial Carbon Adsorbers (1-Duty, 1-Standby)

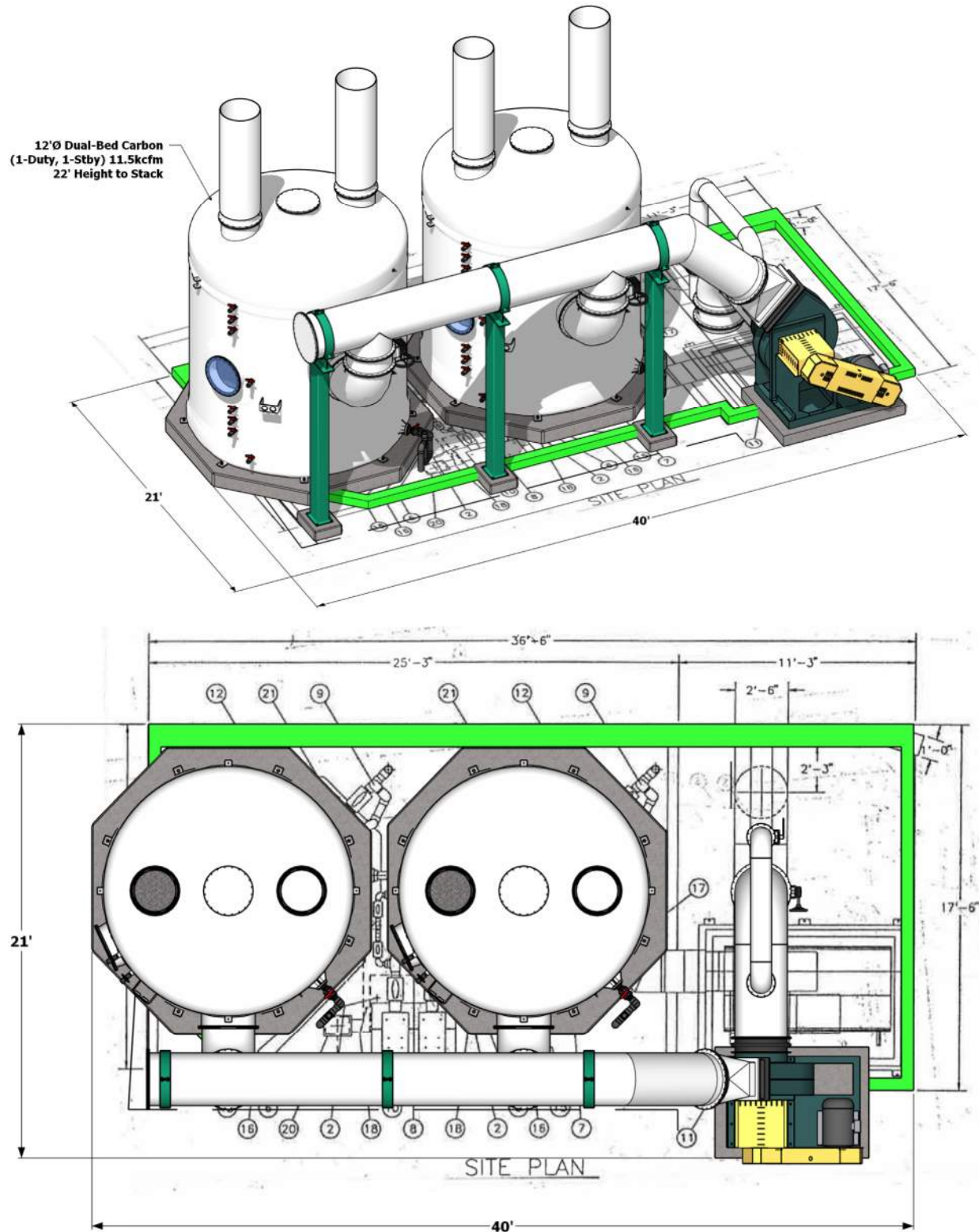


Figure 14 Alternative 2 – Dual-Bed Carbon Adsorbers (1-Duty, 1-Standby)

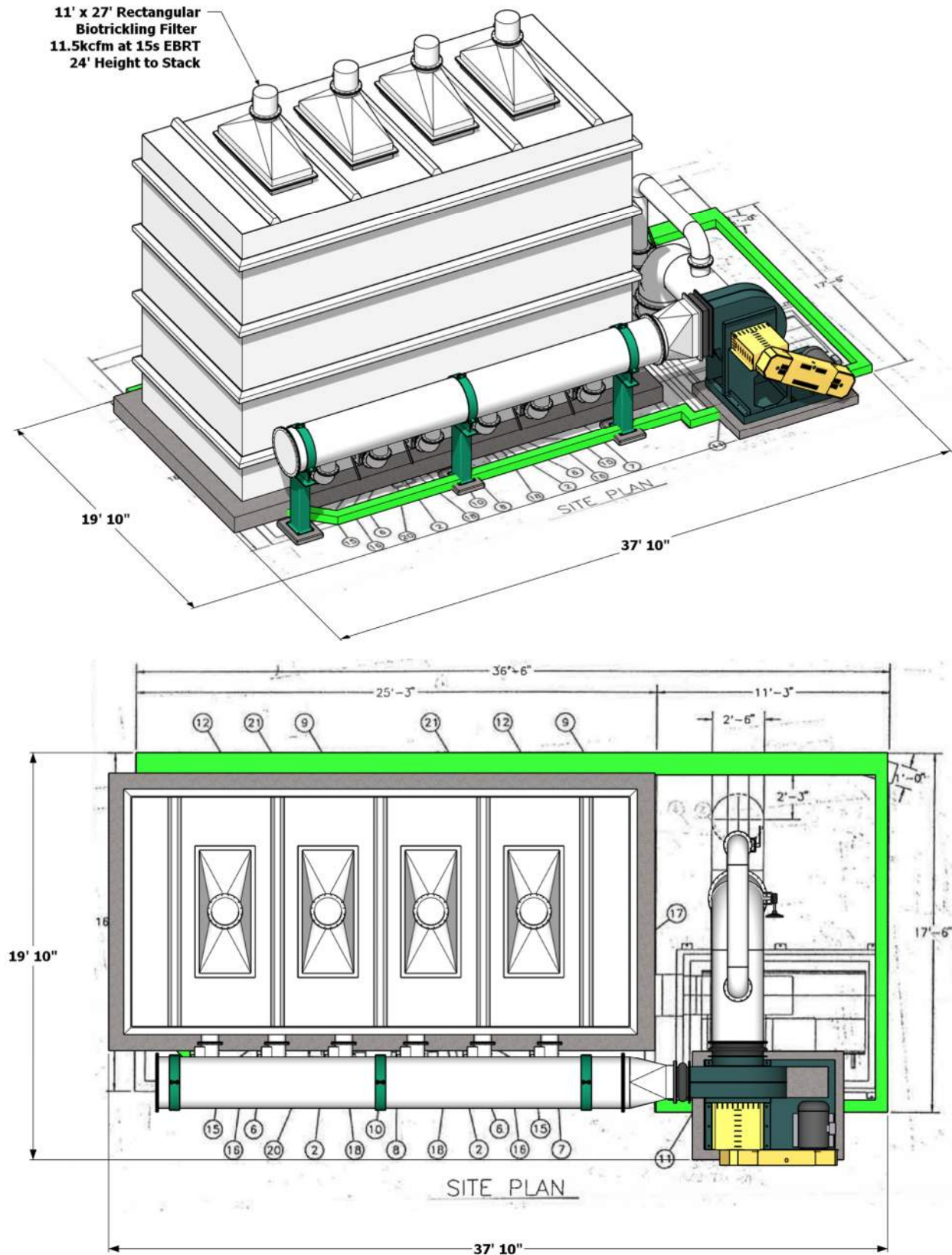


Figure 15 Alternative 3 – Rectangular Biotrickling Filter (Similar to SASM, 1-Duty, 0-Standby)

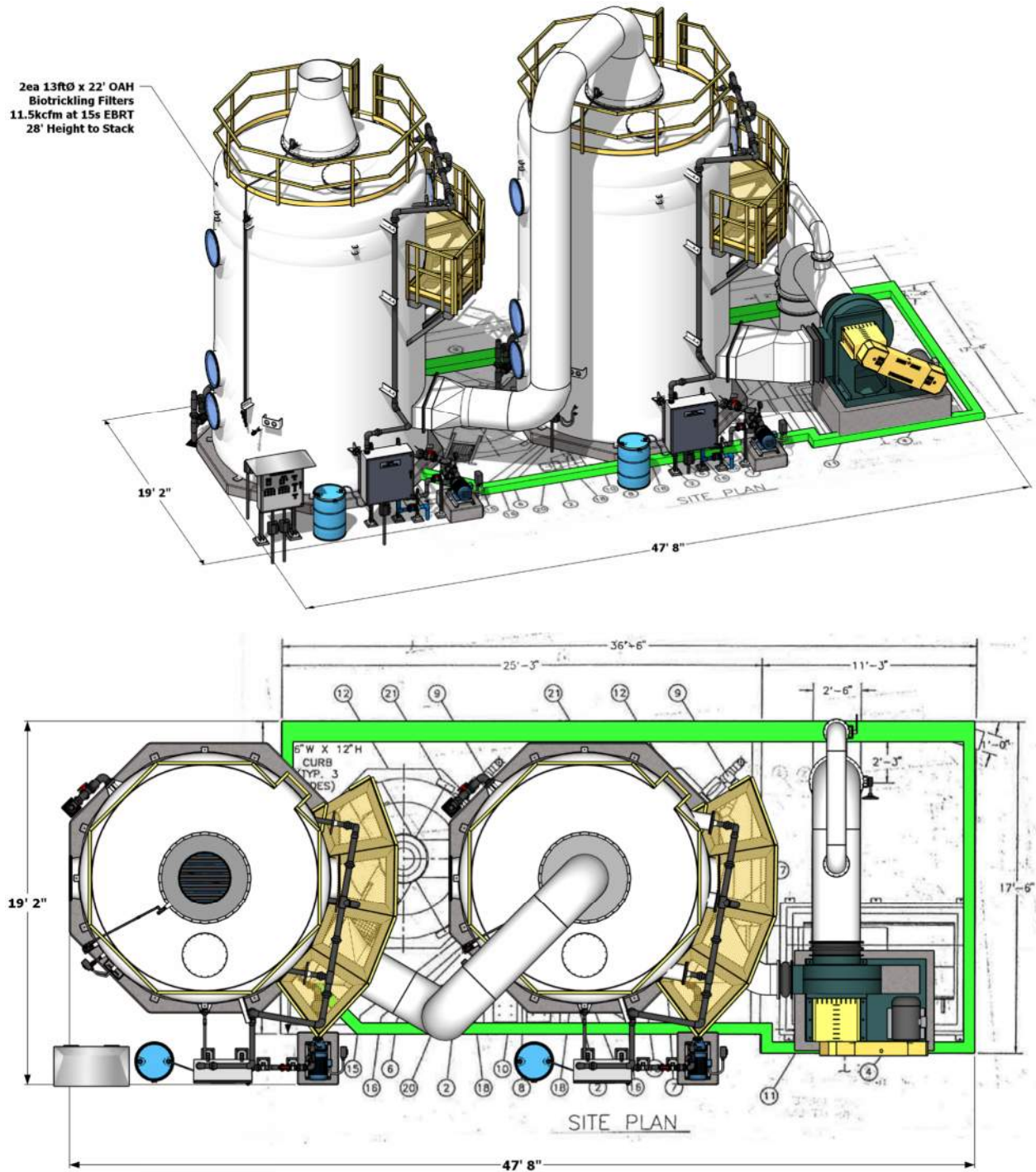


Figure 16 Alternative 4 – Round Cylindrical Biotrickling Filters (2-Duty, 0-Standby)

SECTION 7 CAPITAL AND OPERATING COST COMPARISON

A cost comparison for the liquid phase and vapor phase odor control technology evaluated for the District. Capital costs, O&M costs, and life cycle cost analysis for the odor control options were developed using a combination of vendor quotes and engineer's recent project experience. Allowances for piping, ductwork, electrical work, and instrumentation and controls were also provided. Cost factors were added as defined in this section. The costs presented are a budget-level estimate that are representative of a Class 4 cost estimate as described in AACE International¹ guidelines. All costs are based on 2026 pricing of materials, equipment, labor, and other components listed.

The cost presented in the following tables include the following assumptions and factors:

Subtotal cost includes installation cost. Cost factors of 58 percent of subtotal project cost is added to include the following:

1. Design contingency (20 percent).
2. General conditions (10 percent).
3. General contractor overhead and profit (15 percent).
4. Tax (8 percent).
5. Management and legal (5 percent).
6. Estimating contingency (35 percent).

Life cycle present worth cost analysis assumptions:

1. Flows are estimated based on average flow data and discussions with the District.
2. Chemical dosing rates are estimated based on discussions with vendors and typical recommended dosing rates used in field applications.
3. Chemical costs are based on vendor quotes.
4. Energy cost is based on an average power cost of \$0.20/kilowatt-hour, 365 days a year, continuous operation.
5. Biological media replacement cost is based on 15-year replacement of media volume per vessel at \$65/cubic feet replacement cost.
6. Water cost is consumption is estimated at \$0.00046/gallon.
7. Labor cost is based on one maintenance hour/week at \$50/hour.
8. O&M present worth cost is based on a 20-year period, 6 percent interest rate, equating to a present worth factor of 11.47.

¹ AACE 18R-97. *Cost Estimate Classification System – As Applied in Engineering, Procurement, and Construction for the Process Industries.*

7.1 Vapor Phase Odor Control Cost Analysis

The following describes the vapor phase alternatives that have been considered and evaluated. Carbon adsorption is very effective at removing H₂S, but when the H₂S concentrations average more than 20 ppm, the capacity of the carbon is used up rapidly, and the carbon must be changed frequently. For this study, the average H₂S concentration in all the locations tested during the two-week monitoring period was low to moderate, averaging ~20 ppm during peak summer months. Carbon is, therefore, a reasonably feasible choice and is included in the cost analysis.

Chemical scrubbing is familiar to the District as the existing incumbent odor control technology and is typically best suited for applications when the H₂S loading is reasonably high, especially when those loads are erratic and intermittent. Based on previous experience, the estimated operating and maintenance costs for such systems are typically high, particularly when the H₂S levels are also high, and the chemical consumption would also be high compared to the costs for biological treatment. Furthermore, as indicated previously, due to the special handling requirements of the chemicals involved, safety concerns, and the high cost of purchasing chemicals, replacement chemical scrubbers will be eliminated from further consideration in this analysis.

Biological treatment, such as bioscrubbing, is ideally suited for applications like this, as the H₂S is in the acceptable range for bioscrubbers and would provide good removal efficiency. Large below-grade or above-grade Biofilters are not applicable to this case as the footprint is tight and the H₂S exceeds the range recommended for biofilters. Bioscrubber technology will therefore be the only biological treatment technology considered in the cost analysis.

Table 3 presents 20-year life cycle cost analysis for the bioscrubber odor control technology.

Table 3 20-Year Life Cycle Cost Analysis – Vapor Phase Treatment Alternatives

Item (Treatment Technology)	Bioscrubber	Carbon Adsorber
Air Flow Rate		
Estimated Air Flow Rate	11,500 cfm	11,500 cfm
Estimated Yearly H ₂ S Average ⁽¹⁾	10 ppm	10 ppm
Project Capital Costs		
Odor Control Equipment ⁽²⁾	\$2,500,000	\$2,000,000
Installation Cost at 65%	\$1,625,000	\$1,300,000
Subtotal	\$4,125,000	\$3,300,000
Construction Factors (58% of Subtotal)	\$2,392,500	\$1,914,000
Total Capital (adding 35% Estimating Contingency)	\$8,798,625	\$7,038,900
Annual O&M Costs		
Energy	\$30,600	\$45,900
Media Replacement	\$17,300 ⁽³⁾	\$60,000 ⁽⁴⁾
Nutrients	\$1,700	\$0
Water	\$1,200	\$0
Labor	\$7,800	\$5,200
Subtotal O&M	\$58,600	\$111,100
20-Year Life Cycle Cost		
O&M Present Worth ⁽⁵⁾	\$2,155,636	\$4,086,879
Total Capital	\$8,798,625	\$7,038,900
Total 20-Year Present Worth	\$10,954,281	\$11,125,779

Notes:

cfm – cubic feet per minute.

(1) H₂S is assumed to be reduced to 10 ppm using the anticipated year-round average.

(2) Odor control equipment is based on the following components, as applicable to each system, and includes installation cost:

- Scrubber vessel with internals.
- Media.
- Fans.
- Pumps.
- Concrete work.
- Chemical tanks.
- Ductworks, piping, valves, and supports.
- Electrical, instrumentation, and controls.

(3) Biotrickling filter media lifespan assumed at 15 years. Manufacturer warranty period is not less than 10 years.

(4) Carbon adsorber media lifespan assumed at 1.8 years, with 25 percent factor of safety.

(5) Present worth includes 6 percent inflation rate.

SECTION 8 CONCLUSIONS

The following conclusions can be drawn from the test results and the evaluations of odor control alternatives at the tested locations in the District headworks system.

- Overall, carbon adsorbers with their lower requirement of media volume (EBRT) are able to fit within the space more readily than a typical bioscrubber. The site footprint is therefore capable of supporting a second carbon adsorber system as a fully redundant scrubber to be used during periods of maintenance or carbon change-out.
- Carbon adsorption requires media change-outs every one to two years, which may prove difficult for a plant with smaller working spaces and lay-down areas.
- Carbon media is typically changed by a supplier which the District may have contacts for.
- Ultimately, the carbon adsorber alternative is the lowest-cost and smallest footprint option; however, other considerations like more frequent media change-outs and carbon delivery and disposal may play a larger factor in the decision by the District to decide which technology to ultimately pursue.
- The results of the continuous H₂S monitoring shows that the average H₂S concentration in all the locations tested during the two-week monitoring period were of moderate levels, averaging 20 ppm, with peak levels exceeding 200 ppm.
- The high H₂S concentrations are assumed to be the highest during the summer months of the year; a yearly average of 10 ppm is assumed for the existing odor control system.
- For the vapor phase evaluation, Table 5 shows the bioscrubber option is the most favorable alternative compared with the chemical scrubber option due to the high O&M cost of chemical scrubbing.
- The sulfide level can be reduced by adding ferrous chloride in the sewer trunkline.
- The high H₂S concentration can be substantially reduced by introducing ventilation fresh air in the sewer trunklines and exhausting the air in an air treatment method

SECTION 9 RECOMMENDATIONS

Based on the above evaluations and the conclusions, Carollo recommends consideration of either biological or carbon adsorption to reduce odors and alleviate the O&M of the existing chemical scrubber at the WWTP.

The following lists the potential testing for the odor control improvements:

- Furnish temporary odor control in the form of a roll-off container-style carbon adsorber unit and temporary ductwork, capable of handling >11,500 cfm. This airflow is typically handled by a '1/2 size' container, 8 feet by 8 feet by 20 feet.

- Demolish existing chemical scrubbers and install vapor phase carbon adsorbers or bioscrubbers at the location of the current chemical scrubber. See technology alternatives 1 to 4 (Figures 12 to 15).
- Considering the lower operating and maintenance costs associated with a biological scrubber (alternative 3 and 4), Carollo believes that a system similar to the biotrickling filter installed at the SASM plant would perform well and have the highest return on investment over the lifetime of the equipment.

Short-Term Recommendation (Added in June 2026)

The existing chemical scrubber can be rehabilitated in the short term assuming the vessels (tanks) are structurally sound. The rehabilitation would include

1. New media and demister replacement,
2. New spray nozzles,
3. New recirculation pumps,
4. New chemical metering pumps.
5. New instrumentation (pH/ORP probes)
6. New control panel

The short-term rehabilitation cost is based on similar projects but is subject to change based on findings during a condition assessment, especially vessel and ductwork assessment. The costs to rehabilitate the existing system are between \$1M to \$2M. The rehabilitation scope and construction costs can be confirmed during a condition assessment / predesign phase of a scrubber rehabilitation project.